





## SUSTAINABLE SHIPBUILDING

Sustainability Report







Meyer Turku shipyard specialises in the construction of highly demanding, innovative and environmentally efficient cruise ships, car-passenger ferries and specialised vessels. Together with Meyer Werft in Papenburg, Germany, and Neptun Werft in Rostock, Meyer Turku is one of the world's leading builders of cruise ships. Our largest customers are Royal Caribbean International, Carnival Cruise Lines, TUI Cruises and Costa Cruises. At the end of 2019, the company's order book totalled approximately €7.3 billion, And we account for about 15 % of worldwide cruise ship construction.

Meyer Turku Oy is based entirely at the Turku shipyard, where ships have been built since 1737. Meyer Turku's subsidiaries include the cabin factory Piikkio Works Oy, located in Piikkiö, Shipbuilding Completion Oy, which offers turnkey services for public spaces on ships, and ENG'nD Oy, a shipbuilding and offshore sector design company based in Rauma.

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# New perspectives on responsible shipbuilding



In spring 2020, many things changed all at once with the outbreak of the coronavirus epidemic. Shipbuilding entered a crisis due to the worldwide termination of cruise ship travel. Meyer Turku reacted to the pandemic at an early stage in spring 2020, striving to ensure the continuity of production and, above all, to offer people working in the shipyard as much job security as possible. As of May 2020, there were no diagnosed corona virus infections among those working at the shipyard.

Although Turku Shipyard is now in a different situation than at the end of last year, the measures presented in this sustainability report have not become outdated. In spite of the difficult times, we still want to take responsibility for both people and the environment.

The cornerstone of this approach is to produce ships that are as environmentally friendly as possible. The largest environmental impacts of a ship's life cycle result from the fuel that it consumes, and our goal is to offer our customers as energy-efficient and low-emission ships as possible. This requires continuous product development and an uncompromising attitude both from us and our network partners. This is reflected, for example, in how particularly ambitious emissions and energy consumption targets are set for each new ship project. These goals can only be achieved in cooperation with our partners.

The sustainability of Meyer Turku's own operations is being weighed up during these particularly difficult times. Indeed, we had to practice epidemic prevention already in 2019 as a result of a localised pneumococcus outbreak in the shipyard. On the positive side, however, this helped us to respond effectively to the corona pandemic in the spring. At the same time, we continuously carry out our basic sustainability work at the shipyard: we take care of occupational safety, monitor the sustainability of our network partners, look after our own employees and strive to minimise the environmental impacts of our operations. This basic work is also important in crisis situations, and the results achieved through long-term work must not be allowed to slip away.

We believe in the future. People will continue to want to spend their time on the world's seas in as safe and environmentally friendly a manner as possible. It is our job to offer them this opportunity.

**Tapani Pulli** Vice President Meyer Turku

# General information about the company

Meyer Turku Oy specialises in the construction of highly demanding, innovative and environmentally friendly cruise ships, car-passenger ferries and specialised vessels. Together with the other Meyer shipyards in Germany, Meyer Turku is one of the world's leading builders of cruise ships.

At the end of the 2019 financial year, the company's order book totalled €7.3 billion, and Meyer Turku's share of the worldwide cruise ship construction market was around 15 %. The company's largest customers are Costa Crociere S.p.A, Carnival Corporation, Royal Caribbean Cruises Ltd and TUI Cruises GmbH.

Meyer Turku Oy's operations are concentrated at the Turku shipyard, And the company works in close cooperation with its three subsidiaries: the cabin factory Piikkio Works Oy, Shipbuilding Completion Oy, which offers turnkey services for public spaces on ships, and ENG'nD Oy, a shipbuilding and offshore sector design companyTechnology Design and Engineering Eng'nD Oy.

#### Financial status and result

The company's operations and order book continued to grow in 2019. The large Costa Smeralda ship project, which was delivered at the end of the year, suffered some delays which resulted in significant additional costs and thus an overall loss for the financial year.

The extensive investments that have already been implemented as well as the completion of investments already under way will together enable the efficient execution of the order book that extends to 2025.

As a general rule, ship projects are financed using advance

payments from customers, external bank financing and the company's own capital and assets.

#### Key Events during the financial year

During the financial year, the cruise ship Mein Schiff 2 was delivered to TUI Cruises GmbH in January, and Costa Smeralda was delivered to Costa Crociere S.p.A in December. In June, work began on the assembly of the hull of the Carnival Mardi Gras for Carnival Cruise Lines, and the construction of a new cruise ship for Course the Cruises was initiated in July.

During the financial year, a new supply contract was signed with Royal Caribbean Cruises Ltd for a construction of the third Icon cruise ship. This ship will be completed in 2025. At the end of the financial year, the Group's order book was worth  $\in$ 7.3 billion ( $\in$ 7.5 billion in 2018) and included the orders presented in the table below.

The workloads on our own personnel have been at a good level during the accounting period. In order to meet its growth targets, the company has been continually recruiting more personnel. During the financial year, the number of personnel increased by 152, in accordance with the targets set.

During the financial year, the company implemented an investment programme launched in 2017 to improve the company's competitiveness and ensure capacity for future growth. The Group's investments during the financial year totalled €65.2 million (€71.3 million in 2018). The most significant of these for 2019 were the new social space for employees, the new plate cutting line and several IT investments.

The operations of the company's 100 % owned subsidiaries (Piikkio Works Oy, Shipbuilding Completion Oy and

#### Order Book Situation as of 31 December 2019

Customer	Vessel type	Gross tonnage	Delivery
Carnival Corporation	Cruise ship	180,000	Autumn 2020
Costa Crociere S.p.A	Cruise ship	182,700	2021
Royal Caribbean Cruises Ltd.	Cruise ship	200,000	2022
Carnival Corporation	Cruise ship	180,000	2022
TUI Cruises GmbH	Cruise ship	111,500	2023
Royal Caribbean Cruises Ltd.	Cruise ship	200,000	2024
Royal Caribbean Cruises Ltd.	Cruise ship	200,000	2025



Technology Design and Engineering ENG'nd Oy) reflected the workload situation faced by the parent company and the delays to the Costa Smeralda schedule, as a result of which their financial results remained below target.

#### Key Events after the end of the financial year

The Carnival Mardi Gras cruise ship constructed for Carnival Cruise Lines was launched in January 2020.

The global coronavirus epidemic (COVID-19) has affected the company's operations since February 2020. At an early stage, a preparedness group was established to respond to the challenges of the situation, to draw up prevention plans and to safeguard the health of those working at the shipyard. This group included representatives from senior management, HR, production, HSE, occupational health, and communications.

Meyer Turku has taken a number of measures to prevent the spread of coronavirus. Personnel have been instructed to maintain safety distances at work and to work remotely where possible. The movement of personnel in the shipyard area has been restricted, the personnel at the shipyard as well as those working for network partners have been given instructions for carrying out work at the shipyard, and all business travel has been stopped.

During this very exceptional time, the company's objective has been to ensure, as far as possible, continuity of operations in accordance with its customers' wishes. The global pandemic has given rise to a situation that cannot be influenced by the shipyard, its customers or its stakeholders. This situation could have a significant impact on the company's production schedule and productivity. The company has invited employee representatives to participate in the cooperation procedures regarding possible lay-offs of personnel. The negotiations relate to the entire personnel of the company.

#### Estimate of probable future developments

At the end of the financial year, the company's order book extended up until 2025, ensuring that the company and its core network of partners are able to develop their operations over the long term.

Costa Smeralda, which was significantly larger and technically more complex than the preceding ship projects carried out at the shipyard, presented challenges during the financial year for which the company and its network were not sufficiently prepared.

The emergence of the COVID-19 pandemic ended all cruise traffic and will probably lead to some stretching out of the order book. Most likely, Meyer Turku Oy will maintain approximately the same production level as in 2019, and it can be seen that this will continue at least until 2023. The shipyard will examine its capacity and investment plans accordingly.

In this new environment, the focus will continue to be on bringing new investments into production and continuing with a number of improvements that were initiated at the start of 2019. In addition to the challenges, the new situation also presents opportunities that the shipyard is currently seeking to implement.

In order to respond to the general situation, the investment programme has been reviewed and the planned office building investment has been postponed.

The planned second investment wave has been limited to a

Meyer Turku	2017	2018	2019
Turnover, million EUR	808.2	969.7	1141.8
Profit for the period, million EUR	32.5	29.0	-109.7
Profit for the period, %	4.0	3.0	-9.6
Investments, million EUR	80.8	71.3	65.2
Personnel, average	2,009	2,205	2,386

#### Key financial figures, Meyer Turku group 2019 (includes subsidiaries)

Source: Financial audit report for Meyer Turku Oy 2019. PricewaterhouseCoopers Oy



total of €100 million. The balancing activities implemented also included postponing the delivery of the Carnival Mardi Gras from August 2020 to October 2020.

### Assessment of the most significant operational risks and uncertainties

The company is exposed to the normal market risks present in the international shipbuilding industry, but the effects of the COVID-19 pandemic are currently the biggest risk to the company and its customers. The largest expected disruptions to normal shipping operations and project schedules results from the restrictions imposed by the Finnish Government on the movement of persons, which may particularly affect the availability of foreign labour. There may be challenges resulting from restricted availability of materials and components, and this may affect the activities of both the shipyard and its suppliers.

Based on different market analyses and discussions with it customers, the management of Meyer Turku Oy understands that its cruise company customers have secured their funding up until the end of 2020, so it is unlikely that they will fail to make their payments in accordance with the existing agreements. In the unlikely case that the company's customers would not comply with the contractual payments and the company would not be able to replace this with alternative (or additional) financial resources, the continuity of Meyer Turku's operations may be jeopardised.

The recovery of the cruise industry is unclear and depends crucially on bringing the pandemic under control. The greatest risk to the company is that contractual deliveries would be postponed or, at worst, that a particular ship project would be cancelled entirely.

Competition in the cruise ship market is becoming tougher, as several new shipyards have entered the market in both Europe and China, and South Korean shipyards, for example, are looking for new jobs to replace offshore construction that has collapsed as the price of crude oil has fallen. In addition, Meyer Turku's major competitors in cruise ship construction are partly or entirely state-owned, which may have uneven effects on the competitive situation.

Efforts are being made to tackle risks faced by the company by implementing a careful risk management process. The company management is responsible for the shipyard's risk management. It monitors the risks regularly and reports on them to the company's Board of Directors on a quarterly



basis. A separate risk management plan will be drawn up for each ship project to ensure successful implementation of the projects.

At the operational level, the most significant risks in the shipyard's operations are related to accidents and ship fires. With the strong and rapid growth of the shipyard, the number of persons working at the shipyard will grow significantly, and the shipyard will be building larger ships and building them at a faster rate. In addition, a large number of new people will be arriving to the area, some of which have not previously worked at the shipyard. Significant investments will be made in the prevention and management of safety risks.

In the coming years, the most significant risks for the company are associated with the successful delivery of orders in accordance with the agreements made.

Both completed and planned investments to increase production capacity can be seen throughout the company's operations. During the investment programme, disturbances and interruptions to normal production are to be expected. The delays in the final phase of the construction of the Costa Smeralda in 2019 were particularly due to the significantly larger size of the ship, its technical complexity and the diversity of the facilities involved, factors for which the company and its network were not sufficiently prepared.

These risks have been taken into account in the planning of the production and delivery schedules of the upcoming ship projects. In 2020, the company's growth rate will slow down slightly, and the focus will be on the induction of employees and the efficient implementation of the investments made.

The company buys virtually all of the ships' equipment and materials as well as a large part of the design work from its network partners, and these network companies account for about 80 per cent of each ship's total value. As the production volumes of the shipyard grow and the lead times shortens, the company constantly needs more companies to join its network, and close cooperation with the network will play an increasingly important role in the future.

The company's financing agreements include terms and conditions that, if violated, may lead to agreement termination.

This report was written mostly before the development of the corona pandemic, but has since been edited to reflect the changed situation.

# We grow and invest

After the purchase of the Turku shipyard by the Meyer family in September 2014, we have brought the shipyard back from the brink. In five years, the work situation and pace of activity has changed completely, with the shipyard's order book reaching record levels. The shipyard's production will double from its level in 2018 level to reach over 300,000 gross tonnes by 2023. At the same time as the lead times are shortening for ships being constructed in the shipyard, the vessels themselves will be larger and will include new technological solutions.

We are in the middle of the biggest change in the shipyard's history. The shipyard is carrying out a large-scale production growth programme, and at the same time we are ensuring our competitiveness by investing more than  $\in$ 200 million in equipment and systems. This has meant a wide scale renewal of the shipyard, while at the same time the need for new skills has grown constantly and the systematic development of the personnel's capabilities and competence also plays an important role.

Successful growth implementation will be our most important goal in the coming years. To support this, we initiated at the start of 2019 a growth phase ramp up project which will reshape the working methods of the entire shipyard and its network. The project involves around 40 projects that aim to get to grips with and respond to various challenges in the shipbuilding process. For example, the projects will examine and develop the flow of information between different work stages, which will in turn speed up and facilitate the construction of ships at the shipyard.

#### Investing for greater efficiency

We have invested vigorously in the renewal of the Turku shipyard. Between 2016 and 2019, a total of €200 million of investments were implemented to modernise production equipment and build additional facilities to cater for the growing number of personnel. The investments completed at the shipyard in 2019 included new plate and profile section manufacturing lines and panel manufacturing lines as well as new social facilities for employees .

The investments also included the modernisation of our cabin factory Piikkio Works Oy, which was completed prior to 2019, and the introduction in 2018 of a 120-metre gantry crane, the tallest in the Nordic countries.

The investments significantly increase the shipyard's productivity as well as the reliability and quality of the different production phases. They also improve occupational safety at the shipyard. The main aim of the ramp up project and investments is to ensure that both ourselves and our network companies have the capacity to achieve strong growth.

## Managing huge projects demands professional expertise

Turku shipyard's ship projects are truly huge in scale. In addition to the shipyard's own personnel, up to 600-800 network companies participate in the construction of one single cruise ship. Decades ago, the shipyards built the ships almost entirely by themselves, but today our shipyard operates both as ship designer and constructor and also as the project manager coordinating a wide network of companies.

In cooperation with our supplier network, we have to manage an extremely complex system in which, among other things, steel structures, power sources, wastewater treatment, cable networks, lighting and interior decoration solutions, restaurants, laundry rooms and passenger safety are all seamlessly intertwined.

In 2019, Meyer Turku continued to promote investments into the schedule and scope of the project plan.

#### More office space and social facilities

At the end of the summer, the shipyard started to use a new temporary office building, which allowed teams from procurement, finance, operational planning and ERP projects to move to their new premises. Having these facilities all located under the same roof facilitates cooperation between the departments operating in the building.

The office space for network employees was also completed at the end of the year. The new office building will replace the construction site offices used by the network, improving both the functionality and energy efficiency of the shipyard area and the working conditions for the suppliers. The new, appropriate facilities will make it easier for network companies to recruit for jobs at the shipyard.

The new social facilities were completed in February 2019. The new building has space for up to 2,000 people, and it will increase the capacity for the growing number of people at the shipyard, replacing the old social facilities. The premises also have two category S1 civil defence shelters.



# Report description and central themes

The materiality analysis and stakeholder survey conducted in 2018 guided the content of the sustainability reporting and the selection of key data for Meyer Turku. The key sustainability themes at Meyer Turku were identified on the basis of the issues that emerged as the most important. This report is also built around these themes.

Key topics identified	Key themes
Environmental aspects in ship design	A ship's most significant environmental impacts arise during its long lifespan, which is why we design <b>world-class ships</b> which give an absolutely central place to energy-efficient operations.
Reducing the environmental impacts of shipbuilding	In addition, <b>sustainable production</b> is at the core of the shipyard's operations. We curb the environmental impacts of shipbuilding by using low-emission working methods that also prevent littering of marine areas.
Safety and security of the shipyard area	Thousands of people work at the shipyard, including both our own personnel and employees of our network companies. Working at the shipyard involves exposure to certain safety risks, which is why <b>shipyard</b> <b>risk management and safety</b> receive continual attention and are extremely important to us.
Competence development and education	The design and construction of ships and the management of such a large and complex shipyard require <b>world-class expertise</b> , and we are in constant need of additional highly-skilled workers.
Employee job satisfaction	Within our own Shipbuilding School, we our continuously training new experts and ensuring that knowledge and skills are transferred to the younger generation. We also care about our employees' work satisfaction and seek to give them work tasks which are of interest to them.
Employment	Our operations generate extensive added value and <b>positive impacts for society</b> . The shipyard is a very large employer and we have a significant economic impact, especially in the Turku economic area and Southwest Finland.
	We also contribute to increasing the attractiveness of education in marine and technological fields.
Fair procurement practices and network cooperation.	We grow and develop <b>together with our network</b> and take the Finnish maritime industry onwards and upwards. Our strong growth requires an extensive supplier network both within Finland and abroad.
	We ensure at the procurement stage that our suppliers can handle their delivery commitments and we always require responsible operating methods from our network partners.

This is Meyer Turku Group's third sustainability report. In addition to the parent company Meyer Turku Oy, the report also covers all of its subsidiaries (Piikkio Works Oy, Shipbuilding Completion Oy and Technology Design and Engineering ENG'nD Oy).

As regards training and occupational safety, the report's coverage is broader than just Meyer Turku Group itself. The training offered at the Shipbuilding School and the occupational accidents occurring in the shipyard area are also reported for the personnel of Meyer Turku's network companies.

# Sustainability Goals

Our sustainability goals have been defined by a working group composed of representatives from the shipyard's different organisations. The sustainability objectives set either relate to our core operations or are relevant based on risk assessments.

Theme	Objective	Indicator	Target year	KPI	Actual 2019
Sustainable production	Reducing energy consumption (2017 as reference year)	kWh / working hour	2 020	-4 %	-30.1 %
·	Marine protection and litter prevention	Number of external complaints	Ongoing	0	0
	Number of accidents	Number of accidents leading to work absences	Ongoing	0	66
Safety at the shipyard	Fire safety	Number of fires on ships	Ongoing	0	16 fires
	Increase in the number of HSE observations	Number of observations	Target in 2020: 1000 observations	+100 %	+279 % (248 → 940)
Top-level shipbuilding professionals	Supervisor training and orientation for all new supervisors	Proportion of new supervisors receiving training	2023	100 %	

#### Meyer Turku's sustainability objectives

#### Our subsidiary Piikkio Works has set objectives for its own operations

Theme	Objective	Indicator	Target year	KPI	Actual 2019
Sustainable cabin	Sustainable products from material suppliers and verification of sustainable production methods	Number of QHSE audits		14	19
Sustainable production	Reducing the quantity of protective plastic for cabins	Number of cabins packed with protective plastic		20 %	100 %
	Reducing landfill waste	Amount of waste entering the landfill		12 kg/ cabin	17 kg/cabin
	Sustainable and safe working environment	Number of safety observations		400	302
Well-being and safety of personnel	Lost working time	Sickness absences		< 3 %	3 %
	Lost working time	Accident frequency		0	15.9

# Stakeholders

### The maritime industry as a driver of development

We carry a very important responsibility within society, as Meyer Turku is seen in Finland as a pioneer in the maritime industry, and particularly within the shipbuilding sector. We want to be leading the way in the maritime industry in both technological development and responsible practices.

The most important part of our role is to act as a force for bringing together the ordering customers and our wide network of suppliers to carry out development work and also to provide opportunities for experimenting with new technology. We work actively and closely with different equipment and material manufacturers, and we are constantly discussing with our customers the directions in which the ships of the future should be developed. Each ship built in the shipyard boosts the development of maritime industry technology in Finland as a whole. We, our network, and our customers all need each other, because only together can we develop ourselves and our industry.

We participate in both Finnish and international projects aimed at developing responsible practices within the maritime industry and shipbuilding. We also work in close cooperation with organisations within the Finnish marine cluster and with research and educational institutions. For example, we are involved in the Ecoprodigi project, which aims to increase the environmental efficiency of sea transport in the Baltic Sea region through digitalisation.

#### Active interaction

We actively interact and cooperate with local actors within the Turku economic area, such as the City of Turku and regional development companies. Among other things, we are part of the City of Turku's shipyard group, which discusses topical issues such as the preparation of transport, housing and land use planning and the needs of our network's services.

We also want to improve and develop regular dialogue with our network at a wider level, and each year we bring together companies from our network to participate in a variety of network events.

### ResponSea – for a responsible maritime industry

We are closely involved in developing the sustainability of the Finnish maritime industry through our commitment to Finnish maritime industry's ResponSea initiative.

The ResponSea initiative, which was launched in 2018, defines the common objectives of sustainable development in the maritime industry, encourages companies in the sector to develop in a responsible manner, and challenges them to set their own sustainable development commitments. This topic is important for the maritime industry, as the industry often features broad supply network in which the sustainability of the end product is the sum product of the operations of the entire network.

The key themes for ResponSea are:

- reducing the environmental impact of sea transport
- the marine industry company as a fair employer
- monitoring responsibility within the supply chain
- the circular economy and life cycle efficiency in all operations.

In order to implement the commitments, companies specify concrete measures and then report on the monitoring of these in their own company report.

The maritime industry compiles a yearbook on the implementation of ResponSea, which collects information on the progress made with the commitments and good examples of the development of sustainability within the sector. In addition, Finnish Marine Industries monitors the impacts of the sector on the environment and on society. You can read more about ResponSea on the Finnish Marine Industries website at https://meriteollisuus.teknologiateollisuus.fi/en/ responsea-sustainable-finnish-maritime.



In June 2019, we welcomed our summer workers to the shipyard at an event held on the banks of the Aura River.

### The Finnish maritime industry as a sustainability pioneer

We actively participated in the Sustainability Transparency in Shipbuilding Networks project. The project was funded by Business Finland and carried out between 2016 and 2019, and the project participants included Evac Oy, NIT Naval Interior Team Oy, Finnish Marine Industries ry, the University of Turku and VTT Technical Research Centre of Finland.

The aim of the project was to develop the Finnish maritime industry as a global leader in responsible practices, to find opportunities for cooperation, and to develop new business models.

In the project, we examined different tools that could be suitable both for assessing the sustainability of a cruise ship and for collecting and analysing information, while also developing life cycle calculation models. Because no such assessment tools have been created within the maritime industry for assessing sustainability and life cycles, we borrowed from real-estate life cycle assessment tools. We will continue to develop the sustainability certification of cruise ships on the basis of this study.

We also implemented the Smart Eco Cabin in cooperation with the University of Turku. The Smart Eco Cabin is an interactive virtual cabin which can be viewed with 3D glasses. Within the simulation, the viewer can navigate inside the cabin and familiarise themselves with the various sustainable solutions relating to materials, energy consumption and well-being. We used the simulation to determine whether it is most effective to communicate information on sustainability via sound, written text or, as in this case, 3D animation. At the same time, we examined the differences between genders and age groups in terms of while they found interesting within the simulation. In the future, this information will be utilised in sustainability communications sent directly to the end users. **–** 





# Riding a wave of energy efficiency and low emissions

The design and construction of energy-efficient and lowemission ships is at the core of Meyer Turku's operations, and it is something which is important to us for many different reasons.

We want to play our part in combating climate change. In addition, the construction of energy-efficient ships and the introduction of low-emission energy sources brings us a competitive advantage, as the cruise ship company that buy from us consider these properties particularly important for new ships.

The Paris Agreement on Climate Change does not apply to international shipping, but customer expectations and increasingly strict regulation create pressure for reducing emissions in shipping as well. For example, the European Union and many ports in the EU have already set emission limits for maritime traffic, for example with regard to sulphur oxide emissions. The International Maritime Organization (IMO), which regulates and controls shipping, has also set requirements for the energy efficiency of ships, and these will gradually become tighter up until 2025.

In our ship design processes, we always take account of all current and upcoming energy-saving and environmental requirements, and we believe that tight international regulation is only a positive thing. Ships designed and built at the shipyard are leading the way in energy efficiency and environmental sustainability, and often go beyond the prevailing requirements for energy efficiency and emissions.

### Working together for continuous development

The design of each ship starts years before the actual shipbuilding work begins. Most of the environmental impacts of a ship results from the fuel consumed during its operations. Indeed, the shipyard plays an important role in managing the environmental loading caused by ships, and we are constantly developing and looking for new solutions that can help reduce energy consumption and emissions. We have improved the energy efficiency of ships by making more use of waste heat, optimising system operations and introducing alternative fuels. For example, the energy consumption of Costa Smeralda, which was delivered to the customer at the shipyard at the end of 2019, was improved through the utilisation of waste heat produced by the motors, a highly efficient hull shape, and lifts that generate electricity for the ship's electrical network.

Every time we start designing a new ship class, we set ambitious emissions and energy targets. In spring 2020, we will begin building the first Icon-series ship, which has been designed with efficiency and emission reduction at the core. The design of the vessel began already in 2016, and the objective is that the ship will be 30 % more energy efficient than its most comparable competitor.

However, we would not succeed alone in achieving such ambitious goals. This is why we are constantly working together with our customers, equipment manufacturers and supplier networks as well as research institutes, universities and universities of applied sciences. We are also involved in various research projects, such as the maritime industry's Ecoprodigi project, which aims to use digitalisation to increase the eco-efficiency of the maritime industry and sea transport in the Baltic Sea region.

We are also mapping out new types of expertise originating from outside the maritime industry. Through the Maritime Accelerator programme, we have gained access to international growth companies offering fresh expertise and new solutions. We have also utilised the hackathon action model to identify new ideas and partners.

## The central importance of operational energy efficiency

Cruise ships are complex entities consisting of tens of thousands of devices. Increasingly detailed information can be gathered on ship operations, and we make use of this when designing new ships. We have been utilising and developing for a number of years simulation methods which help us to manage these complex entities. At the planning stage, we can model the operation of the ship's systems and energy flows in conditions that correspond to the actual operation of the ship.

In addition, we use the information obtained from the operations of ships that have already been delivered to monitor their performance. This information enables us to advise our customers in the regulation of the ship's systems and functions in order to make operations more energy-efficient. The information obtained from ships is also valuable in the optimisation of *"We have already taken liquefied natural gas into use on several ships."* 

hydrodynamic performance when we are assessing operating conditions, waves and sea currents as well as different speed requirements.

With the information collected, we are able to produce genuine added value for our customers by making the operation of ships already in use more efficient and by demonstrating the actual fuel consumption and emissions levels as well as the savings achieved. Using these methods, we can design ships that consume less fuel, work more reliably in different conditions and are safer and more comfortable for the passengers.

As data connections between sea and land develop and as the amount of data collected increases, the utilisation and analysis of this data requires more robust tools and new types of expertise. Machine learning and the utilisation of artificial intelligence are in many respects still in their early stages, but they are already opening up new possibilities, such as more efficient analysis and utilisation of information. We want to be at the forefront of such developments, and so during the last year we carried out recruitment work to strengthen the data analysis competence of our energy efficiency group. We are also involved in the INTENS project, which aims to promote the digitalisation of the Finnish maritime industry, and within this project we are focusing particularly on the development of data collection and use in order to improve the energy efficiency of vessels.

#### Alternative fuels

International targets for reducing transport emissions also apply to maritime traffic, and emission restrictions in different sea areas have contributed to increasing requirements and the need for efficient and low-emission vessels. The International Maritime Organisation (IMO), under the auspices of the UN, made a decision on emission cuts in marine traffic in 2018. According to this decision, the annual absolute greenhouse gas emissions of international maritime traffic will be reduced by at least 50 % by 2050 – regardless of the overall increase in traffic volumes. After this, the aim is to gradually remove carbon dioxide emissions completely. The heavy fuel oil that is normally used is being replaced by alternative fuels such as liquefied natural gas (LNG), which does not contain sulphur at all and which produces significantly less nitrogen oxides and particulate matter than heavy fuel oil.

We have already introduced LNG on a number of ships. Costa Smeralda, which was delivered to the customer at the shipyard in 2019, is one of the first LNG passenger ships in the world, and we currently have six more LNG ships on our order book.

It is important to assess the overall impacts of different fuels, as large differences may arise depending on where the fuel originates from and how it is produced. The combustion of natural gas produces about 25 % less  $CO_2$  emissions than fuel oil. However, the methane contained in natural gas is a much more harmful greenhouse gas than carbon dioxide, and thus if natural gas escapes into the atmosphere during primary production or during the transfer phase, or if it escapes from the engines of the ships, its climate benefits can be lost. At the moment, however, LNG is the cleanest cruise ship fuel option which is available on a larger scale.

We are researching and developing methods for using bioliquids and biogases as fuels for ships, and we are involved in European cooperation projects in which, together with refineries, we are investigating the utilisation of biofuels in ships already in the near future. We are also researching alternative energy production technologies, such as hydrogen-powered fuel cells. The use of ultra-low-emission fuel cell technology is indeed expected to increase significantly in passenger ships.

#### Responsible cruise ships

In addition to emissions caused by fuel and electricity consumption, the environmental impacts of a cruise ship also results from its water consumption, waste materials and wastewater, underwater noise, and wave formation. In addition, the ship's weight and the safe dismantling of the ship at the end of its life cycle must be taken into account already in the design phase, and this then guides the selection of the materials used.

We carry out continuous development work together with both equipment and material suppliers and our customers to reduce the environmental load caused by ships and promote the adoption of environmentally sustainable solutions. Among other things, a development project is currently under way to reduce nitrogen oxide emissions from vessels. We use as effective solutions as possible for dealing with ship wastewater and other waste, thus providing our customers with ways to improve their own operations.

The hydrodynamically optimized hull of our ships is not only energy-efficient but also minimises wave formation and, together with well-designed propellers, reduces the amount of underwater noise generated by the ship. Underwater noise originating from internal noise sources can also be reduced through efficient isolation from the ship's hull, which is also an important factor for passenger comfort. We are involved in the EU's H2020 research project, which aims to further reduce the underwater noise generated by our ships.

The aim is to reduce the environmental load caused by cruise ship travel by using the most effective solutions for managing ship sewage and waste and, if necessary, by installing washers and catalysers on ships to reduce sulphur and nitrogen oxide emissions.

The overall development of ships' sustainability is demanding due to the huge size and complexity of cruise ships. In order to be better able to take this into account already in the development phase of new ship concepts, we have strengthened the competence and capacity of our energy efficiency group through additional recruitment. We also organise workshops with our customers to discuss and define sustainability requirements for the future generations of ships.

#### Material selections matter

In order to improve the traceability of materials used on board ships, we carry out continuous development work. This work is important, as the quantities of the many different materials potential lighter materials. For example, we are involved in the Ramsses project, funded by the EU, which explores the possibilities of using alternative, advanced materials in the hull and structures of ships.

Piikkio Works designs and manufactures all the cabin and bathroom modules that are then installed in the ships at the shipyard. The aim is to always make the cabins as light as possible and make use of the best available technical solutions in order to achieve, for example, energy and water savings.



used to build a ship are truly enormous. For example, the construction of each of our Mein Schiff ships involved the use of 2,000 km of electric cable, 180 km of pipes, 8,500 m<sup>2</sup> of windows, 335,000 litres of paint, and 30,000 m<sup>2</sup> of carpets.

In addition, our supplier network and its subcontractors are extensive both in terms of number and geography. In the shipyard's selection of materials, the aim is to take into account the full life cycle impacts stretching from the raw material procurement to the materials' longevity, serviceability and recyclability.

Our subsidiary Shipbuilding Completion is responsible for the turnkey delivery of the cruise ships' public spaces, including the design of the facilities and the management and installation of the materials used. The company carries out continuous development work to improve the traceability of purchased materials and thus also to ensure that production conditions are appropriate.

In addition to sustainability, the other essential criterion for the construction materials is their weight, as a lighter ship has lower fuel consumption. We carry out constant research on

#### Ship recyclability

The documentation of materials used in the construction of each ship is accompanied by an IHM document (Inventory of Hazardous Materials). The EU Ship Recycling Regulation requires that all ships that weigh more than 500 GT and operate under the flag of an EU country must have an up-to-date and certified IHM. We have produced certified IHM reports for all ships constructed at the Turku shipyard since 2009. When the ship is handed over, responsibility for updating and maintaining the IHM is transferred to the shipping company that owns the ship.

The IHM document specifies the locations and quantities of different harmful materials present in the ship that may pose occupational safety or environmental risks during any renovation work or during the demolition of the ship. The EU Ship Recycling Regulation covers 23 hazardous substances that are either restricted or prohibited for use on ships, and it covers all fixtures and materials within the ship.



In order to minimise environmental impacts, the entire life cycle of the ship is taken into account in the design and construction process.

#### Safety first

Safety is essential for the design and construction of a cruise ship. Ship safety and stability involves the careful combination of many different factors, and the management of these different components requires extensive expertise. In the event of a potential accident, such as a crash or a collision with another vessel, the most important thing is to stay upright and above the waterline.

The safety features of our ships, whether they relate to stability, fire safety or ship systems, are all of the highest quality, and we are constantly working on developing the safety features of the next generations of ships. In our ship design processes, we take into account all relevant risk scenarios and design technical solutions that facilitate the best possible preparations for even the least expected risks. Furthermore, every new device designed for the ship receives a safety review. Finally, we thoroughly test each completed ship both in the dock and at sea before delivering it to the customer.

We want to be leading the way in ship safety. We continuously develop our expertise and examine different solutions for improving safety in collaboration with different actors. For example, we have carried out research on the stability of damaged ships together with universities and our customers, and we are also participating in the EU's FLARE project, which seeks to develop vessels' capacity to deal with flooding scenarios. Furthermore, we also carry out careful research into future fuels and technology-related safety issues such as fire safety.

We are also promoting international maritime safety regulation. We are working closely with the maritime authorities and the International Maritime Organisation (IMO) to develop safety rules in order to better respond to technological developments and future operating environments. We are also involved in the international Cruise Ship Safety Forum, which develops best practices to improve the technical and operational safety of ships.

We build our ships in accordance with criteria that are stricter than the current international regulations. For example, the stability regulations for passenger ships that will enter into force in 2020 have being applied in our ship design processes for a long time already.

# Sustainability Goals

The UN 2030 Agenda for Sustainable Development aims at sustainable development from the perspective of the economy, human well-being and the environment. There are 17 UN Sustainable Development Goals. In English, targets are called Sustainable Development Goals (SDG). We have defined for our own business operations the six most important UN sustainable development goals which we are able to have an impact on.

#### Clean water and sanitation



#### Objective:

Improve water quality by reducing pollution, minimising emissions of hazardous chemicals and materials, and significantly increasing global recycling and safe re-use.

#### This is what we do:

We do not use significant amounts of water in our production processes, but we can improve the quality and efficient use of water by improving the treatment of ships' waste and water in cooperation with equipment manufacturers and shipping companies. We are also continuing to develop the safe storage and handling of chemicals in the shipyard area.

#### Decent work and economic growth



#### **Objective:**

Achieve higher levels of economic productivity and improve resource efficiency in consumption and production. Protect human and labour rights and ensure a safe working environment for all employees.

#### This is what we do:

Through new investments and operating methods, our aim is to boost the efficiency and productivity of shipyard operations and resource use. We create new jobs both directly through our own recruitment and indirectly through our growing supplier network. We have drawn up a Code of Conduct for Suppliers, and our suppliers have also committed to complying with this. This code of conduct includes requirements for our suppliers to comply with human rights treaties, working time legislation, and prohibitions on child labour. We improve personnel well-being and occupational safety and provide training for both our own personnel and our network.

#### Sustainable industry, innovations and infrastructures



#### Objective:

Develop high-quality, reliable and sustainable infrastructure, renew infrastructure in line with sustainable development, improve the efficiency of resource use and increase the use of clean andenvironmentally-friendly technologies and production processes.

#### This is what we do:

New investments in production facilities promote energy efficiency and circular economy thinking. Together with shipping companies and equipment and material suppliers, we are developing more sustainable solutions and promoting the deployment of environmentally sustainable technologies.



#### Responsible consumption



#### **Objective:**

Ensure environmentally sustainable processing of chemicals and waste throughout their life cycle. Significantly decrease waste generation through reduction, recycling and reuse.

#### This is what we do:

We continue to improve the efficiency of waste management in production, the reduction of waste and the safe use of chemicals and hazardous substances. We also highlight opportunities to reduce, for example, the amount of food waste produced by ship operations.

#### Climate action



#### Objective:

Improve the ability to adapt to climate-related risk factors and natural disasters and integrate climate change measures into strategies and planning.

#### This is what we do:

We can make a significant contribution to the fight against climate change through both our own production processes and the future impact of the ships we build. The carbon footprint of our production activities derives primarily from energy consumption. Through our operations, we can also reduce both local and global climate emissions by minimising the energy consumption of our ships, improving energy efficiency and exploring the options for using alternative fuels.

#### Underwater Life



#### Objective:

Prevent and significantly reduce marine pollution, with a focus on pollution resulting from land-based operations, such as waste that ends up in the sea.

#### This is what we do:

Preventing marine litter and protecting the seas is one of our key objectives. We can have an impact in this area primarily by implementing technical solutions and by influencing the attitudes and outlook of our own personnel and partnering companies. The most important tools for this work are education, guidance and instructions on the impacts of marine litter and the preventive measures that can be taken.

# Sustainable production

Energy consumption and waste generation are the most significant environmental aspects of shipbuilding. Energy is consumed in the shipyard and cabin factory both in the running of production processes and production equipment and the heating of buildings. A lot of waste is generated due to the huge quantities of materials needed in shipbuilding.

#### Sustainable shipbuilding

Our shipyard and our subsidiary Piikkio Works both maintain an ISO 14001-certified environmental management system. In addition, the shipyard has has a ISO 9001-certified quality management system and an ISO 45 001-certified occupational safety system, and we use both internal and external audits to ensure that our operations meet strict quality, safety and environmental requirements.

According to our assessment, the most significant impacts of the shipbuilding process and possible risks to the environment are caused by the shipyard's energy consumption and waste materials, the littering of nearby areas, and the storage and handling of chemicals.

Shipyard operations require environmental permits, and environmental matters are monitored as part of regular management reviews. The current environmental permit under which we operate dates from 2008. Because the shipyard's production processes have changed and its operations have expanded, we submitted an application for a revised environmental permit at the end of 2018. It is expected that the new permit will be issued in early 2020.

In order to complete future ship projects, we will be carrying out in the next few years dredging of seafloor sediments in the shipping lane and dock area. As part of the environmental permit process for the dredge spoil disposal site, nature surveys were carried out in the shipyard area to examine valuable nature sites and rare species.

#### An efficient and low-emission shipbuilder

Energy is consumed in the shipyard and cabin factory both in the running of production processes and production equipment and the heating of buildings. In all investment projects, we pay particular attention to energy-efficient solutions, and we have implemented a number of projects aimed at energy savings and efficiency, such as the upgrading of heat recovery systems and air conditioning machines and the utilisation of waste heat in space heating. The shipyard's energy audit will be carried out again in early 2020. The energy efficiency of cabin production has also improved with the introduction of the new factory at Piikkio works.

Indirect emissions are caused by the production of electricity and heat that we purchase and by the logistics operations and materials production within our supply chain – with steel





Energy consumption in 2019 (Meyer Turku and Piikkio Works)



production being a particularly large source of emissions. In autumn 2019, the shipyard began use of its own solar power plant, and the shipyard uses only electricity produced by hydro power and solar power.

At the shipyard, airborne emissions are caused by the fuel consumption of machinery and portable fuel oil-powered heaters. VOC emissions are caused by paints and the solvents contained in them. In addition, particulate matter is emitted in the spray cleaning of the surfaces to be painted. VOC emissions from solvents and paints used in the preliminary treatment stage represent a significant proportion of the shipyard's emissions. A new combustion plant is being used to clean the exhaust air from the preliminary treatment work, which reduces VOC emissions by almost 97 %. In addition, the heat generated is captured and utilised in space heating. We are engaged in development work with paint manufacturers, and we will make efforts to switch to completely water-soluble paints if this becomes possible in the future.

#### Waste from the sea and into use

The shipyard and our cabin factory generate a large amount of waste, and the total quantity of waste has increased due to the increased size of the ships being built. The shipyard's largest waste categories are metal, wood and mixed waste generated in the shipbuilding process. The cabin factory, meanwhile, generates primarily metal, cardboard and plastic waste. During the earth construction work carried out in 2019 as part of the shipyard's new investments, an exceptionally large amount of contaminated land was removed and delivered for the necessary decontamination treatment.

We strive to utilise materials efficiently in our own operations, and we work actively with partners to find ways to reduce the amount of waste and find new reuse options. By introducing changes to production and operating methods, significant progress has already been made in reducing the amount of plastic waste and packing material produced in cabin production as well as the amount of unutilised waste ending up in landfill sites. The proportion of waste that was reused or converted into energy was 93 % at the shipyard and 84 % at the cabin factory.

The Turku shipyard is located on the edge of the Ava archipelago, on the shore of the Baltic Sea, and is thus in close contact with sensitive areas in nature. One of our priorities for responsible shipbuilding is the protection of the seas and, in particular, the prevention of littering. As the shipyard operates in a windy seaside environment and a lot of operations take place outdoors, our challenge has been to prevent litter being carried away into the nearby sea areas. Efforts are made to prevent the littering of the shipyard's surroundings and sea areas by using, for example, hood structures to cover ships under construction and garbage containers with covers on the outer decks of ships, as such measures can significantly reduce the amount of litter carried off by the wind. In addition, we have tested, for example, the use of buoys in the quay area, which prevents any waste entering the sea from getting out beyond the waters surrounding the shipyard. Instructions and training on operating methods and continuous reduction of packaging materials all play an important role. During 2019, we carried out an extensive beach cleaning project both at sea and on land.



# A large solar power plant for the shipyard

In the autumn, the shipyard completed construction of its own solar power plant on the roof of the new plate warehouse. The solar energy is collected from close to 1,600 panels, and Turku Energia estimates that the power plant will produce around 480 megawatt hours of electricity per year. This amount corresponds to the annual electricity demand of nearly 200 apartments.

"For several years now, we have made persistent efforts to reduce our carbon footprint. In 2017, we shifted to using completely carbon-neutral electricity, and the solar power plant that has now been built carries us further along the same path," says **Tapani Pulli**, Deputy Yard Director of Meyer Turku.

The solar power plant is owned by Turku Energy, and the electricity it produces is used entirely by the shipyard.

# Environmental indicators

The following tables show the energy, electricity and water consumption data and waste volumes for Meyer Turku shipyard and Piikkio Works.

#### Meyer Turku, energy, electricity and water consumption

	2017	2018	2019
District heating MWh	48,763	45,952	46,684
Electricity MWh	60,270	66,950	69,723
Water consumption m <sup>3</sup>	154,940	182,000	211,704

#### Piikkio Works, energy, electricity and water consumption

	2017	2018	2019
Electricity MWh	1,188	1,176	1,144
Water consumption m <sup>3</sup>	2,103	1,544	1,817
Light fuel oil kg	26,003	63,925	23,829
LPG L	117,296	102,249	145,000

#### Meyer Turku, waste by fraction (tonnes)

	2017	2018	2019
Metal waste	14,357	13,248	19,381
Mixed shipbuilding waste	3,036	3,645	4,508
Wood waste	1,992	1,401	2,086
Slags	1,473	925	1,834
Energy waste	619	559	630
Sludges	396	633	752
Recyclable materials (paper, cardboard, plastic, biowaste)	264	314	391
Hazardous waste	204	190	292
Total	24,357	22,933	31,892
Contaminated soil and concrete	5,261	1,274	12,104
Clean soil and concrete	992		149,298
Grand total	28,593	22,189	191,275

The amount of contaminated soil and concrete grew significantly in 2019 as a result of the earth construction investments. Pure soil and concrete were mainly generated by excavation work carried out at the shipyard.

#### Piikkio Works, waste by fraction (tonnes)

	2017	2018	2019
Metal waste	173	98	177
Waste-to-energy	50	83	104
Construction waste	101	64	68
Cardboard and paper	36	63	87
Mixed wood	28	3	3
Paint waste	2	0	0
Incinerable waste	1	0	0
Other waste	27	7	5
Total	419	318	444

#### Meyer Turku, waste recycling and disposal (tonnes)

	2017	2018	2019
Recycling	13,909	12,743	18,846
Utilisation (incl. use for energy)	6,890	6,293	157,268
Landfill	6,878	2,199	13,992
Reuse	761	789	868
Burning	116	146	292
Composting	39	18	9

Utilisation includes rock excavations (149,000 t), which are used for earthworks.

#### Piikkio Works, waste recycling and disposal (tonnes)

	2017	2018	2019
Recycling	210	161	264
Utilisation	79	86	107
Landfill	101	64	68
Other	27	7	5
Burning	2	0	0





# RISK MANAGEMENT AND SAFETY AT THE SHIPYARD

# Managing safety risks

When seeking to ensure safety, a shipyard is a very demanding location. We must take into account all the hazards associated with the metal and construction industry and the fact that work is often being carried out either high above the ground or water or in ships being constructed while on water, where a ship fire can cause major personal injury and material damage. In addition, as the shipyard grows, work is already being carried out 24 hours a day and every day of the year, and so work being carried out at night or at other darker times brings additional safety risks.

The aim is to prevent risks through a careful risk management process, and the effectiveness of this process is continuously monitored by the company's management. In 2019, the shipyard received ISO 45 001 certification for its new occupational safety management system. The shipyard's rescue plan was updated and completely renewed for the new buildings and operations in the area.

In the coming years, the number of people working at the shipyard will increase significantly – we will be building larger ships and building them quicker than before. In addition, a large number of new people will be arriving to the area, some of whom have not previously worked at the shipyard. That is why the prevention of risks and accidents will continue to be a priority for us. In addition to accident prevention, the aim is to ensure that the ships under construction are delivered to our customers within the agreed schedule.

#### Safety is our top priority

Our work to prevent accidents and prepare for potential accidents is ongoing. We pay close attention to safety and to the risks faced by employees at all stages of the shipbuilding process, and a safety plan is drawn up for each ship before construction begins. In connection with each new ship project, we also assess the specific risks and the means of managing them, such as the use of new fuels such as LNG and the personal training required for this.

The shipyard's safety regulations are strict and we take





Accident rate and absences due to sickness

\*LTIR (lost time injury rate) = accidents causing an absence of LTIR /million working hours, Meyer Turku Oy \*\*absence due to sickness in hours/theoretical regular working hours, Meyer Turku Group



Accident rate, network companies

\*LTIR (lost time injury rate) = accidents causing an absence of LTIR /million working hours

Theme	Objective	Indicator	Target year	Actual 2019
Health and safety at work.	Number of accidents	leading to absence from work Number of accidents	Ongoing	0
	Fire safety	Number of fires on ships	Ongoing	0
	MeyerEye tool for making HSE obser- vations	Implementation	2019	
	Increased number of HSE observations	Number of observations	2019	100 %

Work-related accidents



a very strict approach to ensuring compliance with them. Violations of the regulations may result in being banned from entering the shipyard area.

Every employee working in the shipyard area, both their own employees and those of network companies, must complete training on safety and environmental risks before entering the gate of the shipyard. We offer an electronic HSE induction program (Health, Safety, Environment) in 18 different languages to reduce the risk of safety instructions being misunderstood. The orientation is complemented by a new shipyard passport for foreign network employees, which includes training on Finnish culture in relation to both work and free time. We are also developing more comprehensive safety training for our personnel.

#### More safety observations with MeyerEYE

In 2019, the shipyard (personnel of Meyer Turku Oy and network companies) experienced a total of 66 accidents that resulted in absences from work, while the accident frequency level was 7. These figures are very good compared to the general level in construction and industry. The accident frequency at the Piikkio Works cabin factory was 16.

We take seriously all accidents and near misses. We investigate the causes wherever damage has resulted, and we determine the necessary corrective measures. Thanks to our systematic safety work, the frequency of accidents at the shipyard has improved considerably over the past 10 years. However, in recent years, the shipyard's growth, the large number of new employees and the urgency, overtime and increased night work resulting from the delayed ship project have increased susceptibility to accidents. Nevertheless, we are not compromising on our safety objectives, but instead continue to be very diligent in providing ongoing training, issuing reminders and carrying out detailed monitoring.

We encourage everyone working at the shipyard to report all their safety observations and development proposals. In the past, it has been difficult for us to compile and monitor observations in a timely manner due to the extent of the shipyard, the dozens of mother tongues used and the hundreds of network companies operating at the shipyard. In spring 2019, we introduced a new MeyerEYE digital system to report all safety-related observations, data and images directly from the location of the observation. The system gives us an accurate, real-time situational picture of all shipyard events and the opportunity to respond quickly to them. By the end of the year, more than 3,000 safety observations had been reported through the system, which is a tremendous improvement to the previous total of around 200 observations received each year through numerous different channels. Our subsidiary Piikkio Works reported 304 safety observations.

#### Rigorous monitoring of fire safety

From the risk management and safety perspective, one of the yard's most important issues is fire safety. Extinguishing a fire on a ship is more challenging in many ways than in an ordinary property, and the greatest risk in a ship fire relates to the evacuation of employees from an unfinished ship. Carrying out an evacuation, finding the location of the fire and enabling access for the fire brigade in a cramped, unfinished and maze-like construction area is extremely demanding. This is why the shipyard has its own fire brigade which is on call 24 hours a day, every day of the year, and which receives continuous training to maintain its fire extinguishing and fire rescue skills.

The shipyard's fire brigade serves as the official first response unit, meaning that they are the first link in the chain. There is a radio connection with the authorities, which means that, for example, consulting a physician in emergency situations is fast and effective. As a result of the strong increase in the number of shipyard personnel and other people working in the area, the number of fire alarm and first aid tasks increased considerably during the year. The capacity of the shipyard's fire brigade has been increased through new recruitment, and a new fire truck was introduced at the end of 2019.

#### Hot work and litter as primary reasons for fires

There is a high risk of personal injury and material damage in ship fires. The costs incurred by a ship fire are approximately €300,000–400,000 per minute, and total costs can easily rise to tens of millions of euros. In addition, fires can affect the construction schedules of the ship, which may result in a significant and detrimental chain reaction on the schedules of future ships.

In spring 2019, there were two ship fires started by welding sparks in which the ship had to be evacuated completely. The fires were extinguished quickly and the damage incurred was relatively small. In addition to these, the ships under construction experience 16 outbreaks of fire in which fire extinguishers were required, with most of these being caused by welding or flame cutting work.

Trash and packaging materials are usually the reason why fires spread. The tidiness of the construction sites is one of the key ways of preventing fires – and also particularly challenging in our shipyard. Efforts are also made to improve fire safety through employee training, new manufacturing techniques and materials, and new working methods, such is the practice of bringing larger, prefabricated components onto the ship and using bolted joints instead of welding. We also implement tighter restrictions on and supervision of hot work carried out on the ship.

### Hot work certificate for demanding shipyard work

The risk of fire is high at the shipyard because hot work is constantly being carried out in the cruise ship construction area. The digital hot work permit system currently in use allows us to monitor in real time where on the ship hot work is being carried out, who is doing it and who is monitoring it.

The ship is continuously monitored by external thermal imagers. They give an alert immediately if they detect an increase in the point heat load, which would mean that a fire has broken out on the ship's top or side decks. The system also detects if a person falls into the water.

The shipyard, and the ship construction areas in particular, are an exceptional kind of work site, and we believe that traditional hot work training does not take sufficient account of the special features of the shipyard. For this reason, we developed our own hot work certificate for the shipyard, the completion of which will be made compulsory for everyone carrying out such work. The first hot work certificate training was held in early 2020, and significant investments will be made in further trainings. In the future, only persons trained by Meyer Turku will carry out hot work in the shipyard.

In the development of the hot work certificate, we also specified the risk levels in the different areas of the shipyard, and we use this information to guide and limit the use of hot work more precisely than before. For example, at the lowest risk level, such as in plate warehouses that do not contain flammable materials, the risk of fire is very low and hot work does not require written permission or a fire guard. An example of the highest risk level, on the other hand, would be a nearly completed ship. In these, hot work is generally prohibited, a hot work permit can only be granted in exceptional situations, and hot work is supervised by the shipyard's fire brigade.

#### Safer traffic at the shipyard

We have to give special attention to shipyard's logistics security. Our shipyard area is like a small city where, in addition to the 8,000 employees, there are many different kinds of traffic, including trucks, cranes, forklifts, and even trains.

The shipyard cranes and the cruise ships under construction are high structures where work requires special attention and expertise. Every day, we lift hundreds of loads using the various cranes located both in the warehouses and outdoors, and the centre of gravity for these loads has to be controlled very carefully. Everyone moving around within the shipyard must also understand the risks associated with these loads and stick to the marked routes.

During 2019, we launched an internal transport safety project to investigate the problems and hazardous locations related to shipyard traffic. Based on the responses received, the most dangerous areas were identified and then traffic restrictions were implemented in these areas using one-way systems, traffic bans, or fixed barriers. For example, a busy area at the edge of the ship construction basin was transformed into a one-way lifting area where driving is only permitted for authorised persons. In addition, new routes were introduced and lane markings were improved.

In order to improve safety, the shipyard's forklift truck training has been revised. The training is currently provided by an external organisation, and in addition to theoretical instruction, it also involves practical training and a driving test





The most important people guarding the safety of the shipyard are the individual shipbuilders working there.

that must be passed. We have also reduced the number of forklift trucks in the shipyard, which contributes to reducing the safety risks associated with their use.

An important factor for safe work at the shipyard, especially in darker conditions, is good lighting. The lighting in the shipyard area has been significantly improved and, for example, new LED lamps were introduced as part of the renovation of the ship construction basin. Increased lighting strength improves occupational safety and the efficiency of work in the basin area.

#### Safe chemical use

The shipyard's chemical safety has been developed through a chemical survey process which collected information on the chemicals used by shipyard and network employees as well as their quantities, storage locations and procurement methods. Based on the survey results, targets were set for the development of chemical safety and a foundation was established for the chemical safety management system. The system is based on both national and EU chemical legislation and also the requirements of the management systems used by the shipyard.

An electronic system has been introduced for the management of chemical data. This electronic system contains chemical safety data sheets, storage locations and stored quantities. At the shipyard, the chemicals used in significant quantities are the paints and solvents used for surface treatment of ship components, acetylene used for flame straightening and flame cutting, and LPG used for heating steel plates during the preliminary treatment stage.

The shipyard area is mostly asphalted, which prevents any chemical leaks from being absorbed into the soil. The shipyard's fire brigade has the expertise, preparedness and equipment to act quickly in cases of potential damage, and in 2019 the fire brigade responded to 68 environmental incidents. Most of the cases were related to oil and fuel leaks or paint and solvent leaks. There were three more serious incidents. The fire brigade quickly dealt with the incidents, and as a result the environmental impacts were negligible. The more serious incidents were reported to the supervising authority.

### We carefully protect our data and our customers' data

Know-how and innovations in our own processes and our customers' ship projects are our most valuable knowledge assets. For this reason, the importance of data security is crucial in protecting our expertise, operations and customers, and we invest significantly in this area. At the shipyard, the machines must operate, the systems must run, and the work must continue under all conditions.

Outdated systems are known to be the most vulnerable, and the primary channel for data security breaches is often e-mail. For example, e-mail phishing is constantly taking place – we receive reports of this on an almost daily basis. In maintaining and developing data security alongside technical solutions, it is important to promote data secure operating methods and a data secure culture. That's why we invest in security and privacy online courses for shipyards so that as many people as possible can identify security risks and avoid scams.

In our cyber threat management, we strive to apply wellknown, proven technical solutions for the early detection of attacks and systematic problems. The classification of information and the harmonisation of information security guidelines and solutions in the company's other shipyards also improves the management and confidentiality of our critical information assets. In this way, we also ensure the uninterrupted functioning of our production processes.

# Occupational safety risks at the shipyard



Unguarded machinery



Fire



Tripping / slipping



Unsafe electrical equipment and connections



Danger of getting crushed



Excessive strain



Unsafe lifting operations



Overloaded vehicles and forklifts



Stuck by foreign body

₩

Unsafe working at height



Falling objects



Confined spaces



Internal traffic



Unsafe loading bays



Open shafts and edges



Unsafe working platforms



Poorly supported structures



Unfinished scaffolding



Handling of

chemicals







# Top-level shipbuilding professionals

Today's cruise ships are like smart cities moving around at sea, and the production of cruise ships has changed from a traditional metal industry to a demanding technology industry. The construction of cruisers requires not only skilled metal industry actors, but also state-of-the-art expertise in design, project management, technology and product development. It is therefore important for us to maintain the expertise of our employees at the highest level and to ensure that the shipyard's know-how is transferred to the shipbuilders of the future.

The functional capacity of the shipyard depends on the well-being of its personnel, and we support such well-being, both at work and in free time, in many different ways. The shipyard's own occupational health centre supports supervisors and personnel in the holistic management of their work ability so that all our employees can remain capable and fit to work until retirement age.

#### Fast-track to work

Our company, along with the Finnish maritime industry as a whole, is passing through a generational shift as many long-term shipbuilders reach retirement. In 2019, our number of personnel continued to grow strongly for the fifth consecutive year.

In order for all our new employees to flourish and reach their potential at the shipyard, we have developed the Meyer induction model. The aim is to harmonise and systematise the orientation of each new employee. To support this process, we introduced two e-learning courses at the beginning of 2020. The first of these is completed before the new employee's first working day, and the second is done during the beginning of their employment. In addition to these, traditional practical orientation provided by the supervisor plays an important role.

Maintaining consistent, good supervisory work is importance to us. To this end, we developed in 2019 methods and training for the systematic coaching of supervisors, and these will be included in the regular programme during 2020. Our goal is for each supervisor to be well acquainted with their role and responsibility in, for example, the orientation of new employees and the implementation of our ethical and management principles.

#### Top shipbuilding know-how

The shipbuilding environment is a unique workplace, and one which requires top expertise. Even certified welders receive from us further training in areas such as welding position techniques to enable them to work on challenging tasks at the shipyard. The shipyard's area has its own Shipbuilding School, through which we ensure that we always have the skilled and trained personnel we need to design and build ships. The school works in close cooperation with the shipyard's supervisors, as the aim of the training is to keep the know-how of the shipyard and its network at the forefront of the shipbuilding sector. The personnel of our subsidiary companies are also trained at the Shipbuilding School.

During 2019, the number of training participants continued to grow strongly. Almost 4,000 people completed the training, of which approximately 15 % were from our network companies.

We are investing in the development of web-based training so that more and more employees can participate in training at times which suit them best. We have already moved to a web-based approach, for example, in the delivery of our HSE induction programme for all those working at the shipyard and of the information security training for Meyer Turku personnel.

#### On-the-job learning and skill transfer

Alongside training, learning on the job plays a key role in the introduction and transfer of shipbuilding know-how to new employees. For example, a recently qualified plate welder needs several years of work experience to achieve professional competence in shipyard work. For a long time now, we have utilised the expertise of experienced shipbuilders by having them train and guide a less experienced work partner towards reaching a professional competence level.

Apprenticeship training is also a common means of training new experts, and we encourage our apprentices to also apply for exchange studies at the Matthew docks in Germany.

#### Objectives

Theme	Objective	Indicator	Target year	Actual 2019
Society and economy	Recruitment of new employees	Number of new recruitments	2023	500
Employee well-being	Training 20 new mentors Transfer of know-how	Number of persons trained	2019	20



Number of employees at year-end

#### You're all right, aren't you?

Shipbuilding is very physical work and there are many different occupational safety risks involved in working at the shipyard. On the other hand, the work done by our personnel may be busy and mentally stressful, which leads to the risk of work exhaustion.

It is very important for us to holistically take care of the work capacity of our personnel. This involves identifying the

threats and stress factors in shipyard work, preventing and managing them, and supporting the well-being of employees and, where necessary, their rehabilitation as well. We are developing competence in the early support operating model, and we will introduce an online 'Caring Supervisor' training for supervisors in 2020.

If one of our employees becomes exhausted or sick, or if they injure themselves, our aim is always that they will be able to return to work. Illness or injury can impair work ability, which means that the employee is unable to return to carrying out physically demanding plate welding work, for example. In these situations, we consider different alternatives together with the employee, their supervisor and occupational health care so that they can continue to work, for example, through receiving retraining.

Maintaining work ability and avoiding the need to live on a disability pension has significant positive impacts both on the employee's personal well-being and finances as well as on the national economy. Our aim is to ensure that everyone maintains good work ability and has a long career, as this is in everyone's common interest.

We are one of the few Finnish companies with their own occupational health care. The occupational health centre located at the shipyard facilitates the everyday lives of employees and lowers the threshold for seeking treatment, as it is easy to pay a visit during a work day. The occupational health centre is also familiar with the risks present in the shipyard operating environment and thus able to work closely with the different parties. This gives the centre a significant role in the management of the work ability of the personnel.

We have succeeded in our long-term efforts to reduce at the shipyard the costs of work left undone due to sickness absences, occupational injuries and costs associated with disability pensions. The shipyard's accident, absence and retirement figures are, in comparison to other Finnish industrial companies, at an excellent level. The accident figures are presented on pages 30–31 of the report.

Number of employees at year-end	2016	2017	2018	2019
Meyer Turku Oy	1,614	1,854	2,007	2,139
Piikkio Works Oy	126	131	145	153
Technology Design and Engineering Eng'nD Oy	46	59	58	76
Shipping Completion Oy	38	47	50	53
Total	1,824	2,091	2,260	2,421
Average during the year	1,771	2,009	2,205	2,387
New recruitments	246	359	297	287
Employee turnover	4.8 %	6.1 %	7.7 %	7.5 %*

\* Includes retirements, but does not include fixed-term terminations



Short-term training, number of participants

Labour political recruitment training, number of trainees







### Shipbuilding Social ensures shipyard expertise

The shipbuilding school at the Meyer Turku shipyard is the only one in Finland, and it has been training shipbuilding professionals since way back in 1962.

The school plays a very important role in developing and maintaining the shipyard's expertise and in training new employees to meet the work requirements of the Meyer Turku Group and its network companies. As a result of the large investments made by the shipyard, many employees' job descriptions are changing and there will be a constant need for conversion training and continuing professional education.

The school's annual calendar includes hundreds of training courses and courses tailored to the shipyard's competence needs, including occupational safety and hot work certificate courses, shipbuilding technology courses and courses on software used for ship design, a variety of training courses related to shipbuilding processes, first aid courses, and I anguage studies, such as English, Russian, Finnish and German. As the number of personnel increases, there are also more new supervisors, and these are all given supervisor training.

The school also organises labour market recruitment training, which includes the training on ship plate welders, ship plumbers, engineer fitters and ship designers. At the end of 2019, there were 21 new ship designers being trained, 8 of whom were employed by Meyer Turku.

### We're off for a run!

We also support the well-being of our employees by offering them different recreational opportunities as well as sports and culture vouchers. In the spring, we were learning better swimming techniques together in the swimming course, and in the autumn, we worked together with an external professional to start running schools, which generated a lot of enthusiasm among our employees. We ran once a week for five weeks, and even though the number of participants dropped slightly as the courses progressed and the weather was not always favourable, there were plenty of runners even during autumnal downpours.

Based on the feedback, the running school was considered a very good form of workplace exercise, and we intend to continue with it next autumn!

### Close cooperation to control the pneumococcus epidemic

In autumn 2019, about 30 cases of pneumonia were treated at the Turku University Central Hospital, and the cause of these was found to be pneumococcus bacteria. The patients were employees of various companies, all of whom had worked for a long time on a ship under construction at Meyer Turku shipyard.

We therefore quickly started pneumococcus vaccinations in close cooperation with the National Institute for Health and Welfare, the City of Turku and Turku University Central Hospital. The number of vaccinations needed was large, but we succeeded in quickly vaccinating approximately 5,000 people at the shipyard. General infection control measures, such as good hand hygiene, were also intensified. These measures succeeded in bringing the epidemic under control.





# We create economic added value for society

Our ship projects are big. The value of one of our ship deliveries can be as much as one per cent of the total annual value of Finnish exports, and so the economic and employment impacts of our operations are significant. Together with our network companies, we directly and indirectly employed around 8,100 employees in 2019, and the number is set to increase considerably, reaching up to 20,000 by 2023. This growth is particularly visible in the economy and society of Southwest Finland. Furthermore, the total impact is even greater when one takes into the account the work we provide for foreign companies and our own network suppliers.

### The shipyard's economic impact reaches far and wide

The regional economic impacts of Meyer Turku shipyard were examined for the second time in a study carried out by the Brahea Centre at the University of Turku. According to the report, the shipyard's economic impacts are very significant in the Turku economic area and Southwest Finland, and they are also significant at the national level. The positive impacts of the shipyard spread out widely through its supplier network, as approximately 80 % of the value of the ship is derived from work carried out by the network companies, with only 20 % being accounted for by the shipyard's own work.

Our supplier network has remained fairly stable since 2016 in terms of the number of companies involved, but the value of deliveries made to the shipyard has seen a strong increase, almost doubling in the space of just a few years. The total value of deliveries in 2018 reached approximately €933 million.

We build our ships in close cooperation with our Finnish network, with approximately 75 % of our suppliers being Finnish companies. Our direct and indirect economic impacts are largest in Southwest Finland and Uusimaa, where 80 % of our network companies are located and where most of the people working at the shipyard live. Our suppliers have their own subcontracting networks, and these extend our economic impacts outside of Finland as well. A significant proportion of our foreign suppliers are German, both in terms of total value and number of companies. The strong increase seen in Germany's share is partly explained by the fact that we receive the ships Floating Engine Room Units (FERU) from Meyer's Rostock shipyard. The FERU is part of the ship's core, where the main engine rooms are located.

The total turnover for our shipyard and network is approximately €1.9 billion. The majority of our tax revenue benefits the municipalities of Southwest Finland, but the largest corporate tax payments go to Uusimaa. In addition, municipal tax revenue paid by employees also increases the positive tax revenue impact on the region. The growth in the activities of the shipyard also radiates out positively to the rest of society. The increase in the number of people working at the shipyard has increased the demand for rental housing in the Turku region, and the number of applicants for upper secondary level maritime and technology training has increased considerably in Southwest Finland. ■

### University cooperation to ensure excellence

In 2019, we produced a higher education strategy that will guide our cooperation with universities and higher education institutions in the future. It defines our goal to create in Finland the world's leading industrial and scientific centre for the shipbuilding sector in order to develop our competitiveness, create innovations in shipbuilding and promote key societal values.

For this purpose, we have signed a cooperation agreement with Aalto University and the University of Turku. The agreements concluded are a continuation of the long-term cooperation between the Turku shipyard and universities which has featured top research, high-quality education and the involvement of different maritime technology bodies and organisations. Cooperation is carried out, for example, in materials research and steel structures, hydrodynamics, ship safety, energy efficiency and studies supporting sustainable development. In practice, collaboration is carried out primarily through Master's thesis and doctoral research projects. In addition, Aalto University's new MarineX project is developing a new research forum and collaborative platform for the maritime industry and for marine technology. Furthermore, we are supporting the development of new Master's degree programmes at the University of Turku through funding an endowed professorship. The endowed professorship relates to mechanical engineering and material technology, fields in which the university will begin new engineering Master's degree programmes in autumn 2020.

"We want Finland to be the world leader in ship technology and science. Our close cooperation with universities is one important means of achieving this goal. High-quality engineering training is important to us because our employees' intelligent and creative solutions for ship design and production optimisation will help to keep us competitive. We also want to be present and visible in the academic life of students," says **Jan Meyer**, CEO of Meyer Turku. Distribution of total value of domestic deliveries purchased by the shipyard according to region.



Value of deliveries









Satakunta





Source: The regional economic impacts of Turku Shipyard and its network in 2018, the Brahea Centre of the University of Turku.





# We succeed together as a network

We don't build ships alone. We have annual contractual relationships with approximately 1,500 companies and make more than 30,000 orders each year, ranging from smaller recurring orders to very high value individual orders. Our network companies account for over 80 % of the total expenditures on ship construction. Over the course of a year, the shipyard provides work to approximately 2,000 companies, some for only a few days and others for the whole year. We are continuously providing more work for our network due to our strong production growth. This is why it is so crucial for us to manage our network well and carry out good cooperation. We require from all our suppliers quality, cost-effectiveness, security of supply and responsible practices. We provide orientation to our network employees on how to work safely at the shipyard, and we closely monitor suppliers' practices and performance.

### Maintaining a competent and extensive network is vital

In the past, shipyards built ships almost entirely by themselves, but today shipyards construct ships using increasingly prefabricated components and modules, and they do so in cooperation with many other companies. Above all, the role of the shipyard is to lead and coordinate the shipbuilding process.

Our network consists of design agencies, suppliers of equipment, materials and systems, turnkey suppliers and providers of work subcontracting and work services. From our network, we purchase not only the equipment and materials of the ship, but also the majority of the design and outfitting work, the latter being mostly provided through turnkey deliveries. Of the 2,000 companies operating at the shipyard in 2019, less than one quarter had a direct contractual relationship with the shipyard, with the rest being contracted by one of our network companies. On average, about a half of the 7,500 people working in the shipyard are from foreign countries. In 2019, the shipyard employed people from around 70 different countries.

### Network management improves the monitoring of our suppliers

It is very important for us that our suppliers act in an ethical and sustainable manner. All our agreements include our Code of Conduct for Suppliers. The code of conduct is the same for all the Meyer shipyards in Germany and Finland and for all our subsidiaries.

In the supplier selection process, we take into account not only price, quality and security of supply, but also, for example, how the supplier manages its social and occupational safety obligations and environmental obligations. We require all our network companies to draw up their own occupational health and safety plans. We monitor the compliance of all companies working at the shipyard in regards to legislation such as the Act on the Contractor's Obligations and Liability when Work is Contracted Out and the Occupational Health Act – including also those companies that do not have a direct contractual relationship with Meyer Turku. In addition, we require each company operating on the shipyard area to commit in writing to complying with the terms and conditions of generally binding collective agreements, including wage agreements.

Meyer's shipyards have a shared supplier chain management system (SCM) that improves the monitoring of our suppliers. This shared system enables us to set similar requirements for all network companies, and information about deviations such as negligence of requirements is then available to all our shipyards.

The goal for the SCM is to audit and evaluate by 2021 around 300 of our most significant partners, which together account for around 80 % of our purchasing volume. In 2019, we audited 11 companies at the supplier's premises and verified 89 companies' eligibility to act as suppliers of Meyer shipyards. In audits and eligibility inspections, we examine the suppliers' quality, environmental, occupational safety and financial management as well as the management of the suppliers' own network. During the inspections carried out in 2019, we issued to suppliers a total of 407 different requests for corrections or improvements, the implementation of which is then monitored by our SCM system.

#### Effectively combating the black economy

As ordering companies, we and all of our network companies have a duty to combat the black economy. The shipyard has its own network supervision working group, whose main tasks include combating the black economy and informal labour and monitoring suppliers' social obligations – including the management of taxes, social contributions and working hours – for all companies operating at the shipyard.

We require all companies operating at the shipyard to commit in writing to compliance with the terms of generally binding collective agreements, including wage agreements. In addition, we invest significantly into the orientation of foreign employees who are coming to the shipyard for the first time. The orientation received by everyone before entering the shipyard area also includes training on Finnish working culture and basic rules of working life, and this is offered in several different languages.

We engage in ongoing cooperation with the Regional State Administrative Agency and other authorities, and the



authorities also carry out their own inspections at the shipyard and among our network companies, including for example occupational safety inspections. Our active preventive work has contributed to the fact that, in recent years, only 1–2 % of the companies operating at the shipyard have received comments as a result of inspections carried out by the authorities. We process all complaints and comments that come to our attention and, if the infringement is serious or repeatedly occurring, we ban the operator from entering the shipyard area for a fixed period of time.

The procurement of more responsible materials has also been included in the procurement process for turnkey agreements. We encourage our network to explore different opportunities and offer alternative materials that is either eco-certified or produced in accordance with sustainable development principles.

# 20 years of responsible interior design



The maritime industry company Oy NIT Naval Interior Team Ltd will turn 20 this year. Acting responsibly is one of its core values, and one which it seeks to integrate into all its operations.

"We wouldn't be here now if we hadn't sought to act responsibly since the very beginning. Our vision is to be the industry's most respected partner and best workplace. By acting responsibly, we are on the right track towards this goal", says Managing Director **Sebastian Lagerlöf.** 

The company is already one of Europe's leading shipbuilding companies. It specialises in Turnkey deliveries of interior decoration work in the public spaces of passenger ships. For example, the company plans and implements restaurants and spas for luxury cruises.

The objective of the NIT Group is to provide project-specific solutions that minimise environmental impacts. Sustainability is a crucial factor in the selection of interior decoration materials. Material loss is avoided by designing each part separately and making careful use of the properties of the raw material. For example, the parts of a fixture wall are designed so that their prefabrication, transport and assembly are as efficient and simple as possible. The company also favours material manufacturers that are located close to the ship's construction site.

NIT has received a WWF Green Office certificate for its environmental work. The aim of the environmental management

system is to minimise the company's environmental impacts and to increase the efficiency and productivity of operations.

NIT is committed to the ResponSea action programme for the maritime industry. The focus areas for their operations are

to reduce their ecological footprint, reduce carbon dioxide and greenhouse gas emissions, and develop the working environment and the well-being of their employees.

The company was also involved in the SUSTIS research project that developed the sustainability and ethical sustainability of the maritime industry (Sustainability Transparency in Shipbuilding Networks).

"We must take sustainability to a new level in Finnish shipbuilding, and also use

simple language to communicate this to the world. In this way, we will also reach the end customers, who are the passengers of the future", Lagerlöf says in summary.

Sebastian Lagerlöf, Managing Director of NIT Naval Interi-

or Team Ltd, emphasises the

sustainability work.

importance of transparency in



### Orsap Oy is Meyer Turku's Supplier of the Year

Our cooperation with our reliable network partners is often long-term and built on strong mutual trust and joint development. We want to show appreciation in a concrete way, and so we select each year a Supplier of the Year both for the Turku Shipyard and for all Meyer shipyards as a whole.

In spring 2019, Orsap Oy was selected as the Meyer Turku Supplier of the Year for 2018. Orsap Oy provides turnkey deliveries for the interior decoration of ships.

This recognition shown to them is based on their extensive and successful cooperation with Meyer Turku. The prize gala was held in Papenburg city centre in Germany, where the first Meyer shipyard was established. Over 200 representatives of Meyer and its network were present at the event.

### A cultural and recreational event for the whole network

In cooperation with the City of Turku, we invited in April all the employees of our network companies to participate in the event 'Free Time in Turku'. The goal of this recreational around was to improve our network employees' enjoyment of their leisure time and to facilitate their integration into Turku.

"We have a lot of skilled labour from Finland and abroad working within our extensive network. We want them to feel more connected to Turku so that they stay and work here in Southwest Finland or return here again later on", says **Juha-Matti Salminen**, Security Manager at Meyer Turku.

At the event, a variety of speakers spoke about Turku's cultural and sports services as well as about Finnish language studies and other services that are useful for people moving to Turku. The event also included opportunities to try out games such as mölkky and frisbee golf. About 350 employees attended the event.



# Acting responsibly

Unethical and illegal practices are always unacceptable, regardless of the circumstances.

In our Code of Conduct, we have defined the generally accepted operating practices for Meyer Turku. Our Code of Conduct covers, for example, anti-corruption measures, conflicts of interest, fair competition and procurement, workers' rights, occupational safety and environmental protection. We require that all our employees and supervisors use good judgement, respect our ethical principles, and act honestly in all their company dealings.

Our expectations for our partners are described in our Code of Conduct for Suppliers. Each supplier must commit in writing to complying with these principles.

#### A communication channel for preventing abuse

We have an communication system in place that allows both our own personnel and anyone else, such as a member of our network, to report any irregularities that they have detected or suspected, and to do so anonymously if they so desire. The system also enables the anonymous exchange of information and asking of follow-up questions.

The system will help us to more easily identify potential abuses, such as corruption or theft, and we will be able to

#### "Unethical and illegal practices are always unacceptable, regardless of the circumstances."

address the problems more rapidly. This anonymous channel also lowers the threshold for reporting issues, and it is offered in 10 different languages so that the lack of language skills does not present a barrier to taking action.

The use of this joint system also improves the processing of communications, as the reported issues always come directly to the compliance personnel, who are responsible for investigating these matters. The company's senior management is responsible for deciding on any measures or sanctions to be implemented.

# **Our management principles**

The goal of our management and supervisory work is to support our employees in doing their work well and to achieve the objectives set for our operations. Supervisory work is challenging and requires sensitivity and situational awareness. In this demanding task, we promote success through implementing common management principles.

#### **BE A ROLE MODEL**

As supervisors, we are role models for our team members. In addition to this basic principle, we must ensure that team members comply with our operating principles and the agreed rules.

#### **BE A CHANGE LEADER**

The world around us is constantly changing. At the same time, the requirements and opportunities relating to products, processes and capacity are also undergoing change. The supervisor must have an overview of the future work processes and capabilities of their team. We talk with our team members, gaining their commitment to the changes and leading the change ourselves!

#### **GIVE FEEDBACK**

Our job is to bring together the best teams and to manage both the teams and the individual team members appropriately and effectively. By combining the strengths of all individuals in the best possible way and placing them in suitable tasks, we maximise the added value created. We value and respect our employees, take note of good work and give immediate feedback on results and behaviour.

#### **CARRY YOUR RESPONSIBILITY**

All our activities must comply with the principles of sustainable development. Supervisors have a special responsibility to monitor the health, occupational safety and environment of employees and to take the necessary measures and preventive actions. We pay particular attention to accidents at work, tackling the causes that lead to these in a systematic and sustainable manner.

#### COMMUNICATE

Our operations are transparent and we communicate regularly, transparently, honestly and respectfully with one another. We see conflict situations as an opportunity to improve our operations, and our feedback is always constructive.

#### SET OBJECTIVES AND RESPONSIBILITIES

We want employees to take initiative, take responsibility and work in a self-directed manner. By agreeing on clear rules and objectives with employees, we support them in achieving the set objectives. We aim to assign clear and targeted responsibilities to individual employees or teams. Responsibilities are set so that employees and teams have the freedom to independently locate and implement solutions.



#### FIND SOLUTIONS, MAKE DECISIONS

We support teams in finding the best solution to the problem – by talking openly and dealing with conflicts where necessary. For this reason, the people affected by a decision are involved in the discussion. We aim to maintain a positive atmosphere and focus on finding solutions.

#### **DEVELOP YOUR TEAM**

We ensure that our employees' competence and skills keep pace with the constantly changing requirements. This contributes to the success of both the company and its personnel. Our task is to encourage and support team members in their ongoing learning and to offer opportunities for taking on new challenges.

#### **GRI** Table

The reference framework for the report has been the GRI standard and the report corresponds in most parts to the basic level GRI requirements.

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