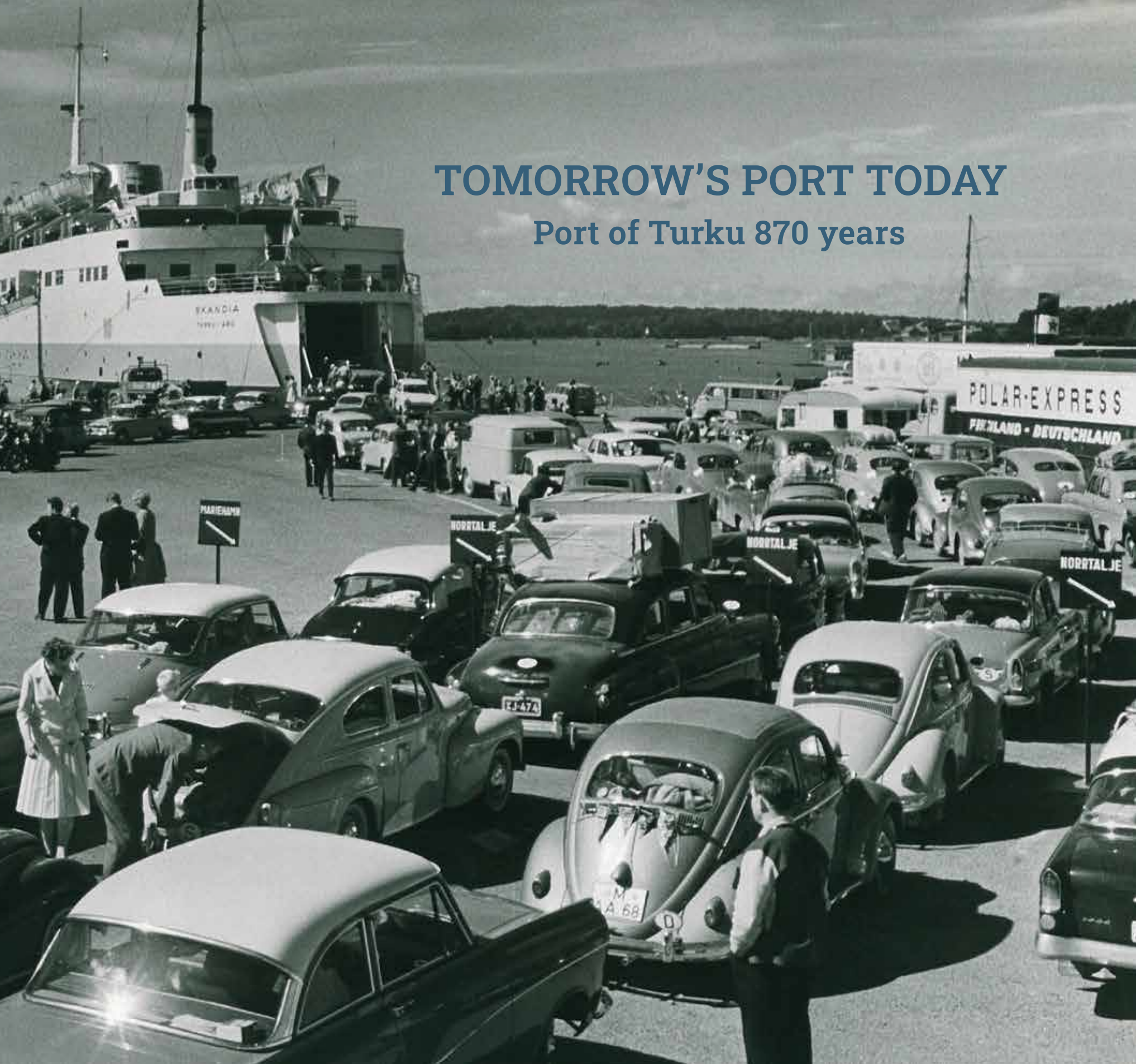


TOMORROW'S PORT TODAY

Port of Turku 870 years



TOMORROW'S PORT TODAY
Port of Turku 870 years

Kari Ahonen

Port of Turku Ltd, Turku 2024

PORT OF TURKU
FINLAND

TOMORROW'S PORT TODAY
Port of Turku 870 years

© Port of Turku Ltd 2024

This publication is partly based for articles
of the book "History of the Port of Turku"
Edited by Juhani T. Lappalainen
Port of Turku 1999

Publisher:
Port of Turku Ltd

Author:
Kari Ahonen

Translation:
Kielipalvelu Iiro Palmroth Ltd

Compiled and edited by:
Marketing and communication
team of Port of Turku Ltd

Cover photo:
Turku City archive

Photos:
Port of Turku archive, if not mention
otherwise in connection with the picture.

Graphic design and layout:
Idea Group / Essi Palmroth

Printing house:
Grano Ltd, Turku 2024

CONTENT

Introduction	4
From a natural harbour to a lively trading post	8
Port and Turku –together for 870 years	28
From dredging management board to a modern limited liability company	32
<i>Competent women as engines for change</i>	40
<i>Creator of possibilities</i>	42
Turku strengthened its role as a unit cargo port	44
<i>Turku was the last train ferry harbour in Finland</i>	59
Touristic attraction carried the Port through difficult years	60
<i>Place on the Baltic Sea cruise map is growing stronger</i>	68
Modern logistics services made the Port a distribution hub for Scandinavian transports	70
Functioning infrastructure ensures efficient operations	76
Goal-directed and productive work for the environment	80
<i>Dredging masses utilised in construction</i>	86
<i>Environmental projects involve co-operation across the Baltic Sea</i>	88
With confidence towards the 2030s	90

**GREETINGS FROM
THE PORT OF
TURKU ON ITS
ANNIVERSARY**



The Port of Turku has acted as Finland's gate to the west for centuries, and the first written records date back to the 12th century. Now that the Port is 870 years old we want to provide you with a review of the past, from the earliest days of the Port up to today.

The main focus of the content of our publication for the anniversary year lies in the early decades of the 2000s which were a time of strong and continuous growth in the Port of Turku. Many big investments have been implemented in the port area by the Port itself, the City of Turku and other logistics companies. At present, the biggest ever investment in the history of the Port is in progress: the Ferry Terminal Turku project will reorganise the entire passenger harbour and also have a significant effect on the urban development of maritime Turku.

In addition to construction of port infrastructure we have invested, for example, in reducing the environmental impacts of the port operations, port safety, and digitalisation. The goal of these investments is to carry out port operations in accordance with the principles of sustainable development and enhance operative functions by utilising the latest technology.

The main emphasis of our environmental work is directed at carbon neutrality, and in conjunction with that the Port of Turku is together with the City of Turku creating Turku a carbon neutral city by 2029. In co-operation with the Ports of Stockholm and Viking Line we have signed an agreement on establishing a green maritime corridor between Turku and Stockholm by 2035 at the latest. The goal is to be completely free from greenhouse gas emissions of fossil origin by then.

One of the key milestones in the 2000s was the incorporation of the port operations at the beginning of 2013. As a result of the incorporation the port organisation can better focus on developing the Port's core business, and improving the productivity of operations as well as competitiveness. For the Port's customers and partners the reform meant even more flexible co-operation and faster reactions to the changing needs of the customers. On the pages of this publication you can read more about the practical consequences of the incorporation.

We wish you an interesting read and welcome you to travel on the most beautiful sea route in the world through the Port of Turku.

Erik Söderholm

Managing Director
Port of Turku Ltd





11TH-20TH CENTURIES



Ships from Turku entered the Mediterranean trade in the 1730s. They brought salt, tobacco and wines, and took timber, iron and some tar. They usually headed for the Meriterranean in late summer, spent the winter in international trade, and returned home the following summer. The 1792 completed brigantine Henrica of Naples.
– Turku Museum Centre



FROM A NATURAL HARBOUR TO A LIVELY TRADING POST

The prerequisites for the natural harbour in Turku date back at least 65 million years when large fractures appeared in the ancient Finnish bedrock. At sea the fractures resulted in deep yet sheltered fairways between islands, such as Airisto sea area. The rising of the crust also formed the channel of the River Aura, and settlement began to appear by the river.

The first settlement after the Ice Age in the Turku region emerged on an island in the sea in the place where the Jäkärälä gravel ridge is now located. Its Stone Age culture existed from around 4200–3300 B.C.E. As the land rose, the settlement in the River Aura valley concentrated around the mouth of the river, on the Litorina clay ground which was utilised for farming that became common during the Kiukainen Culture (2000–1500 B.C.E.), the last Stone Age culture.

The settlement also attracted traders to the banks of the River Aura. In addition to sea fairways and river routes, land connections towards Satakunta, Häme and Uusimaa were set up in the prehistoric period. In the late stage of the Iron Age (500 B.C.E – 1150 C.E.), Finnish wilderness products as well as goods brought from the Baltics, Mälars traders and Gotland, and even Novgorod changed hands by the River Aura. The most important trading post was the wealthy Ristimäki, some seven kilometres upstream from the present mouth of the river.

Turku is probably mentioned in geography for the first time in 1154, when a learned Arab Al-Idrisi who worked in Palermo, Sicily tells about the Finmark land and places called Abuwa and Qalamark there. The former is for a good reason interpreted to refer to Turku's Scandinavian name Åbo which means a river settlement. The latter probably refers to Kalanti in the Vakka-Suomi region.

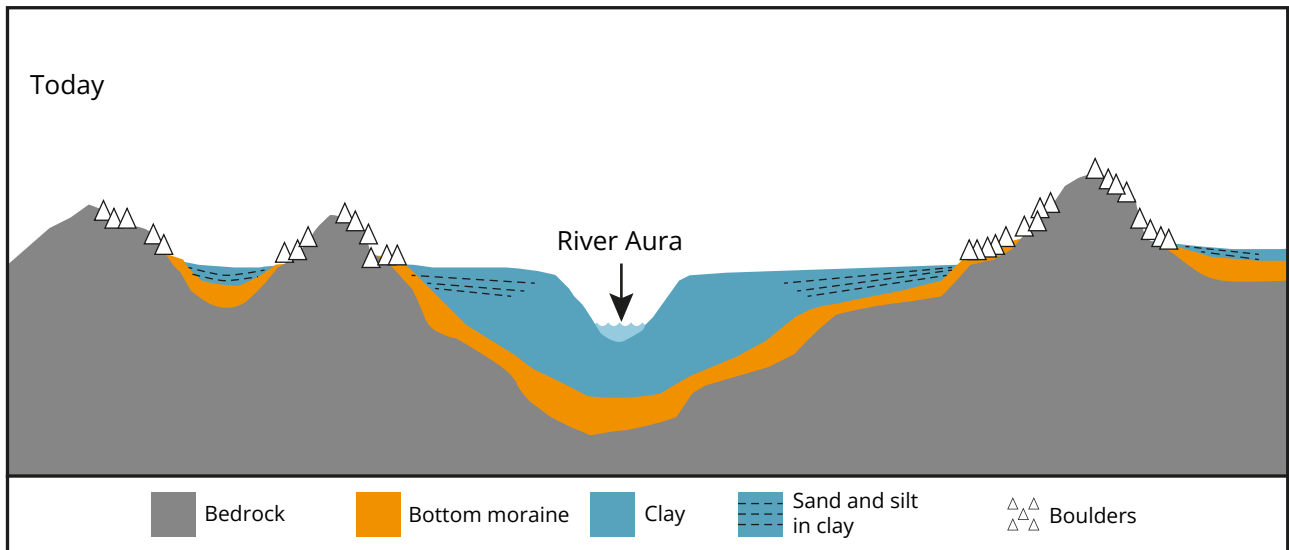
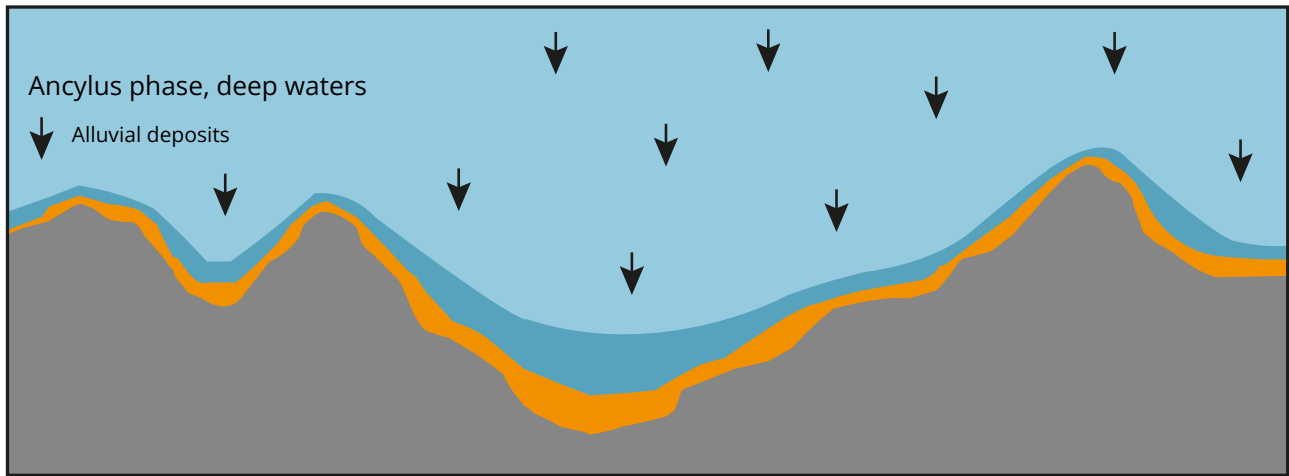
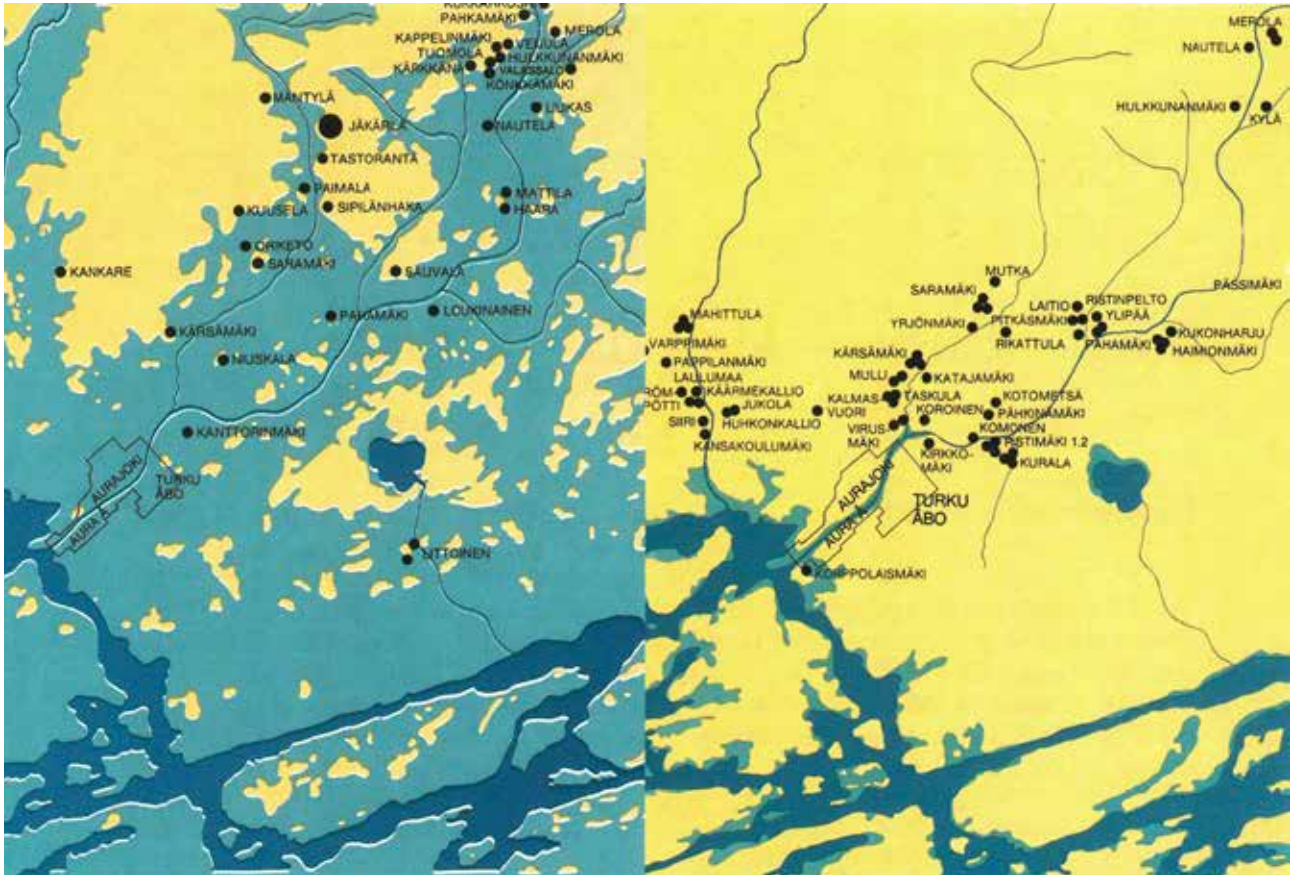
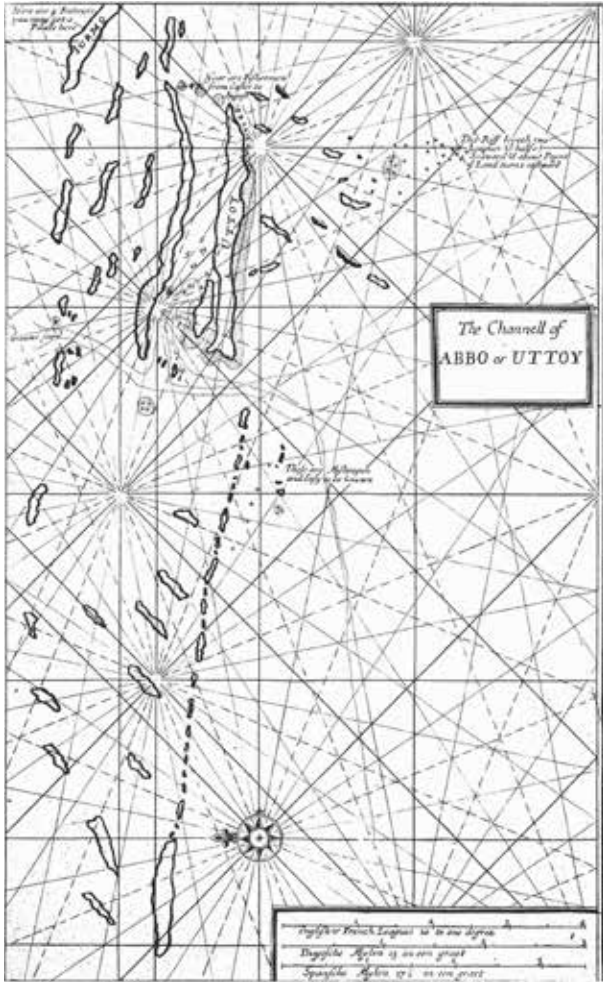


Illustration of solid materials settling on bedrock and bottom moraine. – Jussi T. Lappalainen



Dwelling sites in the Turku area during the Stone Age ('comb-ceramics culture', 3500–2000 BC) and the Iron Age (500 BCE–1100 BC). Even during the latter period, the site of the present-day city was not yet inhabitable. Settlement was concentrated along the lower stretches of the Aura, Vähäjoki and Raisio Rivers. – Turku Museum Centre



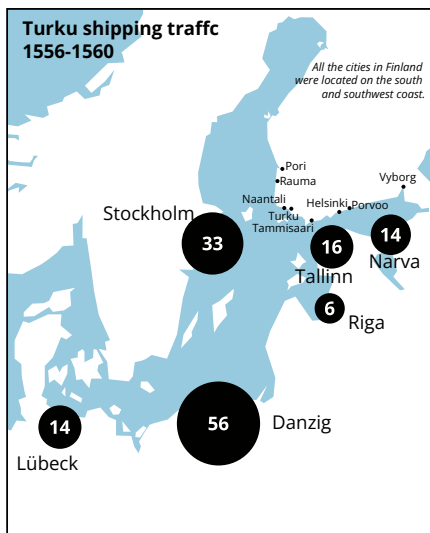
Navigation through the South-West Archipelago was difficult. In former times ships had to rely on instructions even to find local pilots. Gradually these instructions were written down, for instance in Johan Mansson's Sjö-Book, first published in Stockholm in 1644, which includes a detailed description of the Utö-Turku fairway. It was in the same period than the earliest reasonably reliable maps of the Baltic were published. This illustration is taken from a copy by Richard Mount of Theunis Jacob's map dating from 1657. – John Nurminen foundation

“
 In the Middle Ages and the 16th century the most important export items included Baltic herring and dried fish.

Capital of Finland around the river port

Emergence of the port of Turku in the Middle Ages was part of the emergence of the city. The expansion of the Halinen rapids had already cut off the connection from the sea to upstream River Aura, and hence the German trade organised by the Hanseatic League relocated in the Unikankare district in the later 13th century. Finland had fallen under Sweden's rule, and Finland's diocesan centre was relocated and Turku Cathedral was built in the same area. Thus Turku developed naturally into the capital of Finland which grew hand in hand with the lively international river port. The river port was formed by the storehouses of the burghers. The cogs of the Hanseatic traders moored in their berths and dominated the cityscape together with the square, the cathedral and bourgeois houses.

Already Magnus Eriksson's Law of the Realm from 1347 placed Turku alongside Stockholm; it had a free right of sailing while other Finns only had permission to sail to Turku or Stockholm. At first the connections from Turku headed to Lübeck, but in the early 15th century Danzig became the most important destination port. Many ships naturally sailed to the competing Stockholm, but their cargoes were of much smaller volume compared with those destined to Danzig. Danzig still retained its position in the 16th century when around half of the ships departing from Turku headed there. The ships exported Baltic herring and dried fish, which were Finland's most important export items in the 16th century, and imported salt and wine and other luxury articles.



The numbers represent the total sum of return voyages between Turku and the ports shown. These years are the only ones for which customs records have survived for both Turku and Stockholm.

Tar and troops to Europe

In the 17th century, a period of large-scale wars and Sweden as a great power, Holland emerged as a sea power that displaced the regressing Hanseatic League also in the Baltic Sea. Europe's growing navies needed an immeasurable amount of tar, and Finland became the leading tar supplier by the middle of the century. Tar trade and the related sailing to Holland extended Turku's trading connections to the North Sea, even though the tar trade was dominated by the Tar Company, a monopoly based in Stockholm.

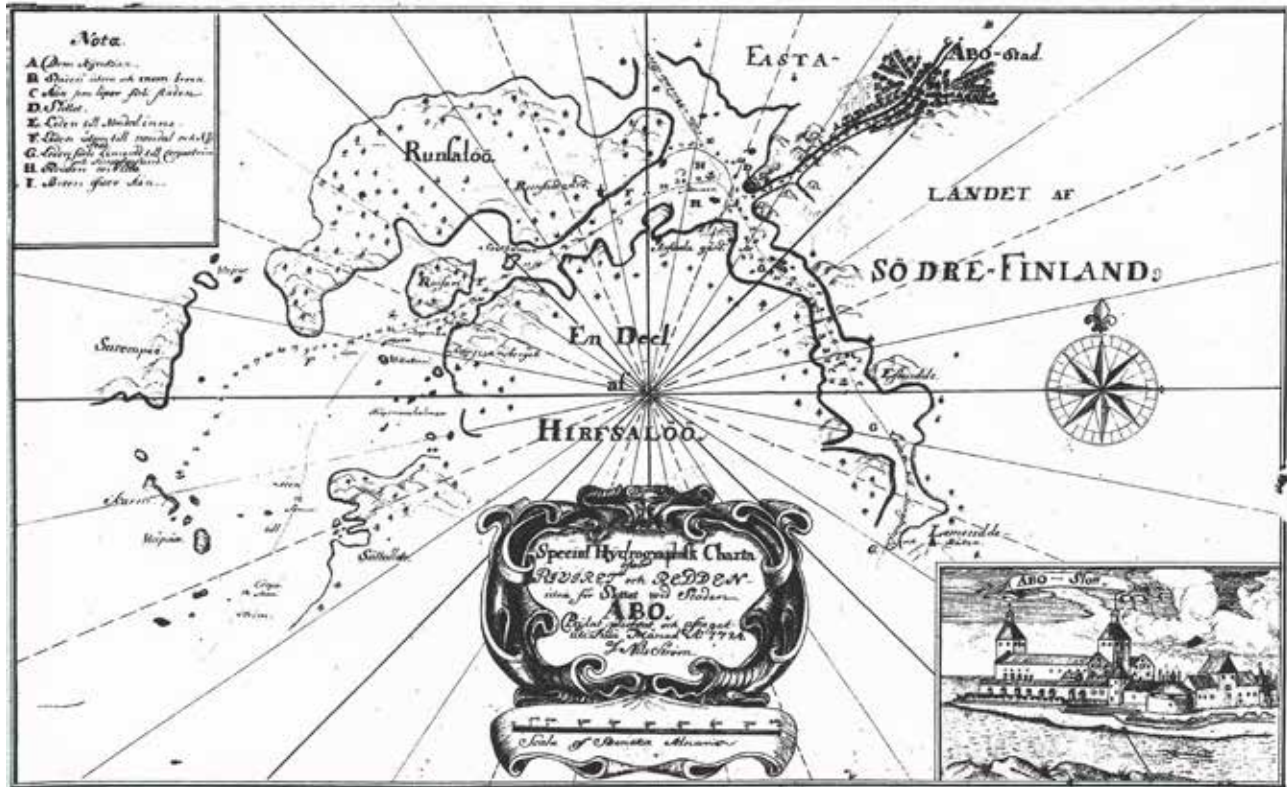
Riverside storehouses and loading berths remained by the River Aura, although they were damaged by the ice run nearly every year. The maritime customs barrier near the Castle guaranteed that the Crown received its share of foreign trade. The City took its share by collecting a surcharge, weighing and measuring fees, as well as port, bridge and warehouse fees. A small toll was charged by the City from the inhabitants of the archipelago at a barrier located further upstream.

Large ships could no longer access the river as it became shallower, but they were forced to stay on the Linnanaukko roads where they were loaded from barges. Founded in Pikisaari on Hirvensalo island in 1649, the tar barrel wholesale stocks drew in most of Turku's foreign trade. Linnanaukko and Pikisaari were outside the city boundaries, but by a decision of Queen Christina the City's District Court was given the right to process civil cases that had broken out in the outer harbour.

The port of Turku also played an important role in transporting Finnish troops to the Prussian War in 1626, and the first shipments to the Thirty Years' War in 1630–1631 departed exclusively from Turku. Later the small town of Helsinki became the most important port of departure for shipments to the German war, as there was direct access to the open sea. When troops left for the Danish wars in 1643–1645, 1659 and 1676–1679, the shores of Turku again echoed with the hammering as ships were equipped for carrying men and horses.



Barrels of pickled Baltic herrings and bundles of dried fish were along the most important items of Finnish exports in the Middle Ages and down to the 16th century, to meet demand during Lent in Catholic Europe. Salt, which was essential for import to Finland, was shipped to Finland in barrels. – Olaus Magnus



The first real hydrographic map of the channels into Turku was charted by Nils Ström in 1724 and published in 1739. In the bottom right corner, an illustration of Turku Castle, which dates from the 13th century. – Krigsarkivet, Stockholm

From the horrors of war to a new rise

The shortage of ships among burghers, fading out of tar exports, luxury statutes, and Crown monopolies meant a decline for sailing in Turku from the 1680s onwards. Having been the fifth most important export harbour of the Kingdom of Sweden in the 1630s, Turku had fallen to the 12th place by 1685. As an import harbour it was number four in the kingdom in 1637 and on the seventh place in 1685, while the leading position of Finnish imports was now held by Viipuri.

The Great Northern War from 1700–1721 meant a serious blow to trade in Turku. In 1713, the Russians approaching by

land occupied the city which had been largely abandoned by the ruling class. After having defeated the Swedish archipelago fleet in Hankoniemi in 1714, the Russian archipelago navy also rowed to Turku which became their base till the end of the war.

Sweden's era as a great power ended with the Treaty of Nystad in 1721. Turku's competitor Viipuri was now part the Russian Empire. The tar monopoly had been terminated during the war, but during the reconstruction era the Crown began to favour domestic keels by employing customs tariffs and commodity ordinance. As exports of timber was only permitted

on domestic ships from the 1740s on, their share of the port calls increased to 90 per cent by the end of the century.

Turku's first own vessel suited for foreign traffic, *S:t Johannes*, was built in 1726. The actual recovery started in the 1730s. Turku became the leading trading port in Finland, and at the end of the next decade the City had 12 deep sea sailing ships that usually headed to the Mediterranean for the winter. They exported mainly timber, tar and iron, and imported salt, tobacco, sugar, paper and wine.

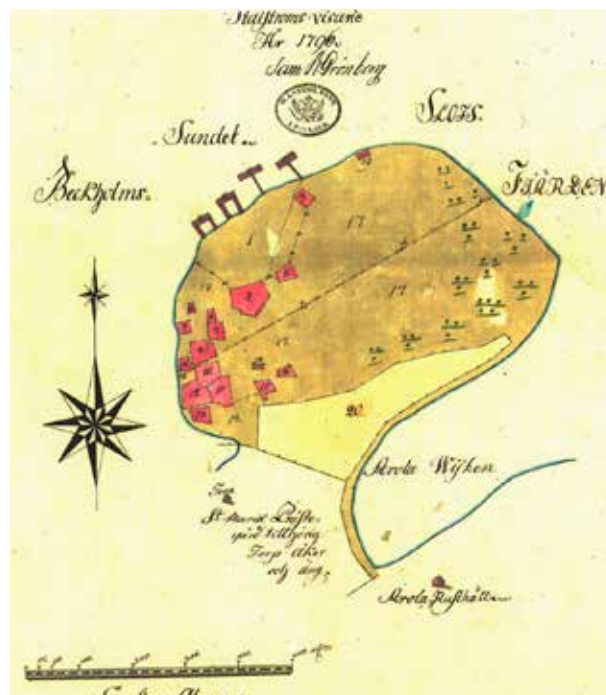
From exporting tar to importing coffee

The sailing in the towns of Ostrobothnia became free in 1765, and they no longer had to sell their products exclusively to Turku or Stockholm. Before that Turku had taken care of up to 90 per cent of the tar trade of staple towns, but now its share fell in ten years to around one per cent. The small town of Helsinki chased Turku's leading position as collector of maritime customs toll during the war of Gustav III and the revolutionary wars in the early 19th century.

Thanks to the wealthy Varsinais-Suomi province and transports to Stockholm, Turku retained its position. Towards the end of the century, around 40 per cent of the salt imported to Finland was carried through Turku, and sometimes it was also exported from Turku to the Baltics and Russia. Coffee was a new import item in the fourth place after salt, tobacco and sugar.

Pikisaari was having its heyday at that time, and in 1796 a port director was appointed. After lengthy disputes, Turku's ownership of the roads and Pikisaari was confirmed by a court decision. On the other hand, the Crown strengthened its position by making Turku a naval port again. Due to the experience from the war of Gustav, shelters and depots for nearly 40 gunboats were built next to the Castle.

When Russia invaded Finland at the beginning of 1808, the vessels locked in ice were inoperable, and the entire naval port was burned down at the end of February. Led by the King of Sweden Gustav IV Adolf, the attempt to attack Turku from Airisto sea area on 4 July 1808 was stopped by the firing of the Russian artillery batteries.



Despite its name, which means 'Pitch Island' Pikisaari has in fact been joined to the north end of the island of Hirvensalo for centuries. It lies about 1,5 km south-west of Turku Castle. It started as a tar station during the 17th century but flourished particularly for the 1730s to late 19th century. – National Land Survey

Into a new era in many ways

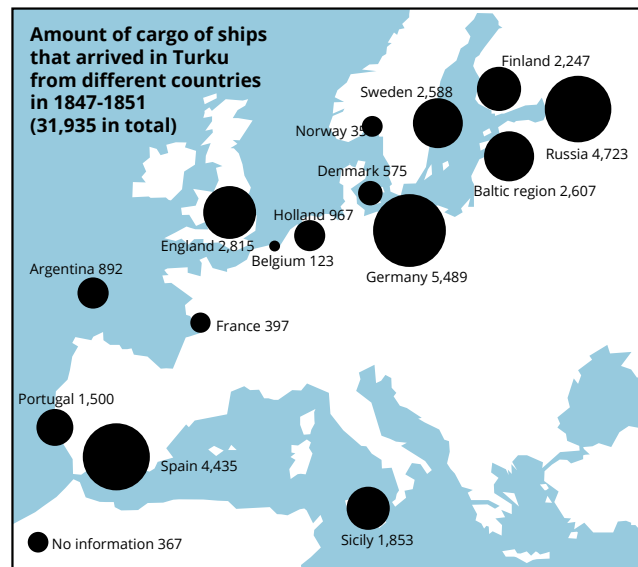
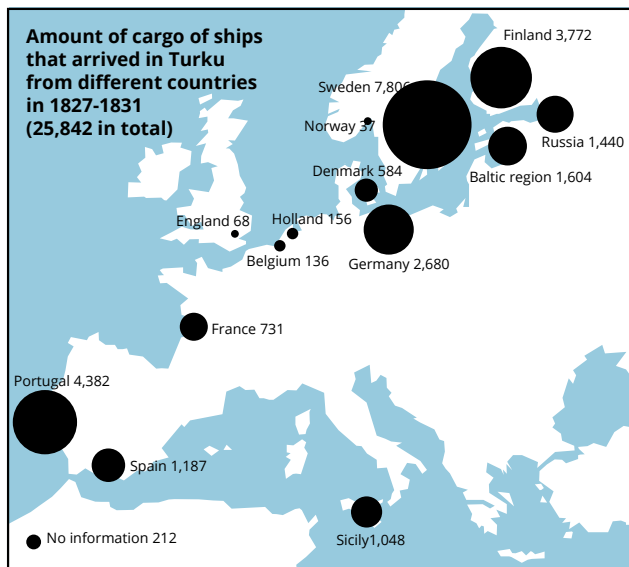
In 1809, Turku became the first capital of autonomous Finland which had been annexed to Russia. War continued elsewhere in Europe, and transports beyond the Baltic Sea did not restart until 1813. Turku was still the leading port in the country: up to the 1820s Turku generated more customs income than Helsinki which had been made the new capital. More than half of the transports from Turku headed to Stockholm. The port's administration was focused in 1811 when the port office and the post of deputy harbour master were established. The latter was held by weight-master Johan Trapp up until the 1850s.

The growth of transport volumes ground to a halt with the worldwide economic depression of the seafaring industry in the 1820s. On the other hand, the effects of the great fire of Turku in 1827 were diminished by the recovery of seafaring in

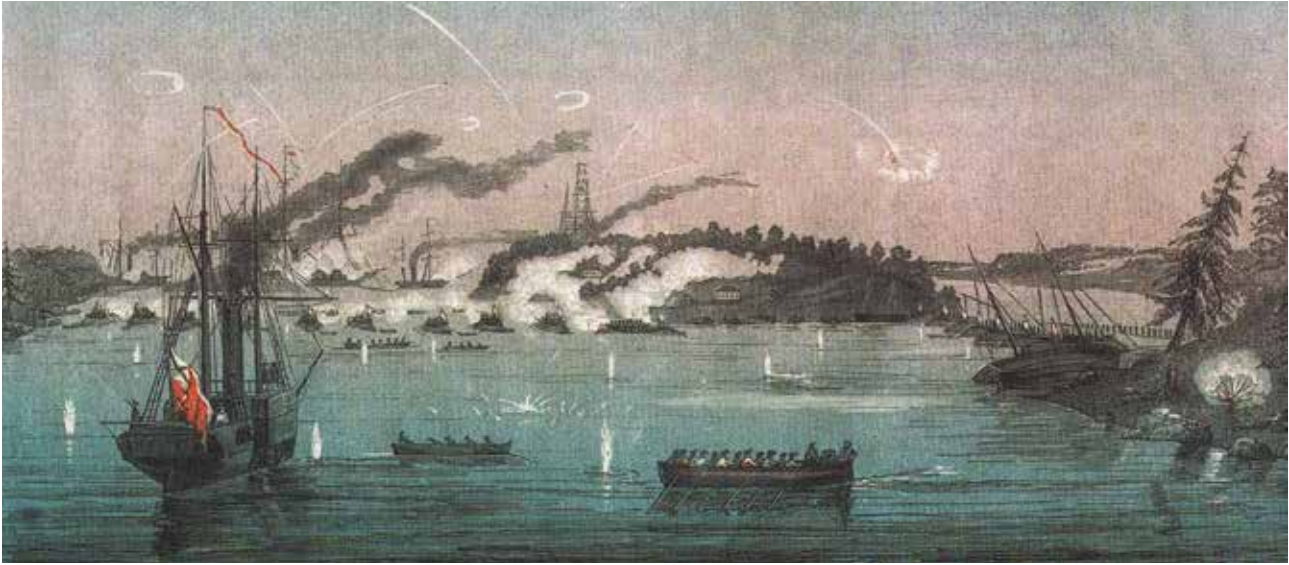
the 1830s. It also reduced Stockholm's share of the transports to around 20 per cent and raised the share of Russian ports to around one-third.

The first steamship, paddle wheel schooner Stockholm, began to operate between Turku and Stockholm in 1821. At the end of the following decade, regular steamship traffic was operated to Stockholm, St. Petersburg and Helsinki. A harbour for small steamships was set up next to the new Auransilta bridge that had been built in the heart of the city.

Mudderverecks Direction, or Dredging Management Board, started operations in 1838, and gradually the port's administration was concentrated there, excluding Pikisaari. The continuous dredging of the river and the canal leading to its mouth switched to machine power when the first steam-powered dredging vessel started in 1841.



In the early 19th century, most of the connections from Turku, not surprisingly, were to destinations within the Baltic, but traffic to the North Sea, the Atlantic, and the Meriterranean was expanding.



A reconnaissance attack by the British Royal Navy against Turku on 22 August 1854 demonstrated the strength of its defences. In the background, the British are bombarding the defenders' command boat and gunboats with cannon and shells. – Woodcut by E. Bernadski, after a drawing by D. Klimow

Merchant fleet lived through the changes of the world

The changes in Finland's customs policy made long-range sailing more affordable than before. The significance of Hamburg and Lübeck to Turku increased while that of Stockholm decreased. In 1852, Turku still possessed Finland's biggest merchant fleet. It included large salt ships that carried cargo at oceans in the winter. Butter had become the city's most important export item.

The Crimean War from 1854–1856 scared burghers to sell their vessels that were out at the sea. As the Englishmen also captured some of them, the cargo tonnage of Turku-based ships shrank to less than half of what it had been before the war. For Russia, Turku remained an important base which was closed with bollards and chains. The reconnaissance attack made by the English on 22 August 1854 showed the strength of the defence, and in the following sailing season

all entry routes to the port were also protected by a carefully planned naval mine and artillery base.

In 1861, Turku again had Finland's biggest merchant fleet, but the completion of the Saimaa canal and the railway between Helsinki and Hämeenlinna shifted the emphasis of goods transports to Viipuri and Helsinki. During the international economic depression that started in 1873, wood-hulled sailing ships became obsolete at the seas of the world. All that affected the port of Turku. Its share of Finland's foreign goods exchange fell to 8 per cent by 1875 while having stood at 18 per cent in 1860.

In the same year 1875, a new phase started in the history of the port of Turku. There would be a railway connection, and the Council decided on building a quay on the canal embankment accumulated from dredging where vessels with

a deep draught could moor. Traffic began to increase again, and the share of steamships in the goods exchange in Turku rose to almost two-thirds. The traditional outer harbour of Pikisaari finally faded out when the customs house moved from there to Kanavaniemi in 1881.

Another pivotal event was regular wintertime ship service once a week to Stockholm started by the new Turku-based company Bore on 27 January 1898. To secure the traffic Turku acquired its first harbour ice-breaker Avance. International passenger traffic first used the lower steamship port on the River Aura, but in 1901 it also moved to Kanavaniemi which provided a railway connection to the main railway station.

On winters with lots of pack ice, such as 1907, the sheltered route through the archipelago turned out to be much more secure than Hanko, favoured by the Finnish State, and in 1909 Bore's competitor Suomen Höyrylaivaosakeyhtiö (SHO) also shifted the focus of its traffic to Turku. From 1912 on Bore and SHO maintained daily traffic from Turku to Stockholm, with the State's support.

Russia's naval base in the First World War

The strong growth of international transports was stopped by the First World War from 1914–1918. At the beginning of the war, Germany aimed at contesting Russia's sea supremacy in the Gulf of Bothnia and the outskirts of the Archipelago Sea with submarines and cruisers. To fight that, Russian navy established the Turku-Åland archipelago station whose staff and service centre was located in the Turku naval port.

The Turku naval base provided maintenance to dozens of war ships and archipelago fortresses and their armament and crew. The Turku region shipyards received large orders from the Russian navy. Russian marines characterised the Turku cityscape throughout the First World War and, for example, maintained order in the city during the militia strike in the restless year 1917.

The Finnish Parliament issued the declaration of independence on 6 December 1917 while the First World War still continued. In The Civil War that broke out in January



Even as late as the 1870s, the view of the rivermouth was idyllic: the beauty of the islands in the foreground, the Castle, and in the distance the Cathedral. – Painting by Bernhard Reinhold 1872. – Turku Museum Centre



The port of Turku was important, both in peace and war. Regular winter traffic to Stockholm was started in 1898, and in 1901 it was transferred on a permanent basis to Kanavaniemi. Passengers arriving from Stockholm could continue by train, tram, or carriage. – Sjöhistoriska museet vid Åbo Akademi

1918, the winning “White” troops of the Government were backed by Germany and the revolutionary “Reds” by Russia. The Russian ships stationed in Turku helped the Reds in their battles in the Åland islands and the Archipelago Sea. After the Hango agreement between Germany and Russia on 5 April 1918, the Russians evacuated their troops from Turku and the Whites marched on 13 April 1918 into the city which had also been abandoned by the Reds.

Port bombed by Soviet troops

The beginning of the Second World War saw a fairly poorly prepared city. Air-raid shelters had to be built and anti-aircraft guns transferred to protect the port in particular before the Winter War broke out on 30 November 1939. The port nevertheless suffered heavy damages in the bombing in January 1940.

Turku’s importance encouraged the military command to enhance the defence. E.g. armoured ships Ilmarinen and Väinämöinen with effective anti-aircraft armament anchored on roads off Turku on 21 January 1940. In February the enemy

made attacks against Bothnian Sea ports and ships sailing in ice channels.

The Soviet Union declared a blockade of the Finnish coastline. The blockade had to be broken with escort activities. Vessels from import harbour Turku and export harbours Pori and Rauma were gathered into convoys at the northern tip of the Åland islands and escorted from there to territorial waters of Sweden. When fast ice prevented the operation of submarines at the end of January, the convoy route was transferred to the south side of the Åland islands. The mines laid by enemy ships on the route were lifted on the ice and neutralised.

After the 15-month Interim Peace, Finland was again at war at midsummer 1941, now alongside Germany. The Soviet bombing in the early days of the war again seriously damaged the port area. Due to the threat posed by submarines, ships sailed in convoys from late June to the end of 1941 and again in autumn 1942.

In 1941 and 1944, after a long break Turku was Finland’s number one port in terms of traffic volume; a large part of that consisted of maintenance transports for the German troops in Lapland. A new naval port was built in Pansio during the Continuation War.

Finland ceased the war against the Soviet Union in



During the first World War, the Russian Navy needed to defend its naval command headquarters for the Southwestern and Åland archipelagos. In picture, the gunboat Grozyashchy, which had its base in Turku, is steaming out to the sea. – Russian Naval Archives.

September 1944 and still fought the Lapland War to expel the Germans. The Second World War that lasted until summer 1945, shortage of ships and risk of mines prevented seafaring from recovering until the following year. An important sign of that was “Herakles”, the first, eagerly awaited coffee ship that arrived in Turku on 24 February 1946.



During the Winter War of 1939–40, the Soviet Air Force made repeated attacks on Turku, which was Finland's vital link westwards. – Turku City archive

Far-reaching plans for the future

The growth of the vessel sizes, competitive loading conditions and winter sailing presented ever greater demands to ports. To address those challenges, the port of Turku commissioned its first port plan in 1898 which focused on the development of the Kanavaniemi area and the use of the banks of the River Aura. Although the plan was never specifically approved, it factually served as the basis for the development. The new plans drafted in 1911–1912 joined together the harbours of Kanavaniemi and Linnanaukko, and separated passenger traffic and cargo transports from each other.

The most far-reaching of the many proposals was a plan commissioned by a private company in 1918 for a transit port in Turku that would forward transit shipments to Russia. In the plan the port would be extended all the way to Pansio and Raisio-lahti bay, and it would have forwarded e.g. train

“
Pansio oil harbour became a significant harbour for imports and distribution in the 1930s.

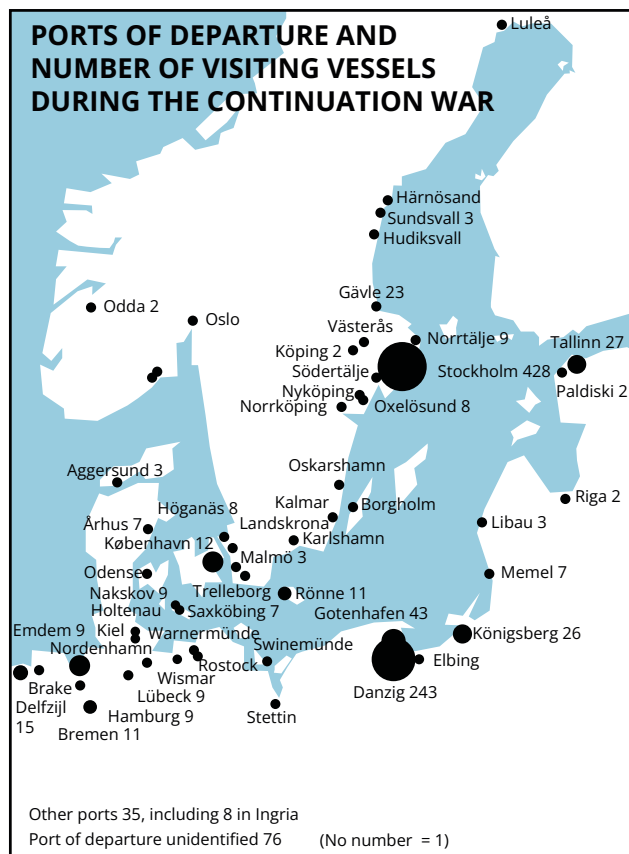
ferry transports. After the end of the First World War the development of seafaring did not, however, live up to the expectations, and the plan was not implemented.

Instead, the development of the Kanavaniemi area continued. The fairways leading there were made deeper, quays were expanded, and a marshalling yard, many cranes, storage areas and goods shelters were built. In accordance with the plan from 1929, the building of an oil harbour began in Pansio in the 1930s, and it quickly became an important import and distribution harbour for oil products.

An idea emerged among agricultural producers to concentrate Finland's butter exports to Turku. After the Council of State approved the proposal on placing a permanent butter inspection plant in the Kanavaniemi area, a butter magazine was completed there in 1934. The rapidly expanded butter exports drew in other agricultural products as well.

Already the plan from 1929 included an idea to deepen the waterways and build the Linnanaukko quay between Kanavaniemi and Ruissalontie road. The implementation had started by a decision made in 1937, but the war and reconstruction postponed the completion until 1955. Two years later the construction of the West Quay started opposite the Linnanaukko quay.

At the same time, the increasing availability of shelter space in the port led to strong increase in car imports. Turku Free Zone Company's outdoor storage area started operations in 1965, and in the 1970s dedicated terminals were built for the rapidly increasing truck transports.



These two maps show the overseas traffic during the Second World War and demonstrate how isolated Finland was. During the Winter War of 1939–40, the only ship which reached destinations beyond the Baltic were those already at sea when the war broke out. During the prolonged static phase of the Continuation War (1941–44), Finland was heavily dependent upon Germany and Sweden.



The Butter Magazine built in 1934 was an important factor in stimulating exports through Turku. In addition to providing facilities for testing and storing butter for export, it also helped to generate a flow of other dairy products and foodstuffs. In the picture, the crane is shifting a load of butter in casks called "drittels". – Turku City archive



In the days when loading and unloading were time-consuming tasks, and especially in hard winters, ships might have to wait for days or even weeks in the shipping roads off Pikisaari for a harbour berth. The seamen would go on shore leave over the ice and over the ice there also came the smugglers, the "ship girls", and the police and customs officers. In the winter of 1963, strikes by icebreaker crews and by administrative officials made the situation even more difficult, and there was as many as 25 ships waiting in the ice, which was strong enough for motor vehicles. – Turku City archive

Turku's importance was emphasised in hard winters

Turku turned out to be a good winter port, which put it among the leading Finnish ports in the first decade of the 20th century. Transports in Turku were promoted e.g. by a decision made by the Council of State in 1922 which equalised the rail cargo of export goods to Turku and Hanko. In winters with difficult ice conditions, especially in 1926 and 1931, and also during the economic boom, as in 1928, Turku experienced some peak volumes.

The core of the traffic in Turku was formed by the Stockholm route. In its wake, connections were opened to Lübeck, Stettin, Hull, and South America. Stettin and Hull became important export destinations for butter and eggs in particular in the early 1930s. Liner service accounted for around one-fifth of all transports in the 1930s.

Turku was characteristically an import harbour. Measured by weight, the most significant imported goods were coal and in the late 1930s also oil products. As traditional grain imports decreased, the volume of corn increased, while coffee, sugar and raw cotton maintained their important share. The share of machines increased considerably. In exports, timber and wood products were the key items. Hides, pelts, furs and foods were also imported mainly via Turku from Finland to international destinations.

In the 1940s, Turku remained an import harbour. Vuoksenniska Oy's ironworks in Turku and the Raisio food factories emerged as important customers of the port in the late 1940s as both importers of raw materials and ingredients and as exporters of finished products.

The increase of car traffic eliminated the prerequisites for archipelago and coastal traffic. While local ship departures in the Turku region numbered 185 per week in summer 1925, they had decreased to under 80 by 1939. During the war the local traffic recovered slightly, but the new spreading of cars finished off local seaborne traffic in the early 1950s. The vessels that carried sand and gravel for the building industry continued their operations, though. Measured by tonnes, they



The 1960s saw a major change in the traffic on Kanavaniemi, when the Silja (Bore, SHO, Svea) introduced the first new type of ferry, the Skandia in 1961. In 1973 the Viking-linja also moved its ferry terminal to Kanavaniemi. In the early 1970s shown here, nonetheless, Kanavaniemi was still dominated by freight shipping. At the tip of the point two passenger ferries can be seen: a traditional ship on the left, and a ro-ro car ferry on the right. Since 1976 all the ferries operating to Sweden have been of the ro-ro type. – In the background there can be seen the causeway for the bridge to Ruissalo; later the West Harbour was constructed on the far side of the basin to the right. – Turku City archive

formed the most important mass goods in the port of Turku at the end of the 1960s.

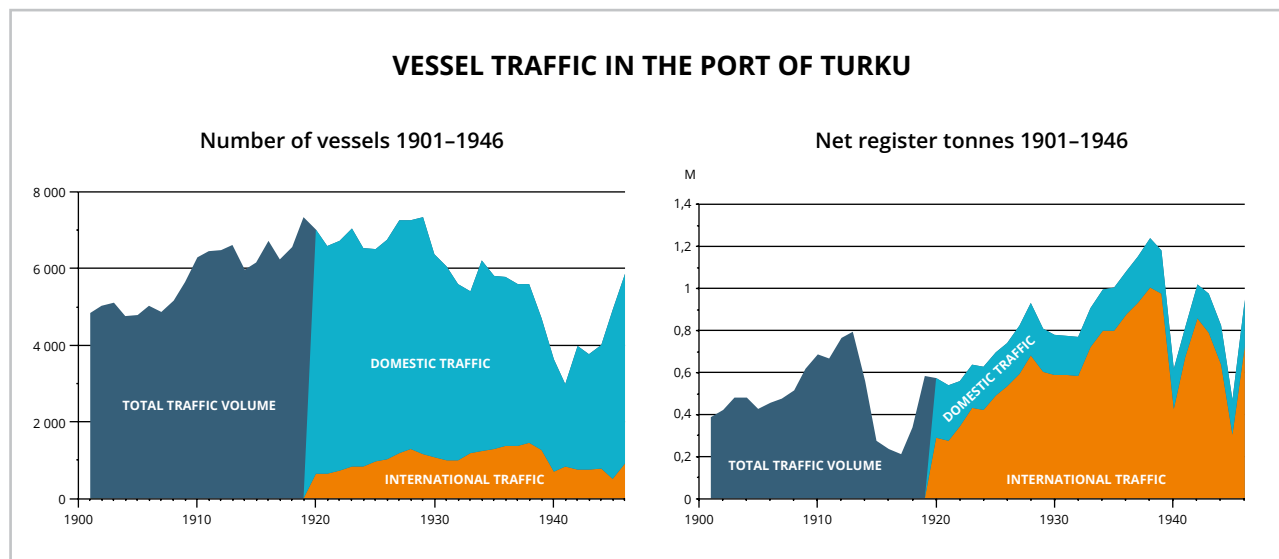
Soon after the Second World War, Finnish seafaring had to go through two winters with difficult ice conditions in 1946 and 1947. During the latter, Finland was nearly isolated for two months when the route between Turku and Sweden was the only one in operation. In 1956, even that was cut off for ten days in February, and the general strike in March congested the port of Turku more than ever before. A similar combination of a hard winter and a strike was seen in Turku again in 1963.

The last winter congestion took place in Turku in 1970, after which the stronger vessels were able to sail to other ports as well, at least with assistance from the State's icebreakers.

In passenger traffic a new era began when passport control was removed from the traffic between the Nordic countries in 1958 and the car ferry services. The number

“
**Passenger volume on the
 Turku–Stockholm route
 exceeded one million
 passengers in 1971.**

of passengers in the traffic between Turku and Sweden quadrupled in the 1960s and exceeded the milestone of one million annual passengers in 1971.



The vessels in the Finnish domestic shipping trade were often small, and so although in the number of vessels they outnumbered the ships in the foreign trade, their combined cargo capacity could not compete with the much bigger ships in the international trade. The diagram on the right shows particularly clearly the disastrous impact of the two World Wars on the port traffic.

Major changes paved the way into the 2000s

Major changes began to take place in the Kanavaniemi area in the 1960s. The first new kind of passenger ferry Skandia of joint shipping company Silja (Bore, SHO, Svea) started operations in 1961. In 1973, Viking-linja Oy also transferred its passenger services to Kanavaniemi. Dedicated for passenger harbour use, Kanavaniemi was fully equipped to serve as a ferry port, and its terminals and traffic arrangements were actively developed in the 1980s and 1990s.

Short supply of field space needed by the increasing ro-ro and unit cargo transports in particular and free zone areas meant that in the 1950s there were still plans to extend the goods port to Ruissalo island, but the plan was discarded due to nature conservation. The plan from 1967 in turn proposed that the port's rail connections be clarified and the West Quay be extended to West Harbour. Turku City Council approved the plan which was specified with a general plan for the goods port in 1985, and the implementation began in the following year.

In stevedoring, new technology led to fully machine-operated work in the 1980s. Goods are loaded and unloaded either on wheels or using unit cargo cranes. The operations are largely computerised; each shipment can be tracked in real time on the road, on the field and in the cargo hold and loaded in the right place according to the advance plan. The duration of port calls had decreased to just a few hours while previously the loading had taken days.

Straight after the general plan of the cargo port Silja Oy proposed train ferry traffic to Stockholm as a new element. It was located in Linnanaukko area close to Silja's terminal and began under the name SeaWind in 1989. At that point, the available space in Kanavaniemi, Linnanaukko and West Harbour had run out, and room for expansion had to be looked for elsewhere.

Suitable space was found in Pansio, on the east side of the old oil harbour where an area of nearly 100 hectares was released for use at the beginning of the 1990s. The implementation of the plan began in 1996 with the renovation of the old oil quay. When Oy Finncarriers Ab offered to

transfer the destination port of its train ferry traffic for Travemünde to Turku, an agreement was made in 1997, and the Pansio train ferry port received its first vessel on 1 June 1998. An area was also reserved in Pansio for a unit cargo port.



By the 1990s, 85% of all the cargo transported through Turku was being carried by ro-ro ferries for rail or road vehicles. Kanavaniemi was a fully equipped passenger harbour. The size of the ro-ro ferries operating the services to Stockholm were ten times as large as they were in 1960s; ships had become floating shopping malls and conference centres. In the background, the rail/ro-ro ferry SeaWind can be seen, and behind her, the West Harbour. At the train ferry harbour in Pansio, exporters' goods could be left undisturbed on the rail freight trucks when their wheel bogies were replaced by wheels for the standard gauge used in Continental Europe. In the picture the rolling stock is being shunted from the bogie exchanged shed onto a ship bound for Travemünde. – Saaristo photography studio



21ST CENTURY



The lively passenger traffic through the Port of Turku has a positive effect on the operations of service businesses in the city and the neighbouring areas.



PORT AND TURKU –TOGETHER FOR 870 YEARS

The city and the Port of Turku have been growing and developing side by side for centuries. As an inseparable part of the city, the Port of Turku has generated and still generates considerable added value to the City, the business life as well as the inhabitants. Through co-operation and interaction with different parties the Port of Turku ensures that its own operations are developed in a responsible manner and in accordance with the principles of sustainable development.

The port strengthens Turku's maritime image and acts as a significant attraction factor for the city. As a centre of maritime transports belonging to the European Union's TEN-T core network, the Port strengthens Turku's position as a key logistics hub in Finland and the Baltic Sea region. By increasing the volume of the goods flow, the Port of Turku contributes to the vitality of the business life in the whole region and the well-being of people by creating new business operations and jobs in the city.



The Port of Turku employed 40 people at the end of 2023. In addition, there are over one thousand professionals of different fields working in the port area. The number of logistics industry employees in all of Southwest Finland was estimated to total 10,000 people at the turn of the 2020s.

Port operations employ people directly and indirectly

The Port and the numerous companies operating there employ a considerable number of people both directly and indirectly. In addition to the Port of Turku's own organisation, there are over one thousand professionals of different fields working in the port area every day, and the number of logistics industry employees in all of Southwest Finland was estimated to total over 10,000 people at the turn of the 2020s. The demand for labour in the field is expected to continue to increase, e.g. due to the growth of online sales.

Port of Turku is also an important part of the maritime cluster of Southwest Finland, the core of which is formed by the maritime industry, maritime businesses, and port operations. The roots of the local shipyard industry lie at the mouth of the River Aura where shipbuilding continued until the mid-1970s after which the shipyard operations transferred to Perno district. Located on the Raisio-lahti bay and currently owned by German company Meyer Werth, the shipyard is known as the leading builder of cruise liners and a pioneer in its field.

The maritime cluster has great significance to the well-being of Southwest Finland on the whole through

employment. With indirect jobs included, the maritime cluster is estimated to employ around 27,000 people in Southwest Finland and Satakunta, which accounts for 8.5 per cent of all people employed in the area.

Sea travel generates demand for the service businesses in the city

Port of Turku has a major effect on the City's attraction as a tourism destination. The port and the beautiful route through the archipelago strengthen Turku's maritime image and welcome the travellers arriving in the city from Scandinavia and elsewhere from the Baltic Sea region.

Nearly three million passengers travel through the port every year. The number of passengers is also positively visible in the operations of service businesses in the city and the neighbouring areas, such as hotels, restaurants, other tourism service providers and shops. By visiting museums, exhibitions and other sights and events tourists help to support and maintain their operating prerequisites and development potential.

Thanks to the co-operation involving the Port of Turku, shipping companies, the City of Turku, the regional tourism organisation Visit Turku Archipelago, and other tourism industry players, the passenger traffic through the port is expected to continue to develop in the future, too. For the Port's own operations it means measures to make departing from Turku and arriving in the city even easier, faster and more convenient for the passengers. An important role in that is played by the new joint terminal Ferry Terminal Turku which is due for completion at the turn of 2026 and 2027.

Port area lies at the heart of urban development

The port is part of the City of Turku's development corridor of the city-centre which has the greatest potential for the development of urban living in accordance with modern requirements and for condensing the urban structure. As a



result of the co-operation between the Port and the City, new residential areas close to the sea will rise near the port in the future, and they will link the port more closely to the city-centre and open up new opportunities for people interested in urban living.

The Linnakaupunki district to be located next to the port is intended to become a residential area for more than 10,000 people and an important cluster of jobs and services. The new building of Linnakaupunki is envisioned together with the planner in such a way that the port operations will be naturally linked to the renewing structure of the rest of the area in the future as well. The expectations and wishes of both the inhabitants of the nearby areas and those of the businesses will be taken into account in the drawing up of the development plans.

The development of the inner harbour will continue as part of the Port's core operations, and its passenger services will be connected structurally and operationally to the renewing structure of the rest of the area. Regarding goods transports, the Port of Turku's focus lies in minimising the environmental impacts of the operations and forwarding heavy vehicles from the port to highways smoothly and without congestions past the urban residential areas.

Port's anniversary is shared by the whole city

In addition to financial benefits, the port strengthens Turku's image as an active, international, and vital city. The location of the port near the city-centre increases the interaction between the Port and the local inhabitants. The Port has contributed to making the roads by the River Aura from the city-centre to the port more pleasant and to launching many interesting events in the city. One of these is the Tall Ships Races that are coming to Turku for the sixth time on the Port of Turku's 870th anniversary, in summer 2024.



In the Port's 870th anniversary Turku will host the Tall Ships Races for the sixth time. The event is a good example of the co-operation between the Port and the City, as the Port has a big role in organising the event.

Turku Harbour Board meeting in 1968 in the conference room of the Port's office building. The Harbour Board and its predecessor the Port Authority were for a long time completely masculine administrative municipalities. The first women became members of the Harbour Board in 1989. – Turku City archive



FROM DREDGING MANAGEMENT BOARD TO A MODERN LIMITED LIABILITY COMPANY

In the final years of the 19th century, the administration of the Port of Turku was the responsibility of the Management Board of the Harbour and Dredging Authority which was discontinued due to unclear responsibilities in the 1890s. Its duties were first transferred to the City's Finance Chamber which was followed by the Harbour Department founded in 1916. The lack of a determined harbour policy, however, was soon found to hinder the development of the port, as a result of which a specific Port Authority was established in Turku in 1920 as the first in Finland. The Port Authority assumed responsibility for the development of the port on the whole, and it was headed up by the Harbour Master, Port Treasurer and Port Engineer, each of whom led their own office.

In terms of administration, the next bigger step was taken in 1937, when the Port Authority was changed into the Harbour Board that operated under the City Board. The power of decision nevertheless remained the same as the Port operated as an independent bureau that drew up its own budget. After the war, the increasing competition between ports called for concentration of marketing and representation, for which purpose Turku established the post of the Port Director, first as temporary from 1950 on and finally as a permanent position from 1956 on. The Deputy Mayor of Technical Department acted as the chairman of the Harbour Board for a long time, but as the municipal administration became more democratic, an elected representative took over as the chairman in 1961.

After extensive planning, new code of professional standards was verified for the Harbour Board in 1972. At the same time, The Port's former offices were transformed into financial, transport and technical departments. As in other Finnish ports, discussion on the incorporation of the Port commenced in Turku already in the 1980s. The matter proceeded to a vote in the Harbour Board in 1989 where the proposal on incorporation was rejected by a small margin. The possible incorporation of the Port remained on the agenda in the early 1990s, but in 1994 the Turku City Council ended up making the Port the City's public utility company with net budgeting.



In October 1920, Turku established a specific Port Authority as the first in Finland. The chairman was Sea Captain Werner Streng who served in the position for an exceptionally long time and also transferred to act as the chairman of the Harbour Board in 1937. The Port Authority convened for the first time on 10 November 1920. – Turku City archive



At the beginning of the 2000s, the Harbour Board comprised of 13 members elected by the City Council for the same term as the City Council. From among them, the City Council appointed the chairman, deputy chairman, and a personal deputy member for each of them. Those present in the meetings of the Harbour Board also included a representative of the City Board, secretary, and rapporteurs. Pictured top from left: Pekka Räsänen, Seppo Muurinen, Sini Soini, Seppo Kemppainen, Ann-Sofi Hurme, Veikko Keto, Raija Helin, Turja Lehtonen, Jorma Hellstén, Sari Hukkanen, Matti J. Niemi. Bottom from left: Pentti Vänni, Marja Vyyryläinen (deputy chair), Christian Ramberg, Pentti Sokajärvi (chair), Jarmo Koskinen (secretary), Reijo Vuorio.

“
Wholly owned by the
City Turku, Port of Turku
Ltd started operations
in 2013.

Amendments of Local Government Act changed the administration model

On entering the 21st century, the administration of the Port of Turku was still being handled by a Harbour Board comprising of elected representatives. The purpose of the Harbour Board was to steer and supervise the Port's operations and the reaching of the goals set. At the same time, it had to look after the technical, financial and organisational development of the Port. The members of the Harbour Board were elected by the City Council, and the term of office corresponded with that of the City Council, i.e. four years. From the beginning of the 2000s on, the number of members of the Harbour Board was thirteen. From among them, the City Council appointed the chairman, deputy chairman, and a personal deputy member for each of them. In addition, a representative of the City Board sat in the Harbour Board.

From the beginning of 2009 on, the Port of Turku operated as a public utility company in accordance with the amended Local Government Act. In place of the former Harbour Board, the Management Board of the public utility company was set up to manage the Port's operations, with seven members elected by the City Council. The new form of public utility company allowed for the Port's more independent operating, which meant e.g. that the Management Board of the municipal port enterprise approved the Port of Turku's budget and financial statements. In its first operating year



Preparations aimed at the incorporation of the Port started in spring 2010. The Port's own personnel participated in the preparatory work in different sub-committees. In the same year, a training programme for change concerning the whole personnel was initiated with the goal to maintain interaction and provide further information on the need for a change, as well as keeping the employees up to date on the progress of the Port's incorporation process.

the Management Board approved, among other things, the principles of good governance which determined e.g. the decision-making procedure and purchasing rights of the public utility company.

Preparations for incorporation started in the 2010s

The City Council approved in autumn 2009 a document concerning the owner policy for 2009–2013 in which one of the measures is the incorporation of the public utility companies. A project team complemented by persons from the central administration of the Port and the City started the preparations aimed at the incorporation of the Port in spring 2010. The Port's own personnel participated in the preparatory work in a number of sub-committees.

A training programme for change concerning the whole personnel was initiated in co-operation with the Turku University of Applied Sciences in spring 2010. The goal of

the training was to maintain interaction and provide further information on the need for a change, as well as keeping the employees up to date on the progress of the Port's incorporation process. During the extensive training of change, strategies were devised together and discussions were held on e.g. the use of resources and the development of expertise.

The studies for the incorporation of the Port of Turku proceeded significantly in 2011, although the handling of the new Local Government Act was delayed in the Parliament. As part of the incorporation process the Port's organisation and its development needs were reviewed. Based on the review, a decision was made to make the Port's organisation lower and more concise regarding both operative functions and administrative services. Co-operation with the City of Turku's different public utility companies was increased by making a decision to purchase part of the maintenance services from the City, and consequently some personnel transferred from the Port to the City. The new organisation model was introduced at the beginning of June 2011.

Port of Turku Ltd started a new era in 2013

Year 2013 stands as an important milestone in the history of the Port of Turku. After careful preparation, the City of Turku transferred the operations of its municipal port enterprise to the new company by a sale of business operations. Wholly-owned by the City of Turku, Port of Turku Ltd started operations at the beginning of 2013. The incorporation was a response to the amendment of the Local Government Act following the European Union's neutrality requirements, and its goals were to allow for the new organisation to concentrate on the Port's core functions as well as improving the productivity of operations and competitiveness. The development of the infrastructure required by the port and logistics operations as well as marketing of the Port together with other port operators were determined as the key duties of the new port enterprise. For the Port's customers and partners the amendment meant even more flexible co-operation and faster decision-making.

The Port's administrative model also changed in connection with the incorporation. The Management Board of the municipal port enterprise was replaced by a Board of Directors in accordance with the Limited Liability Companies Act, the duties and responsibilities of which are determined on the basis of the Limited Liability Companies Act and other applicable legislation. The Board of Directors takes care of the administration of the port enterprise and appropriate organisation of operations, and handles and decides on all significant matters concerning the operations of the company. According to the Articles of Association, the Board of Directors has a minimum of three and a maximum of seven members.

The first Board of Directors focused on developing the Port's operating model

Port of Turku Ltd's first chairman of the Board was Marjukka Karttunen, during whose term the Board of Directors focused on developing the Port's operating model and updated the company's business strategy by separating the passenger traffic and cargo transports into their own profit units. The objective of the change was to create a more customer-oriented and cost-efficient operating model that would efficiently implement the key goals of the port operations. Support functions of the business sectors were determined to include official and security services, technical services,



The Port's administrative model also changed in connection with the incorporation, and the Management Board of the public utility company was replaced by a Board of Directors in accordance with the Limited Liability Companies Act. Marjukka Karttunen was elected the first chairman of the Board of Directors. Pictured from left: Satu Hildén, Christian Ramberg, Arja Iho, Jukka Mikkola (deputy chair), Marjukka Karttunen (chair), Maria Puhakka, Turja Lehtonen, Jarmo Koskinen, and Jarmo Tamminen.

In 2018, Member of Parliament Ville Niinistö was elected the chairman of the Board of Directors of the Port of Turku.



“

One of the key tasks of Port of Turku Ltd's Board of Directors is to respond to the demands of drivers of change in the Port of Turku's operating environment. The leading drivers of change are environmental protection, digitalisation, and the City of Turku's town planning.

finances and administration, development, and marketing and communication. In addition to the updating of the business strategy, the first Board of Directors of the port enterprise had to make investment decisions, the biggest of which included e.g. the decision on building DB Schenker's large terminal and its expansions. Towards the end of the term of the Board of Directors, preparations were initiated for the new joint terminal in the passenger harbour, and a majority of the shares of Turku Free Zone Company Ltd was acquired.

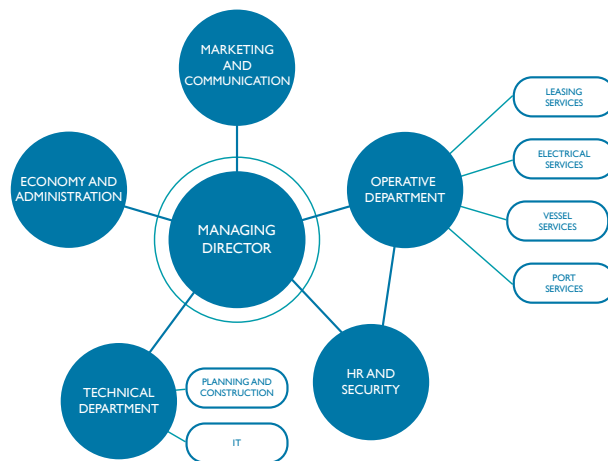
Since 2018, Ville Niinistö has acted as the chairman of the Board of Directors of Port of Turku Ltd. During his term, the operating environment of the Port of Turku has been in a state of constant change, as the most important drivers for change have been environmental protection, digitalisation, and the City of Turku's town planning. Responding to issues has been among the Board's key duties, and alongside those it has continuously made decisions on questions related to the

planning and construction of the new joint terminal in the passenger harbour.

Preparing for the future during transformation of corporate culture

Under supervision of the Board of Directors, the port enterprise initiated a transformation of its corporate culture in 2021 the goal of which was to prepare the staff to respond to the opportunities and challenges of the port operations of the future. After setting the goals, focus was directed at enhancing the operating processes as well as the expertise of the personnel and making it more diverse. The change of the corporate culture strategy concerned everyone and extended from the development of management to diversification of expertise and know-how.

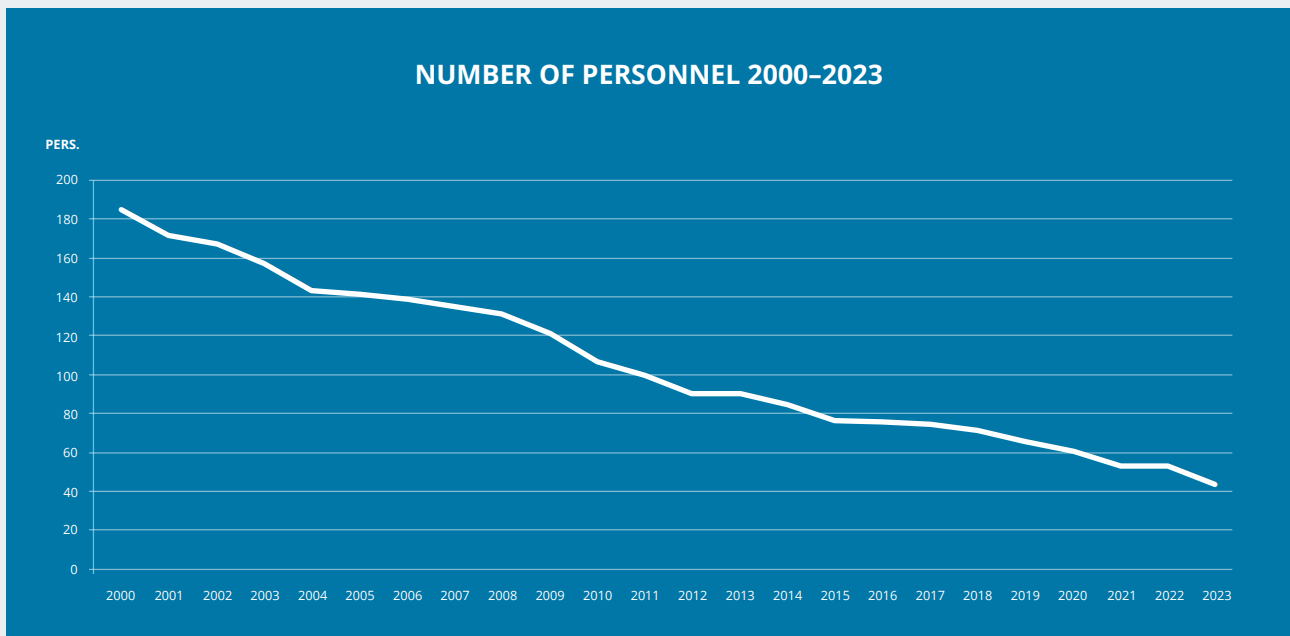
The transformation also included the organisation structure, entered into force at the beginning of 2022, in which the Port's vessel services and maintenance services were combined into one unit under the Port's operative services. The goal of the change was to condense and strengthen the internal co-operation and at the same time increase the flexibility of customer service.



Port of Turku's organisation in 2023.

WORK IN THE PORT 2000–2024





The Port of Turku's number of personnel has been decreasing throughout the 2000s as a result of enhancing of the Port's operations as well as technological development and attrition. For example, in the early 2010s when the Port's organisation was made lower, personnel transferred to the City of Turku, and in 2020 part of the crane operators transferred to Turku Stevedoring as a result of the sale of the crane operations. After the co-operation negotiations implemented in 2023, Port of Turku employed around 40 people at the end of the year.

COMPETENT WOMEN AS ENGINES FOR CHANGE



Marjukka Karttunen (presently Parpola), Managing Director and entrepreneur, acted as the chairwoman of the Board of Directors of Port of Turku Ltd from 2013–2017.



Pirkko Mikkola, Justice of Court of Appeal, acted as the chairwoman of the Managing Board of the public utility company from 2009–2013.

Pirkko Mikkola, Justice of Court of Appeal, and Marjukka Karttunen (presently Parpola), Managing Director and entrepreneur, played key roles in both preparation and implementation of the incorporation of the Port of Turku. Pirkko Mikkola acted as the chairwoman of the Managing Board of the public utility company from 2009–2013 and Marjukka Karttunen was the chairwoman of the Board of Directors of the port enterprise from 2013–2017.

”The Port’s transformation into the City’s public utility company was the first step on the way towards incorporation, although proposals on the matter had been submitted already much earlier. From the very beginning it was clear to the Managing Board that its most important task was to prepare the incorporation together with the operative management of the Port. One of the key tasks was to adapt the personnel to the future changes and clearing the worries related thereto, for which a special structural change group was set up in spring 2010. The co-operation was characterised by openness and mutual trust, which both enabled smooth working of the Managing Board and supported the Managing Director of the Port in his work. Compared to the years in the Harbour Board, the working of the Managing Board was more independent, but the City’s understanding on the importance of the Port nevertheless provided a firm foundation for decision-making”, Pirkko Mikkola reminisces.

Marjukka Parpola remembers how she and long-time chairman of the Harbour Board Pentti Sokajärvi always ended their addresses in the Turku City Council meetings concerning the Port by stating that “and by the way, the Port needs to be incorporated”. In 2013, the incorporation finally happened, and Marjukka Parpola was chosen to manage the change.

”Incorporation was the right decision by the City to enable the development of the Port. The changing of the old culture and operating model took their time, of course, but by doing it from top down we succeeded in engaging the personnel of the company to the new model. The same change of corporate culture also concerned the Board of Directors, as some of the members had not sat in a Board of Directors of a limited liability company before that. The first steps towards operating like a limited liability company included stating the Port’s mission and updating the business strategy, which aimed at focusing on the business areas in terms of the Port’s finances, and development thereof. The Board of Directors did not intervene the operative functions, although I and the Managing Director of the port enterprise made up a functioning working pair from the very beginning e.g. in putting the strategy in practice. All in all it was great to be involved in making the big change that created a foundation for the future of the Port far ahead”, Marjukka Parpola assures.

CREATOR OF POSSIBILITIES



*Christian Ramberg
acted as the Managing
Director of Port of Turku
from 2000–2019.*

Christian Ramberg worked as the Managing Director of the Port of Turku from year 2000 up to 2019. During his management term of nearly twenty years the Port of Turku implemented several significant reforms that considerably advanced the Port's operations. Christian Ramberg thinks that the most important of the changes during his post as the Managing Director was the Port's strengthened position within the European transport system and the Port's stronger position as the centre for Scandinavian traffic in Finland.

"The TEN-T transport network forms the logistical backbone of the European Union, and in it the Port of Turku is part of the core network corridor extending from Scandinavia to the Mediterranean Sea which goes from Finland via Sweden and Central Europe all the way to the southern tip of Italy. A strong position in the European transport network has enabled and still enables various development projects supported by the EU which aim at improved flow of cargo logistics between and inside the member states. For example, the E18 motorway completed in 2018 speeds up the connections to the Helsinki metropolitan area, and the renovation of Highway 8 that started in 2014 and the improvement of the Turku ring road currently underway provide more speed, clarity and safety to port traffic. Being part of the core network has also directly benefited the Port where many development projects have been implemented with partial support from the European Union's different funding instruments", Christian Ramberg says.

The Port of Turku has always been the centre of Scandinavian traffic in Finland, and in the 2000s its position in that role has further strengthened. The most significant factors contributing to the positive development are the fast connection between Turku and Stockholm, continuous

renewal of the vessel stock, and quick reacting to the needs of the customers, e.g. in building logistics premises.

"The role of the port enterprise in the development work is to create opportunities and remove the obstacles to development. My own work mainly involved promotion of matters related thereto and speeding up the decision-making together with the customers and the decision-makers of the City of Turku. Key points during the 2000s include particularly the major investments in the large logistics centres in the Ovako area and the widening of Suikkilantie road to four lanes in order to link the road traffic to and from the port directly to the highway network. Several projects were also prepared by the Port, as the Port held and still holds strong expertise in harbour construction and environmental issues."

Christian Ramberg thinks that the importance of co-operation and networking is continuously growing. In order to be able to affect issues important to the Port you need to be proactive in both national and international networks.

"The competition between ports is fierce in both cargo transports and passenger services, so you need to keep your antennae out and grab any opportunities quickly, even with anticipation. The incorporation of the Port in 2013 was a big change that gave the Port even better opportunities for the development of its business strategy as well as quick decision-making. The incorporation was implemented successfully by the Port, and the resulting benefits were efficiently utilised during the first ten years as a limited liability company. I believe that the Port of Turku has the readiness to further strengthen its position among the Baltic Sea ports and at the heart of European transport flow", Christian Ramberg assures.



TURKU STRENGTHENED ITS ROLE AS A UNIT CARGO PORT

When year 2000 was approaching, the Port of Turku quickly regained the position it had lost during the previous decades. In the 1990s the Port's transport volume grew faster than that of any other Finnish port, at twice the rate compared to Helsinki, for example. The growth of goods transports was speeded up by the increase in unit cargo transports in particular, which made the Port of Turku the second biggest unit cargo port in Finland regarding both imports and exports in the 1990s. The magnitude of the change is indicated by the share in the handling of unit cargo imported to Finland which increased from 40 per cent at the beginning of the 1970s to 90 per cent in the late 1990s.

In the first decade of the 2000s, the total volume of cargo transports through the Port of Turku settled to around four million tonnes per year, while the annual variation was a few per cent during the period from 2000–2007. Factors that affected the transport volume in different years included, for example, the industrial action early in the decade, and the changes in the fleet on the Port's main routes. In 2000, the growth of transports was slowed by the solidarity strike of stevedores related to the labour dispute in the transport industry, and the maintenance breaks of the passenger ferries operating services to Sweden. In spring 2005, the positively started growth of goods transports grounds to a halt due to a strike in the paper industry and the subsequent lockout which lasted for about seven weeks.

During the first decade of the 2000s, the majority of the Port of Turku's cargo transports was carried on ro-ro vessels, including passenger/car ferries and rail traffic. The Port's transports destined to Germany and the North Sea strengthened, when Finnlines increased its capacity on the route between Turku and Travemünde in 2006 and 2007, and opened a new connection from Turku to Antwerp in January 2007. Cargo space on the Travemünde route was also increased by PowerLine's m/s Antares which replaced m/s Global Freighter on the route at the beginning of 2007. The development of the ro-ro traffic suffered a setback, when SeaWind's m/s Sky Wind ceased operating from Turku. As a result, there was a shortfall of one vessel on the Port's main route between Turku and Stockholm, which was the principal reason for the decrease in the Port's ro-ro traffic in 2007 by nearly 18% compared to the previous year.



Transports from the Port of Turku to Germany and North Sea ports grew stronger, when Finnlines increased its capacity on the route between Turku and Travemünde in 2006 and 2007. In addition, Finnlines opened a new route from Turku to Antwerp.

Turbulence in global economy was also visible in the port

The global economic recession that started in 2008 and lasted for two years was also reflected in the international traffic in the Port of Turku. The impacts were, however, milder in the Port of Turku compared to some other ports. That was due to the Port of Turku's wide range of transported goods which made the port less vulnerable compared to ports that specialised in transports in specific lines of industry. Despite the recession, the Port's transports to Germany and the North Sea ports developed favourably, but the cargo volume to and from Sweden decreased due to shortage of vessel capacity, although the arrival of m/s Galaxy brought much desired additional capacity to the route in summer 2008. It was not

necessary to cut down liner connections due to the recession, and at times there was also need for additional capacity on different routes, although the goods transports decreased by around 25 per cent during the recession compared to 2007. The biggest change was seen in the import of cars which decreased by 66 per cent when the transit shipments to Russia ended in late 2009.

Year 2010 means positive development for the Port of Turku. Signs of passing of the global economic recession were already visible early in the year, and as the year progressed, the Port's key figures kept improving. The engine of growth was goods transports the volume of which increased by over



Despite the economic recession that started in 2008, there was no need to reduce the liner connections and operating frequency in the Port of Turku, and at times even extra ships were needed. The arrival of m/s Galaxy in the Turku–Stockholm route in summer 2008 also provided much needed extra capacity on vehicle decks.

8 per cent on the previous year. Goods transports increased as a result of the quick recovery of Finland's foreign trade and lively exports. Exports to the main markets of Sweden and Germany increased most, but transit transports to Russia also increased clearly after having fallen for a couple of years. Thanks to the rapid growth of goods transports, one extra vessel sailed on the route between Finland and Sweden in summer 2010.

The positive development of the Port's goods transport continued in early 2011, although towards the end of the year the Port's operations quieted somewhat due to the slowing of Finland's foreign trade. The repercussions of the international financial crisis were still reflected in the cargo volumes in Continental Europe in particular, while the volume of Scandinavian transports remained stable throughout the year. Thus the volume of goods transports in 2011 totalled 2.8 million tonnes, down by over 6 per cent on the previous year, although the cargo volume in the passenger/car ferry traffic to and from Sweden increased by over 4 per cent. 2011 marked the end of an era in the Port of Turku's goods transports, when VR Group and the Swedish company Green Cargo decided to discontinue the SeaRail train ferry service.

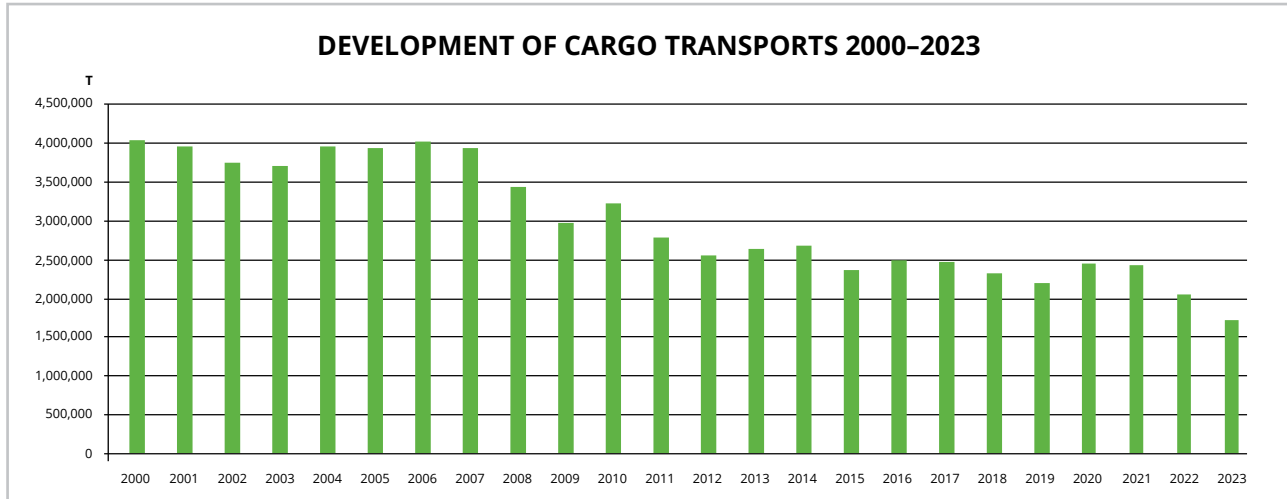
“
The economic recession that started in 2008 was also reflected in the Port of Turku's international transports.”



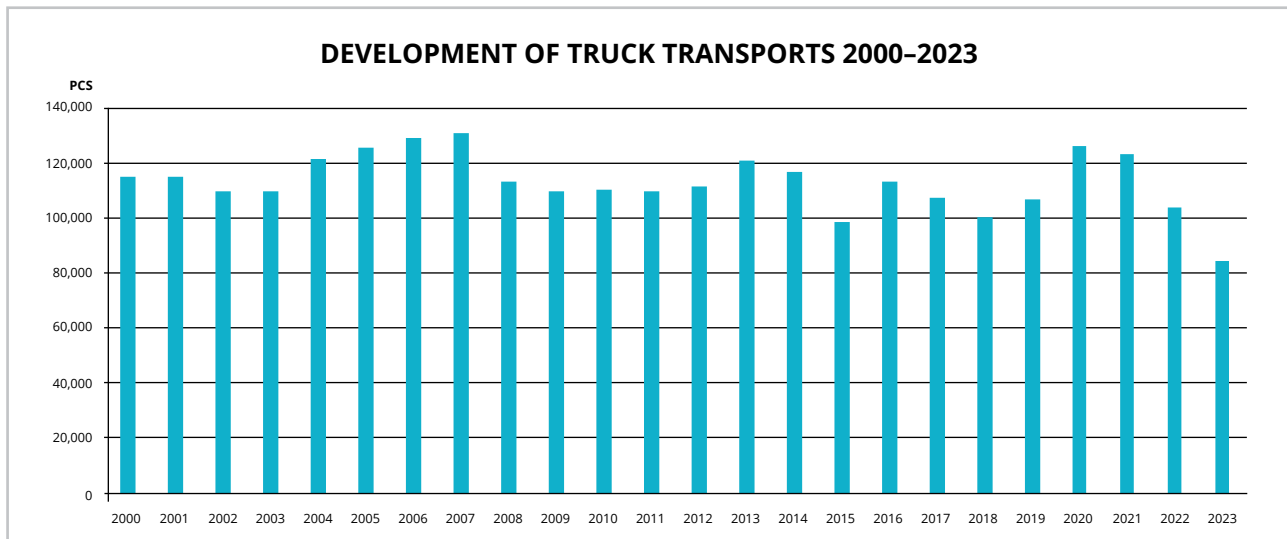
2010 was a year of positive development for the Port of Turku. The growth was driven by goods transports the volume of which increased by more than 8 per cent on the previous year. Thanks to the rapid growth of goods transports, the need for additional capacity emerged on the Swedish route, and Tallink Silja transferred m/s Regal Star for the summer to help out. The vessel did not carry passengers on the route, but was reserved exclusively for cargo transports.



Most of the Port of Turku's liner service destination ports are located in the Baltic Sea area and Scandinavia. The destination ports located in the North Sea offer a connection from Turku to ocean lines. The ports active at the time of compiling the map are marked in black, and the ports marked in red are no longer destination ports of liner services.



The total volume of goods transports has varied with the domestic and global economic conditions. The figures of the early 2020s show the effect of the Covid-19 pandemic, as during the worst years of the pandemic both Viking Line and Tallink Silja concentrated their Scandinavian transports to Turku.



The truck traffic in the Port of Turku was the busiest in 2007, after which the long-lasting recession reduced the number of trucks considerably. The introduction of m/s Viking Grace and m/s Baltic Princess on the route in 2013 and the years of the coronavirus pandemic from 2020–2021 stand out as peaks. The removal of m/s Galaxy from the Turku–Stockholm route is visible in the figures for 2022, as the number of daily departures fell to three.

Renewal of fleet increased Scandinavian transports

The development of goods transports continued along the same lines in 2012, as truck transports to and from Sweden continued to grow, while other international traffic decreased. The growth of transports to Scandinavia was promoted by the introduction of new vessels with higher cargo capacity on the route between Turku and Stockholm. Viking Line's new m/s Viking Grace started operations in January 2012, and a couple of weeks later Tallink Silja's m/s Baltic Princess had its first departure in Turku. The increase in the vessel capacity contributed to the growth of the Port's cargo transports also in 2013, when the volume of truck transport increased by more than 8 per cent compared to 2012. As a result of continuing growth, the Port began to plan an expansion of the truck parking area, with the aim to double the number of parking spots reserved for trucks and the drivers' passenger cars, and to improve the services available to the drivers.

Year 2014 was still characterised by the economic recession that lasted longer than expected in Europe. Emerging signs of new growth were seen during the year, but a permanent turning point was not yet at hand. The volume of goods transported through the Port of Turku nevertheless increased by about 2 per cent due to the positive development of exports. Cargo volume on the route between Turku and Stockholm continued to grow, and the new connections opened up new opportunities for the shipments of Finnish businesses. Baltic Line added port calls in Denmark and Poland to its Norway line and announced on introducing a second vessel to ensure weekly departures. Furthermore, Stena Line and Mann Lines initiated strategic co-operation in late 2014. In conjunction with the co-operation, Stena Line's ro-ro vessel Stena Foreteller was chartered to Mann Lines' service departing in Turku from January 2015 onwards.

The difficult economic conditions in Finland made 2015 a challenging year for the port sector on the whole. Despite the increase in capacity and opening of new connections, the total volume of the Port of Turku's goods transports fell by



Train ferry traffic between Turku and Stockholm ended in late 2011, when VR Group and Swedish company Green Cargo discontinued their SeaRail transports. The cargo capacity provided by the route nevertheless remained the same between the cities, as m/s SeaWind increased its truck capacity correspondingly. However, m/s SeaWind was removed from the Turku route completely in 2015.

nearly 12 per cent in 2015 due to the quieting of foreign trade. There was nevertheless some positive development as well in the business sector of goods transports during the year. The Port's competitive position in the exports of highly processed products was enhanced by the increase in the capacity of Mann Lines and Baltic Lines. Stena Foreteller started operating in liner service for Mann Lines at the beginning of the year, thus considerably increasing the shipping company's cargo capacity. On Baltic Lines' route the capacity was doubled, as the shipping company introduced m/s Mini Star alongside its sister ship m/s Link Star and switched to weekly departures. The most significant change in the goods transports between Turku and Stockholm was the exit of m/s SeaWind from the route at the beginning of the year.



In 2013, the positive development stemmed especially from the growth of vessel capacity on the route between Turku and Stockholm, when m/s Viking Grace started operating in Turku on 15 January 2013 and m/s Baltic Princess on 1 February 2013. The cargo on the route is mainly transported by trucks for which the new vessels provided considerably more lane metres. The increase in capacity was directly visible in the volume of truck traffic in the Port of Turku, as it increased by 8.4 per cent compared to 2012.

Year 2015 was challenging for goods transports due to the general economic conditions. The volume of total transports decreased, but there was also positive development in goods transports during the year. The Port's competitive position in export transports of highly processed products was improved by increase in capacity by Mann Lines and Baltic Line Finland. Stena Foreteller started liner service for Mann Lines at the beginning of the year and increased the shipping company's cargo capacity by 700 lane metres. On Baltic Line's route the capacity was doubled when the shipping company introduced m/s Mini Star alongside its sister ship m/s Link Star. With two vessels on the route, the shipping company started weekly departures, opening a sea connection from Turku to Poland and Denmark in addition to the connection to Norway.



German transports and project shipments as engines of new growth

Year 2016 was one of progress for the Port of Turku, despite the still unstable conditions in the global economy. The total volume of goods transports increased by around 5 per cent on the previous year, and growth in unit cargo stood at nearly 9 per cent. The majority of the growth accumulated from German traffic which was speeded up by the increase in Finnlines' vessel capacity and the increase of weekly departures to four. In addition to unit cargo, there was growth in demanding project shipments of the heavy industry which were shipped via Turku all the way to the Asian and American markets. The growth of project shipments was partly enabled by the excellent resources of port operators for the load handling of demanding shipments, modernisation of the cranes, and the Port of Turku's strategic choices for the development of services needed by the project shipments.

Finland's economic outlook turned for the better in 2017, after a long recession. The recovery of the foreign trade started early in the year, and economic growth accelerated rapidly towards the end of the year. The Port of Turku's operations developed positively in the wake of general economic growth, and the Port's goods transports increased in particular. Southwest Finland emerged as the engine of growth for the whole country, and the success of the shipyard industry also stood out as an individual factor in the demand for the Port of Turku's services. In 2017, the cargo volume transported through the Port totalled 2.5 million tonnes, up by 3 per cent on the previous year.

At the beginning of 2018, the cargo shipping companies with liner services departing from Turku updated their fleet and increased their capacity. Mann Lines' new, operationally efficient ro-ro vessel m/l Freyja arrived straight from the shipyard and started services in January. At the same time, operations were started by m/s Finntide, the first vessel in Finnlines' ship lengthening project. The next vessel back in service was m/s Finnwave which was lengthened at the same Polish shipyard and arrived in Turku for the first time at the

“
As the vessel sizes grew, Finnlines' operations were transferred from Pansio to the West Harbour in 2018.

beginning of February. Thanks to the lengthening project, Finnlines' cargo capacity on the route between Turku and Germany increased by nearly 20 per cent compared to the situation before lengthening. As the size of the vessels grew, Finnlines' operations in Turku moved from Pansio to the West Harbour, which also facilitated the co-operation with port operator Finnsteve.

In 2019, the cargo volume transported through the Port totalled 2.2 million tonnes, down by almost 2 per cent on the previous year. While the total transport volume decreased slightly, unit cargo transport developed favourably and increased by over 6 per cent compared to the previous year.

The modernisation of the gates in the West Harbour, aimed at smoother truck traffic in the Port, was completed in 2019. Truck traffic services were also developed in 2019–2021, when a heavy traffic measurement and identification system was built at Viking Line's field. Identifying, weighing, measuring, and photographing of heavy equipment made possible by the system increased safety and balanced the loading of ships. In addition, the traffic control of the Tallink Silja field was improved by centralizing passenger and cargo traffic to the same field and by installing digital traffic signs on the field, which smoothed the flow in the car field and speeded up the loading of the ship.



Cargo transports in the Port of Turku developed positively in 2016. Unit cargo volume grew by nearly 9 per cent, mainly due to increase in German transports. The growth was supported by Finnlines increasing its vessel calls to four per week and significant growth in the cargo capacity. Within the investment programme initiated by Finnlines in 2017, the shipping company lengthened its four Breeze class vessels of which m/s Finn tide and m/s Finnwave operated on the Turku route. As the vessel sizes grew, Finnlines' operations in Turku were transferred from Pansio to the West Harbour in January 2018.

Mann Lines' new ro-ro vessel ML Freyja started operations in 2018. The vessel arrived directly from the shipyard and was 15 years newer than its predecessor m/s Foreteller. That meant significantly better fuel efficiency compared to the vessel that operated on the route previously.



Covid-19 pandemic concentrated Finland's Scandinavian transports to Turku

Year 2020 will remain in history as a highly exceptional period of time. The positive outlook early in the year quickly turned uncertain with the international news about a pandemic, and the coronavirus epidemic also arrived in Finland in March. In the Port of Turku the effects of the epidemic hit hardest the shipping companies operating services between Turku and Stockholm, as the restrictions decided on by the Finnish Government stopped passenger traffic between the countries almost completely. As the passenger traffic waned, cargo transports became the backbone of port operations, which was partly affected by the subsidies from the Finnish National Emergency Supply Agency for maintaining the services.

Both Viking Line and Tallink Silja concentrated their Scandinavian transports to Turku, resulting in growth of 12.2 per cent in the Port of Turku's cargo transports compared to 2019. Positive development was also visible in the Port of Turku's other liner services. Opened at the beginning of 2020, the connection from the Port of Turku to Rotterdam turned out to be a superior export and import route. Complementing Mann Lines' former route, the line offers excellent further connections to ocean lines as well as comprehensive rail and road connections to all over Europe. After the Brexit, the shipping company's connection to Great Britain has also become more important by offering reliable solutions and expertise to companies faced with a new situation.

2021 was the second year characterised by the coronavirus pandemic. Although the pandemic that broke out in 2020 showed some signs of slowing, the growing rate of infections caused by new variants made it necessary to continue and at times tighten the restrictions. The role of cargo transports remained strong, and the Port of Turku managed to keep up the good level achieved through the growth in the previous year.

The cargo volume carried through the Port of Turku in year 2021 totalled 2.4 million tonnes as per the goal, which was divided nearly half and half between imports and exports. The export volume increased slightly on the previous year. The good

“

The early 2020s will remain in history as a highly exceptional period of time. The coronavirus pandemic arrived in Finland in March 2020 and in the Port of Turku its impacts concerned the shipping companies operating between Turku and Stockholm in particular. As a consequence of the restrictions caused by the pandemic, passenger traffic stopped almost completely and cargo transports become the backbone of port operations.

performance of goods transports was still promoted by the concentration of Tallink Silja's and Viking Line's Scandinavian transports to Turku and the support of the Finnish National Emergency Supply Agency for securing goods transports.



The coronavirus pandemic turned the Swedish route temporarily into a cargo-only line. In practice, the measures for controlling the coronavirus epidemic that broke out in March stopped the passenger traffic between the countries completely for a period. Cargo transports were allowed to continue, because sea transports play a key role in securing Finland's emergency supply. The port of Turku is one of the critical ports in terms of security of supply. The work in the Port is also determined as critical for society. Passenger traffic quieted down, but the port continued to operate 24/7 during the pandemic and ensured functioning cargo transports to all parts of Finland.





New technology and digitalisation made the operations more efficient

Despite the challenging times, the Port of Turku, shipping companies and other players are nevertheless investing in the future. In late 2021, a new automated system for mooring and unmooring vessels was installed in the Port of Turku. The automooring system was installed in Viking Line's berth, and in the first phase it is used by both of Viking Line's vessels on the Turku route. The introduction of the new system continues the digitalisation of the port operations, in which the Port of Turku is a pioneer in its field.

As an important element of the development of port services, the reorganisation of the Port's crane services was completed in 2021. By the sale of business operations, the Port's crane services were transferred to Turku Stevedoring Oy which provides reliable and flexible crane services to all operators and shipping companies working in the Port. The solution turned out to be a success, and the customers are satisfied with the quality of the services.

In 2022, the total volume of goods transports carried through the Port of Turku was just over 2 million tonnes, down by around 15 per cent compared to 2021. The majority of the fall resulted from unit cargo transports which was affected above all by the decrease in capacity in the Swedish traffic. Tallink



In 2021, the Port of Turku introduced an automooring system on Viking Line's berth for faster mooring and unmooring of vessels. It cut down fuel consumption of vessels and reduced emissions during port calls.



Port of Turku Ltd sold its crane services business as a sale of business operations to Turku Stevedoring Oy (TurkuSteve). As a result of the sale, cranes and crane operators were transferred to the new owner on 1 March 2021. The reason for the sale was the Port of Turku's need to focus on its core task, on creating an appropriate operating environment for both passenger traffic and cargo transports, as well as ensuring the continuing of the crane services.

Silja's m/s Galaxy was pulled from the route in September, which reduced the departures from Turku on the route to three per day instead of the previous four. The removed capacity was partly covered by m/s Viking Glory which started operations in March and offers around 600 lane metres more cargo space than its predecessor m/s Amorella.

The Port's other goods transports continued along the same lines. There is regular service to Travemünde, and Finnlines operates to Germany weekly. Mann Lines operates weekly from Turku to Harwich, calling e.g. in Bremerhaven and offering a smooth connection to ocean lines via Rotterdam. Baltic Line's weekly liner service connects the port of Turku to the markets of Norway, Denmark, and Poland. In addition to those, the Port of Turku actively negotiates on opening new connections to Baltic Sea ports as well as further afield to Europe. Negotiations have advanced furthest on opening a liner service to Poland, on which the cities of Turku and Gdynia signed a letter of intent already in late 2019. The goal of the agreement is to increase the cargo and passenger volumes between the ports of Turku and Gdynia and strengthen the competitiveness and position of both parties within the international transport network. However, the economic uncertainty brought about by the corona pandemic and the war in Ukraine has slowed down the negotiations on opening the line.

TURKU WAS THE LAST TRAIN FERRY HARBOUR IN FINLAND

Cargo was carried to the Port of Turku also by rail for nearly two decades around the turn of the millennium. The Port made major investments in the infrastructure and services required by the train ferry service, as a result of which all train ferry transports in Finland were concentrated to Turku in the early 2000s. In the best years in the first decade after year 2000, some 25,000 rail carriages with cargo passed through the Port, but gradually the trend began to show signs of decline.

The rail carriage transports were first started by Silja Line, as it founded SeaWind Line to operate the service between Turku and Stockholm in April 1989. SeaWind Line's concept was based on transports of trains, trucks and passenger cars. There was room for a limited number of passengers and you could only embark by car. The shipping company's first vessel was m/s Sea Wind, and m/s Sky Wind was added on the route in 1999. The train ferry service between Turku and Stockholm ended in 2012, when VR Group and Swedish company Green Cargo decided to discontinue their SeaRail transports.

A big step forward was taken in the Port's train ferry transports in 1998, when Finncarriers transferred the departure port of its train ferry service between Finland and Germany from Hanko to Turku. At first there were six daily departures from the new Pansio train ferry harbour to Travemünde. The route was operated by m/s Runner, m/s Rider and m/s Railship. Train ferry service from Germany to Pansio ended at the end of 2007, however, as the cost-efficiency of ro-ro transports shifted the cargo from rail to trucks, and the last train ferry harbour in Finland was closed down.



Cargo was carried by train through the Port of Turku for nearly two decades. The train ferries of SeaWind Line operated between Turku and Stockholm from 1989–2012 and train ferries of Finncarriers between Turku and Travemünde from 1998–2007.

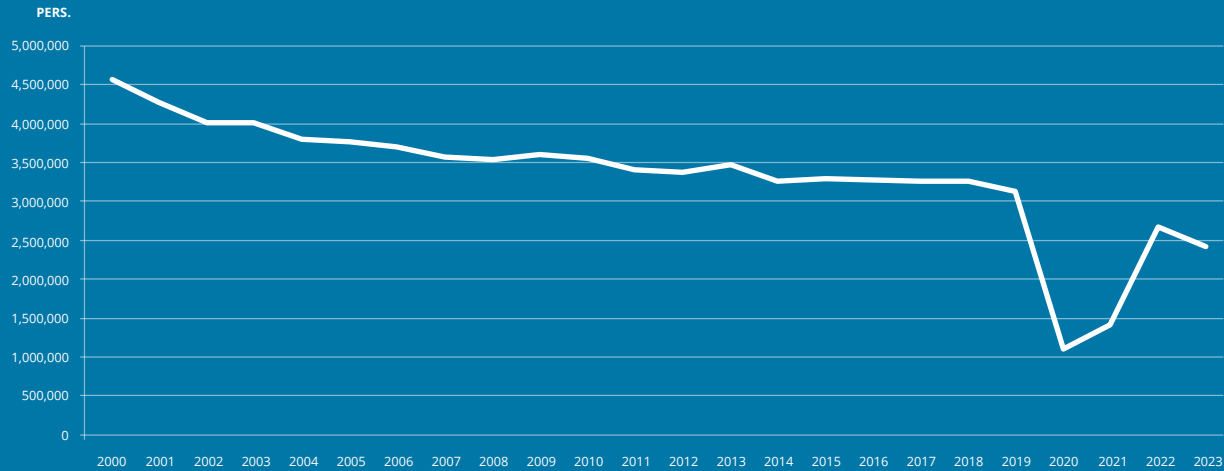


TOURISTIC ATTRACTION CARRIED THE PORT THROUGH DIFFICULT YEARS

The Port of Turku is the leading port for Scandinavian transports in Turku and, measured by the total number of passengers, the second biggest passenger harbour in Finland. Surrounded by a beautiful archipelago, the Port's popularity among travellers is based on fast connections and high-quality services as well as the highest frequency of connections to and from Sweden. The Port's passenger traffic comprises of fast-paced ferry services and international cruise liners visits.

The Port's passenger traffic developed very favourably in the 1990s, when the shipping companies concentrated their Swedish traffic largely to Turku. The Port of Helsinki maintained its position as the biggest passenger harbour in Finland mainly due to the services to Tallinn, but Turku passed Helsinki in the number of trips destined to Sweden already in 1993. Turku's position as the second biggest passenger harbour in Finland was also strengthened when Viking Line discontinued its passenger service from Naantali to Sweden in 1996.

DEVELOPMENT OF PASSENGER TRAFFIC 2000–2023



The passenger volumes between the Port of Turku and Sweden rose at best to 4 million passengers per year in the first decade of the 2000s. The recession that started at the turn of the decade and the poor economic conditions throughout the 2010s were reflected in passenger traffic, as domestic consumption decreased. In the 2020s, the new growth was slowed down by the effects of the global coronavirus pandemic and the war in Ukraine as well as the decrease in daily ship departures from four to three as of autumn 2022.

New millennium started with steadily busy passenger traffic

During the first three years of the 2000s, just over four million passengers travelled through the Port of Turku annually. There were six to eight daily departures, and the services were operated at different times by three different shipping companies: Viking Line, Silja Line, and SeaWind Line. In the following years, the number of passengers decreased slightly, although the volume in the late 2010s was still 3.6–3.8 million passengers per year.

One of the key reasons for the decrease in passenger volumes was the smaller vessel capacity on the Swedish

route, which was partly due to business re-organisation in the shipping industry as a result of which Tallink Grupp AS acquired Silja Oy Ab in summer 2006. Changes continued the next year when SeaWind Line completely discontinued its passenger service from Turku to Sweden at the end of 2007.

However, the passenger volumes took an upwards turn again in late 2008, when Tallink Silja's m/s Galaxy started sailing between Turku and Stockholm. Built at the Rauma shipyard a couple of years earlier, the vessel replaced m/s Silja Festival in Turku. The introduction of the new vessel, familiar

to many people from the Helsinki–Tallinn route, sparked interest among travellers and increased the passenger capacity on the route considerably by offering around 500 more berths compared to m/s Silja Festival.

In 2010, the passenger traffic in the Port of Turku continued to be steadily busy, and around 10,000 passengers per day travelled through the Port on average. On the Turku–Stockholm route the high level of passenger volume was enabled by the reforms implemented on board Viking Line’s vessels and m/s Silja Galaxy which started operations in the previous year. Both provided the passengers with better services, and more comfortable cabins and public premises. At the end of year, Viking Line confirmed the order for its new ship from the Turku shipyard for the Turku–Stockholm route.

New, modern vessel increased the attraction of cruises to Sweden

The passenger volumes remained at the long-term average level also in 2011. A remarkable change was visible in the increase in the number of Russian passengers, which was partly affected by the well-functioning railway connections from the Port of Turku all the way to St. Petersburg. Passenger traffic gained extra colour from the Cultural Tall Ships Regatta which was part of the European Capital of Culture 2011 programme. The great sailing ships and the major event drew around 320,000 visitors to Turku in the summer. The services of passenger traffic were improved during the year by introducing new traffic arrangements in the Port which made it easier for those coming in their own car to arrive in the Port and embark the ships.

In 2012, the Port prepared for an increase in passenger volumes, as both Viking Line and Tallink Silja announced new vessels for the Turku route for 2013. In addition to further improvement of the Port’s traffic arrangements, the parking areas in the Port were expanded and quay structures and terminals were renewed to meet the requirements set by the growing vessel size. The work was completed on schedule well ahead of the arrival of the new vessels in Turku. Viking Line’s m/s Viking Grace started operating on the route in mid-



In the early 2000s, the passenger volumes decreased slightly due to the smaller vessel capacity on the Swedish route. The decrease in vessel capacity was affected, for example, by SeaWind Line discontinuing its passenger traffic in Turku at the end of 2007. The passenger volumes turned to a rise again in late 2008, when over 20 years old m/s Silja Festival was replaced by m/s Silja Galaxy, which provided significant added capacity to the Turku–Stockholm route. M/s Galaxy could take nearly 800 more passengers compared to m/s Festival.

January 2013, and a couple of weeks later Tallink Silja's m/s Baltic Princess had its first departure in Turku.

As expected, the renewal of the vessel stock was seen in the passenger volumes, and the number of passengers travelling through the Port of Turku in 2013 was up by over five per cent compared to the previous year. The new vessels gathered a lot of publicity in the media, as for example the environmentally sound aspects of m/s Viking Grace were highlighted. The new features gained a lot of attention and attracted new passenger groups in search of maritime experiences to the Turku–Stockholm route.

The long-lasting economic recession in Europe was, however, also reflected in the passenger traffic in the Port of Turku in 2014. Despite the attraction brought by the new vessels, the passenger volume decreased on the previous year, as the decrease in consumer demand caused by the economic conditions was strongly directed at the use of tourism services. The attraction of sea travel was nevertheless still visible on various theme cruises which were organised by the shipping companies for different target groups.

In 2015, the general economic conditions continued to be challenging. In spite of that the Port of Turku's passenger volumes increased again, indicating the importance of the recent investments made both by the shipping companies and the Port. The increase in the touristic attraction of the City of Turku also helped, which was still affected by a successful year as the European Capital of Culture in 2011. The biggest growth was seen during the summer season, when the passenger volumes of both Viking Line and Silja Line on the Turku route reached record-high figures. In 2016, the Port reached the satisfactory level of the previous year, when some 3.3 million passengers travelled through the Port. The popularity of the Port's passenger traffic was maintained by the will of the shipping companies to renew their vessels and services based on the customers' wishes.

Tallink Silja updated m/s Galaxy in spring 2016, and the renewal continued on m/s Baltic Princess during spring 2017. Viking Line also refurbished both of its vessels on the route, m/s Viking Amorella and m/s Viking Grace. In late 2016,

Viking Line announced that it had signed a letter of intent on a new vessel for the Turku–Stockholm route. The planned vessel would be m/s Viking Grace's sister ship, but a little bigger. The order was confirmed in 2017.

In the last years of the 2010s, the passenger traffic in the Port of Turku continued to be lively as in the previous years, and the Port's position as the leading port of Scandinavian traffic in Finland grew even stronger. In autumn 2018, a strategic letter of intent was signed by the Port of Turku, City of Turku, Tallink Silja Oy and Viking Line Abp, the common goal of which was to develop the Turku passenger harbour into a maritime centre that will fulfil the requirements of modern, fast-paced, smooth and safe vessel traffic. Named Ferry Terminal Turku, the project includes a new joint terminal for passenger traffic as well as significant changes in quay structures, field areas and traffic arrangements. In late 2019, a letter of intent was signed by the Port of Turku and Port of Gdynia with the goal to open a new ship service for both passengers and cargo between the ports of Turku and Gdynia.



The Port of Turku, City of Turku, Tallink Silja and Viking Line signed in 2018 a letter of intent aimed at developing the Turku passenger harbour into a modern maritime centre that will fulfil the requirements of vessel traffic. The project was named Ferry Terminal Turku. In late 2019, a letter of intent was also signed by the Port of Turku and Port of Gdynia with the goal to open a new ship service for both passengers and cargo between the ports of Turku and Gdynia.



Having sailed on the Turku–Stockholm route since 1995 and a favourite among the passengers, m/s Silja Europa transferred to the Helsinki-Tallinn route in spring 2013, when Tallink Silja replaced it with m/s Baltic Princess. During nearly 20 years in Turku, m/s Silja Europa carried 22 million passengers on the route.



In the early 2010s, the passenger traffic in the Port of Turku was steadily busy, and the new, modern vessels introduced on the route increase the attraction of cruises to Sweden. The Port prepared for the increase in passenger traffic e.g. by expanding the parking areas and renewing the quay structures and terminals to respond to the requirements set by the growing vessels sizes.



In 2013, Viking Line's brand new m/s Viking Grace started operations in mid-January and Tallink Silja's m/s Baltic Princess departed from Turku to Stockholm for the first time at the beginning of February. The experiences and diverse entertainment available on board the new vessels increased the interest in the cruises on the route and attracted completely new passenger groups to sea travel.

Pandemic and the war in Ukraine cast a shadow over the early 2020s

The Port of Turku entered the 2020s with strong expectations that collapsed in the first months of the decade. During the first two months of the year the passenger volumes were growing compared to the previous year, but from March onwards the figures declined rapidly as a result of the global coronavirus pandemic.

The travel restrictions set by the Finnish Government and the general fear of the spreading of the disease meant that the passenger volume for 2020 was only 1.1 million passengers. Compared to the previous year, the volume travelling through the Port of Turku was down by two million passengers. Thanks to the demand for cargo transports between Turku and Stockholm the vessels of both Viking Line and Tallink Silja sailed as per normal throughout the year, and thus necessary travelling was also possible while the restrictions were in force. During the quieter phase of the epidemic in July–August, Tallink Silja also operated direct departures from Turku to Tallinn. The shipping companies did good work for reducing the risk of contagions and ensuring the safety of passengers.

In 2021, the passenger traffic in the Port picked up clearly compared to the previous year, although the coronavirus pandemic was still reflected significantly in the passenger volumes. The total number of passengers travelling through the Port of Turku was around 1.4 million, an increase of around 40 per cent on the figures of the first year of the coronavirus pandemic. During the best summer months the number of passengers rose close to the normal level, but the new waves of contagions with different restrictions pushed the figures of the latter part of the year to a lower level than expected. The vessels of both Viking Line and Tallink Silja nevertheless sailed as per normal throughout the year, offering passenger services while taking into account different restrictions and requirements of health security.

For the Port's passenger traffic year 2022 meant a return to the pre-pandemic figures. During the year, the passenger

“
In 2020, the passenger volume fell to 1.1 million due to the coronavirus pandemic.

volume doubled compared to 2021 and stood at 2.7 million. The pent-up demand due to the pandemic was channelled to Turku especially by Viking Line's new flagship Viking Glory which started operating between Turku and Stockholm at the beginning of March. More than one million passengers travelled on the new vessel by January 2023, which helped Viking Line's Turku–Mariehamn–Stockholm route to reach an all-time record-high number of passengers in summer 2022.

The development of the Port's passenger volume continued positively also through the rest of 2022, although Russia's invasion in Ukraine in February also affected the vessel services in the Baltic Sea, for example through the steep rise of fuel prices. Relating to the war in Ukraine, Tallink Silja announced in September that it will temporarily lease m/s Galaxy to Holland for the accommodation of Ukrainian war refugees. At the same time, m/s Baltic Princess transferred to offer in the autumn–winter season 2022–2023 a new cruise product in which the ship calls in Kapellskär instead of Stockholm.

In 2023, the Port of Turku maintained its position as the leading port for transports between Finland and Sweden and as the second biggest passenger harbour in the country. Some 2.6 million passengers travelled through the Port, which exceeded the goal. Viking Line's passenger volume on the Turku route grew and Tallink Silja's passenger figures were also fairly good towards the end of the year. As a result, the passenger numbers decreased by just eight per cent on the previous year, despite one vessels having been removed from the capacity.



M/s Viking Glory replaced m/s Viking Amorella that had operated the Turku–Stockholm route for over 30 years and increased the passenger capacity on the route by about ten per cent. The vessel arrived in the Port of Turku with major festivities. The audience was not allowed to the restricted port area, but a large crowd of people watched the arrival of the ship behind the port fences and on Ruissalo island. The public also had a chance to watch the arrival online.

PLACE ON THE BALTIC SEA CRUISE MAP IS GROWING STRONGER



Artania, which has visited Turku for several years, is one of the largest cruise ships to arrive at the Port of Turku with its length of 231 meters.

The daily passenger traffic between the Port of Turku and Stockholm is complemented by the cruise liner traffic which has brought a varying number of passengers to Turku in the 2000s. In the busiest years, the cruise liner visits have numbered around twenty, lastly 22 visits in 2022.

Turku offers an excellent place to visit for the Baltic Sea cruise companies alongside with or as an alternative to the capital cities in the region. Individuality and authenticity combined with green thinking have emerged as the city's strong attraction factors. History and the present day come together in the city in an interesting way, within a walking distance from the Port. The archipelago, which is often called the most beautiful in the world, offers peaceful nature and genuine archipelago experiences, and there are even individually tailored excursions available. Cruise passengers can also enjoy various cultural events and restaurant services of international standard. The refurbishment of the areas near the Port will introduce interesting new sights, as a new Museum of History will be built next to the Turku Castle and Forum Marinum maritime museum. Together with tourism organisation Visit Turku Archipelago, the Port of Turku works continuously to improve the customer experience offered to the passengers.

The Port of Turku offers excellent services to cruise liner companies. There are plenty of berths and fixed waste water collection points for vessels, and security is ensured with 24-hour camera surveillance. There is a quay for larger cruise ships in the inner harbour that can accommodate vessels up to 230 metres long, and the plans for the next few years include a dedicated terminal for cruise liners. Vessels that are under 100 metres long are usually berthed in the River Aura, so that the passengers have a nice and short walk to the Turku city-centre along the riverside street.



Cruise liner Vasco da Gama visited Turku in 2022, the year with a record-high number of cruise ship visits in the Port of Turku. The number of the visits stemmed from long-term marketing efforts, but was also affected by the adjusted routes due the war in Ukraine that started in February 2022.



The cruise ship World Voyager is among the smaller luxury cruise ships that, due to their size, can dock not only at the main port but also along the Aura River. In 2022, the ship visited Turku four times.

In the late 2010s, the Ovako area quickly developed into one of the biggest and most modern logistics clusters in Finland. Schenker's distribution centre with a floor area of 22,000 square metres was opened in the area in April 2007, and due to high demand it was expanded already in 2009. In January 2010, Posten Logistik's logistics centre with a floor area of 27,000 square metres was inaugurated.



MODERN LOGISTICS SERVICES MADE THE PORT A DISTRIBUTION HUB FOR SCANDINAVIAN TRANSPORTS

The third cornerstone of the Port of Turku's operations is formed by the warehousing and logistics services. These ship traffic supporting services have been vigorously developed together with the providers of warehousing and logistics services, listening to their needs and wishes. The goal of continuing investments and partnerships is to strengthen Turku's position as distribution hub for Scandinavian transports in Finland through which various products pass quickly and reliably in different directions.

The rental projects of office premises, buildings and land areas are most commonly shared development projects involving the Port's partners. In addition to services suited to short-term and long-term warehousing, the companies operating in the port area provide their customers with various added value services, such as assembly, finishing and packing as well as forwarding of products. The port enterprise has more than 800,000 m² of outdoor storage areas in the vicinity of quays and around 100,000 m² of indoor storage space in the port and the adjoining logistics area.



It is an important goal for the Port of Turku to develop terminal and warehousing services that support the cargo operations. The development work has considerably strengthened the position of the Turku region as a national distribution hub. The Turku region has become the centre for Scandinavian traffic in Finland, and various transport industry operators have played a role in reaching that position. The Port maintained, for example, the Turku Distribution Centre working group, established in the early 2000s, the mission of which was to develop the distribution hub operations. The Turku Distribution Centre area is marked in purple in the picture.

Warehouse investments are based on customers' needs

Big investments were made in the development of the Port's warehouse and logistics services during the first decade of the 2000s, when the Port's most extensive investments up to then were implemented. The rate of investments has remained lively also thereafter, and new warehouse space has been built nearly on a yearly basis. The Port of Turku participated actively in the projects aimed at strengthening the logistics position of the Turku region on the whole. In addition, the Port operated the TDC (Turku Distribution Centre) working group, set up for the development of the distribution hub operations in the early years of the 2000s, and the TAT (Turku Auto Terminal) working group that developed the services for car imports.

In 2003, investments in warehouse construction in the port were made, for example, by the Turku Free Zone Company, Kaukokiito and Scandic Trans. Kaukokiito built a new warehouse and handling hall and renovated part of its

terminal into a modern foodstuffs warehouse, and Scandic Trans implemented a new logistics centre as the company's own project. The investments in that year also included SeaRail's transfer loading hall the goal of which was to enhance the flow of rail transports.

In the following years the focus of warehouse construction lay in the West Harbour, where building projects in 2004 included, for example, the Port's second container terminal for use by Finnsteve and the light-structured hall to serve Finnlines' cargo transports. The big projects of 2005 included the light-structured hall with a floor area of 5,000 m² for Mann Lines, and the Best-Hall fabric building designed for the needs of Finnforest with new kind of technology for humidity removal. With a floor area of 7,500 m², it was the biggest Best-Hall fabric building in the port up to then when completed in January 2006.



Scandic Trans' new logistics centre was completed in the immediate vicinity of the Port of Turku in March 2003. The new building provided versatile services, such as transfer loading, handling, and warehousing services.



From 2004–2007 the focus of warehouse construction lay strongly in the West Harbour where light-structured halls were built for the needs of e.g. Finnsteve, Mann Lines and Finnforest.

“

The large distribution hubs helped the Ovakko area to develop into a modern logistics cluster.

Huge investments in the Ovakko area paved the way into the future

In 2005, an investment decision was made on building Schenker Cargo's distribution warehouse in the Ovakko area. The building of the first stage of the distribution hub with a floor area of around 22,000 m² commenced at the beginning of 2006, and the topping-out ceremony was held already in December. The construction progressed well and the warehouse was completed in April 2007, and due to high demand an investment decision on expanding the distribution hub was made in the same year. The work on the expansion started in 2008, and the project was completed in 2009 as planned.

In 2008, a building project of Posten Logistik was started in the Ovakko area. The hall with a floor area of around 27,000 m² was completed in December 2009 and inaugurated in January 2010. Thanks to the distribution hubs of Posten Logistik and Schenker Cargo, the Ovakko area quickly evolved into one of the biggest and most modern logistics clusters in Finland which is still being developed according to the logistics needs of the customers. The total floor area of the biggest distribution and warehousing terminals in the area stands at around 75,000 m² which, in addition to the above, includes e.g. the expansion of DHL Supply Chain's fashion logistics centre by 6,000 m² completed in 2012.

Development of the logistics area in Pansio Harbour gets underway

In 2008, investments were started in the Pansio Harbour which switched to serving Finnlines' ro-ro transports to Germany due to the discontinuing of the train ferry traffic. In the first stage, three light-structured halls with a floor area of 5,000 m² were built, and the space provided by them was also utilised by the shipyard industry in Turku. In 2011, a development plan for the Pansio Harbour was initiated by dividing the area into two parts, the operative harbour area and the logistics operations area. The development project started with the renovation of the former transfer loading hall of train ferry traffic into a distribution warehouse which was rented out to Schenker Cargo Oy.

In the final years of the 2010s, the focus of warehouse construction lay in the Turku Free Zone Company's area. During 2017, the company commissioned the building of two halls, the first of which, the unheated Best-Hall fabric building with a floor area of 3,500 m², was introduced in late January. The other hall, heated with environmentally sound geothermal energy was completed in late summer.



The Pansio harbour area was developed in a project started in 2011 as a result of which the area was divided into two parts, the operative harbour area and the logistics operations area. After implementation of the change, e.g. three light-structured halls with a floor area of 5,000 square metres in each were built.

Turku Free Zone Company becomes Port of Turku's subsidiary

In 2019, Turku Free Zone Company became Port of Turku's subsidiary, as the Port acquired the majority of shares in the company. The goal of the rapidly growing company is to offer an increasing selection of innovative added value services based on digitalisation, for warehousing as well as manufacture and finishing of products. Alongside the development of new services, Turku Free Zone Company continues to invest in new premises. During 2023, four new halls were completed in the Free Zone Company's area, increasing the warehouse capacity by 11,000 m². In addition, the company has building permit applications pending for two more Best-Hall fabric buildings the capacity of which has been sold out already before completion. By additional construction the company responds to the growing demand, as the customers are preparing to increase their stocks due to the extended delivery times caused by the war in Ukraine and longer shipping routes.



Goods handling and warehousing service provider Turku Free Zone Company became Port of Turku Ltd's subsidiary in 2019 when the Port acquired the majority of shares in the company.

The construction work of the new measurement and identification system for heavy vehicles was completed in the Port in 2020. The system built on Viking Line's field area meant a significant improvement for the loading of trucks in ships. The identification, weighing, measurement and photographing of trucks provide safety and facilitate more efficient and balanced loading of the ship, which in turn will improve energy-efficiency.



FUNCTIONING INFRASTRUCTURE ENSURES EFFICIENT OPERATIONS

The foundation of efficient port operations is formed by the connections, people and infrastructure. In the Port of Turku, these three factors are combined into a reliably operating entity, each area of which is continuously being developed while listening to different co-operation parties.

The infrastructure of the port of Turku has been vigorously developed and reformed also through the 2000s, thanks to which it meets the demands of efficient port operations in terms of both cargo transports and passenger traffic. There is enough service capacity even for significant growth of transport volumes in terms of passenger services, ro-ro traffic as well as project shipments of the industry.

Port's investments respond to the needs of customers

In new building of the 2000s, the most significant investments included the large distribution hubs and expansions of the Turku Free Zone Company to serve the Port's good transports as well as increasing the capacity of the Port's own warehouse space according to the demand of the customers. Right now, in 2024, the construction work on the Ferry Terminal Turku project is starting, and the result will be a new joint terminal for shipping companies in the passenger harbour. It is the Port of Turku's biggest ever investment, and, once completed, it will create opportunities for growth and enable new operators in passenger traffic.

Alongside construction projects, the Port has invested in the development of vessel services. In order to enhance the services, a lot of new technology based increasingly on digitalisation and automation has been introduced during the 2000s. These include, for example, functions that enhance the traffic guidance in the port area, mooring and unmooring of ships, and safety in the port area. As for goods transports, the Port has invested in services for the truck drivers. Located right next to the Port, the truck parking area provides a wide range of services for the drivers including a fuelling station and facilities for rest and recreation.

Maintenance of infrastructure is part of everyday operations

Alongside new building, efficient port operations require continuous maintenance of existing areas and structures. In addition to keeping up the Port's operating prerequisites, maintenance services also affect the safety of the people moving about and working in the port in all situations and under any circumstances. In addition to natural wear and tear, needs for renewal arise, for example, from changes in traffic, growth of vessel size, and impacts of weather phenomena.

In the early 2000s, one of the biggest needs for changes arose from the International Ship and Port Facility Security



In 2008, street and field areas were elevated in the passenger harbour area and the boundary wall of the Kanavaniemi quay was heightened due to increasingly common flooding. The tiling and elevation work in Ensimmäinen linja street commenced in April 2008 and the work for flood prevention was completed in June 2008.

(ISPS) Code. Introduced in 2004, the ISPS Code required that port areas be fenced and equipped with access control, which meant significant changes in the Port of Turku. Alterations required by environmental reasons in turn included flood response work in the Port towards the end of the first decade after year 2000. Due to increasingly common flooding, streets and field areas were elevated in the passenger harbour area, the boundary wall of the quay in Kanavaniemi was heightened, and the operating of discharge wells was improved. By reducing the adverse impacts of flooding the Port improved the safety of passengers, protected buildings, and minimised adverse effects on traffic.

Of all the port areas, the biggest changes concerned the Pansio Harbour in the 2000s. After the train ferry service was discontinued in 2007, the Pansio port area has been developed as a logistics area the infrastructure of which is suited to the import and export needs of trade and industry. The area is divided into a fenced port area and a logistics area which provides a large outdoor area as well as plenty of warehouse capacity.

Ferry Terminal Turku paves the way into the future

The Ferry Terminal Turku project will upgrade the passenger harbour in Turku into a maritime hub that meets the requirements of modern, fast-paced, smooth and safe sea traffic. The massive project includes a new joint terminal for passenger traffic as well as significant changes in quay structures, field areas and traffic arrangements in the port area and the city's street network. The railway tracks leading to the passenger harbour will also be realigned. The total cost of the project is 172 million euros, and the budget and financing arrangements were approved by the Turku City Council in February 2023, and the town plan drawn up for the area was confirmed in December 2023.

A letter of intent on the new joint terminal was signed by the Port of Turku, City of Turku, Tallink Silja and Viking

Line already in 2018. After the completion of the project fiche, the planning of the passenger terminal commenced in 2021. Five architect agencies were selected to the architectural competition for the new terminal, and in May 2022 a proposal called Origami by PES Architects was chosen the winner. The functionality and expressive architecture of the plan were emphasised in the selection which provided a solid basis for further planning that started in late 2022.

The planning of the development phase is implemented under project management of Ramboll CM and in addition to cost-efficiency it focuses especially on improving the functionality and use of space in collaboration with the future users, designers, and project management contractors. The goal is to have the terminal with its connections ready for use by 2027.



The Ferry Terminal Turku (FTT) project will rearrange the areas in the Port of Turku. The project includes the construction of the actual terminal building, renewal of quays and adjoining areas for the shipping companies, including e.g. passenger corridors and bridges as well as automooring equipment, construction of the vehicle field with connection to the street network, and an area for escort traffic. In addition, reorganisation will be implemented in the cargo port in connection with the project.

Introduced on the route between Turku and Stockholm in January 2013, Viking Grace was a pioneer of environmental issues from the very beginning. The vessel gained worldwide attention, as it was the first large passenger ship in the world fuelled by liquefied natural gas (LNG).



GOAL-DIRECTED AND PRODUCTIVE WORK FOR THE ENVIRONMENT

The location of the port of Turku at the heart of the Baltic Sea with sensitive nature values requires continuous monitoring of the environmental impacts and prevention of adverse effects. The Port of Turku has for a long time included environmental issues as a key factor in its strategy, and consequently the Port has achieved a position as one of the leading environmental experts in its line of business.

The goal is to minimise the port of Turku's environmental impacts on land, at sea and in the air. In addition to the unique nature of the Baltic Sea and the Archipelago Sea, special attention is directed at the requirements of the existing and expanding residential areas near the port, for example to reduce the adverse effects of traffic and to steer the traffic smoothly past the residential district. For reaching the goals set, close co-operation is conducted between the port enterprise, port operators and numerous stakeholders at local, national and international level.

ENVIRONMENTAL PROGRAMME 2019-2025



The goal of the Port of Turku's environmental programme is to secure the well-being of sea nature, reduce emissions into air further, and enhance energy-efficiency.

Certified environmental system guides practical operations

The Port of Turku started the building of its quality system in 1995, and the building of the environmental system related thereto began in 1998. The operations system formed by those two was officially introduced at the beginning of 2001. In June 2002, Det Norske Veritas (DNV Certification Oy/Ab) granted certifications in accordance with the quality system standard ISO 9001:2000 and environmental system standard ISO 14001:1996 for the Port of Turku's operations system. The certifications are renewed regularly and the most recent audit was performed in 2022.

The Port has implemented long-term, goal-oriented environmental efforts throughout the 2000s. The work

done has generated results, as the emissions into air from port operations have decreased by 82 per cent per tonnes transported from 2011–2021. Energy-efficiency has also improved, as electricity consumption decreased by as much as 41per cent during the same period. Individual measures for improving the environmental issues and minimising environmental impacts are determined in the Port's environmental programme which was lastly updated for the period from 2019–2025. The key objectives of the programme are to further reduce emissions into air, enhance energy-efficiency, and secure the well-being of sea nature.

Discounted port charges for environmentally sound vessels

The Port of Turku introduced environmental port charges already at the beginning of 2006. At first, shipping companies were granted a discount on port charges, if the sulphur content of the fuel used by the vessel or the volume of nitrogen oxides emitted into air by the vessel were below specific limits. At that time, environmental vessel charges aimed at steering the shipping companies primarily towards using fuel with lower sulphur content or to introduce technology for decreasing nitrogen oxides. The discount system was revised in 2021 to comply with the Clean Shipping Index. In addition to nitrogen, sulphur and carbon dioxide emissions, the Index takes into account chemicals as well as water, waste and particle emissions.

The environmental discounts also concern waste management. Discount on the waste management charges of solid waste is granted to those vessels that sort their waste in the way approved by the Port. As a general rule, the vessels in liner service are responsible for organising their waste management by themselves.

Ship traffic contributes to environmental efforts

The shipping companies operating in the Port of Turku have had a significant effect on decreasing the carbon footprint of the port operations.

The emissions into air from ship traffic decreased considerably as a result of the EU's Sulphur Directive that entered into force in 2015. The decrease in emissions into air was also promoted by Viking Line as it switched to use liquefied natural gas (LNG) as fuel in its ships sailing between Turku and Stockholm. Since 2021, both vessels on the route have been powered by LNG, as the new Viking Glory started operations alongside Viking Grace. Positive effects have also stemmed from the low-sulphur fuel, catalysers and new engine types used by Tallink Silja.

The protection of sea nature is also taken into account in the design of the newest vessels operating on the Turku route. The shape of hull has been hydro-dynamically optimised to minimise wave formation. In the archipelago between Turku and Stockholm this prevents erosion and reduces the impacts of ship traffic on the sensitive archipelago nature.



“

The environmental programme aims at mitigation of climate change as part of carbon neutral Turku.

Digitalisation helps reduce emissions

Adding digital services to port operations decreases the carbon dioxide emissions of the entire transport chain and reduces the energy consumption of port operations. Reduction of emissions is targeted through utilisation of positioning technology as well as increasing the use of automation and robotisation in load handling.

The Port of Turku utilises automation, for example, in connection with the port calls of passenger vessels. For that purpose, an automooring system for faster mooring and unmooring of vessels was installed in the Port in late 2020. The system reduces the fuel consumption of the vessels and cuts down their emissions during port calls. The automooring system was installed on Viking Line's berth and it is used by both vessels of the shipping company.

Digital services are also utilised in traffic control in the port. Gate systems and traffic arrangements in the passenger harbour help reduce the idling of vehicles and emissions in the port area. Digitalisation also affects the energy consumption of the port operations. The Port of Turku's electricity consumption has been cut down significantly by switching to LED lamps in the biggest warehouses and the inner harbour area and by utilising digital control of lighting.



The Port of Turku updated its outdoor lighting by investing in energy saving LED lamps. In the project, the old high-pressure sodium lamps in the port area were replaced with new LED lamps, and an intelligent control system was installed for the lighting. Thanks to the measures taken the energy consumption of outdoor lighting was halved.

Environmental programme paves the way towards carbon neutral future

The Port of Turku's environmental programme for 2019–2025 aims at mitigation of climate change as part of the carbon neutral urban area in Turku. In 2022, the greenhouse gas emissions of port operations were reduced, for instance, as Amorella was replaced by Viking Glory on the route between Turku and Stockholm. The carbon dioxide emissions of the new vessel are up to a quarter smaller compared to Amorella, although its passenger and cargo capacity is considerably higher compared to its predecessor. In 2022, the calculation system of emissions was updated and the figures for 2022 were calculated in accordance with the new system.

The Port aims at reducing emissions into air by 40 per cent in the period from 2008–2025, and in conjunction with that, the Port has carried out anticipatory measures e.g. to provide vessels with shore-side electricity supply.

The City of Turku has set a goal to be carbon neutral by 2029 and from there onwards to sequester more carbon than the area generates emissions. The Port of Turku committed itself to the goal in June 2023 by joining the City of Turku's climate team and signing the climate commitment. The Port's effort for climate is transferring towards carbon neutrality by investing in the use of renewable energy and electrification of operations. The electricity used by the Port is carbon neutral. The vehicle stock has been replaced with electric vehicles within the limits permitted by the markets, concerning both vans and other equipment. In addition, new charging points have been installed in the port area. The vehicles that could not be electrified have switched to using biodiesel.

Today, the importance of environmental work is also visible in the result of the business operations, as sustainable operations constitute a significant competitive advantage in the port industry as well. In the Port of Turku, environmental work lies at the heart of all operations. Often it means investments, but they pay themselves back throughout the logistics chain, creating new, cleaner well-being.



The Port of Turku began in 2021 to replace its vehicles with electric vehicles. By the end of 2023, all of the Port's passenger cars were electrically powered, and vans have also been replaced where possible. Switching to electric cars continues the Port of Turku's green reforms which also support the City of Turku's goal for carbon neutrality.

DREDGING MASSES UTILISED IN CONSTRUCTION



The elevation of the ground and the sludge carried by the River Aura require continuous dredging. Purchased in 1905, bucket-chain dredger Karhu served the Port for more than 80 years. - Turku City archive

“The maintenance dredging of the Port is one of the most talked about topics related to the Port’s environmental issues”, says Markku Alahäme, Technical Director of the Port of Turku.

The environmental impacts of dredging have been debated on by both experts and ordinary citizens. The aspects of most interest are the impacts of dredging and disposal on the water quality, vegetation, benthos, and fish. The Port of Turku has been following the impacts of dredging on the water systems and fishery annually since 1989. During that time the need for and volume of dredging have varied greatly, and at present it is estimated that maintenance dredging is required at 5–7 years’ intervals.

The most far-reaching change in the dredging activities was implemented, when the Port of Turku together with the City of Turku decided to end the disposal of dredging masses in the sea in 2019. Alternative disposal methods had been studied and tested before. As early as 2006, possible disposal sites on land were studied, mainly for the placement of masses not suited to disposal in the sea within the City of Turku. In 2017, a preliminary study initiated by the Port of Turku and the Centre for Economic Development, Transport and the Environment was started to map out the potential disposal sites on land in the entire Turku region. In addition, the Port of Turku implemented from 2006–2009 a pilot site in the Pansio Harbour where stabilised masses not suited to disposal in the sea were placed in the embankment pool built specifically for that purpose.

The first phase of the new disposal site for dredging masses was completed in Lauttaranta district on Hirvensalo

island in late 2022. The dredging masses are used to elevate the flooding area there, and the masses are stabilised to improve their bearing capacity. Before the disposal of dredging masses in Lauttaranta district, the masses from each dredging site are examined to ensure that they meet the limit values, as a new seaside residential area is intended to be built on top of the masses in the future. That way the dredging masses can be utilised efficiently, at the same time improving the state of the Baltic Sea.



A stabilisation pool for contaminated dredging masses was established in Pansio from 2006–2009 as part of the EU-LIFE STABLE project. The goal of the project was to develop a new environmentally sound and cost-efficient stabilisation method for the treatment of contaminated sediments. The stabilised dredging masses were utilised in the field structures of the Pansio Harbour.

ENVIRONMENTAL PROJECTS INVOLVE CO-OPERATION ACROSS THE BALTIC SEA



The Port of Turku has promoted and continues to promote the objectives of its environmental work by participating in several co-operation projects that take environmental issues into account. The biggest national and international projects have had long-term effects on reducing the environmental impacts of seafaring in the entire Baltic Sea region.

The New Hansa of Sustainable Ports and Cities project that ended at the end of 2005 concentrated on the development of waste management and waste water management of vessels and reducing emission into air in ports. As an outcome of the project, representatives of fifteen different cities and ports signed a Memorandum of Co-operation related to sustainable development of port and seafaring policy of the Baltic Sea region in connection with the general assembly of the Union of Baltic Cities. The Memorandum created a foundation for the shared environmental practices of ports concerning the handling and reception of waste and waste water as well as improvement of air quality.

In 2007, the Port concentrated on evaluating and reducing the noise impacts from the operations. In conjunction with that, the Port of Turku participated in the part on noise measurement under the EU-wide *Efforts project's* environmental section. As part of the project, regular noise measurements required by the environmental permit were carried out in different areas of the Port. The Port also commissioned a noise report on the noise level of port operations in the new residential area of Telakkaranta planned in the vicinity of the Port.

In 2008, the Port implemented the *EU-Life Stable project* the goal of which was to introduce a new, environmentally sound and cost-efficient stabilisation method for the treatment of contaminated dredging masses. The target area was the port area in Turku where the sediment in the River Aura had been contaminated due to the organotin compounds contained in the bottom paints of ships used previously. The embankment pool built specifically in Pansio was utilised in the treatment and stabilisation of contaminated dredging masses already in 2005, and harmful substances were bound by mixing them with various stabilisers.

The Port of Turku participated in the EU-financed *CleanShip – Clean Baltic Sea Shipping project* from 2010 onwards. The project ended in September 2013, and its purpose was to develop tools and best practices for the ports and vessel

traffic in the Baltic Sea region to improve the state of the environment. As a result of the project, a common model for taking environmental aspects into account in port charges was recommended to the ports. In addition, it was proposed that an environmental index be set up for ports which would harmonise the environmental work of the ports and highlight the development of environmental issues in the ports.

The Northern ScanMed Ports project was implemented from 2014–2016. As part of this EU-supported project the Port of Turku invested particularly in increasing the reception capacity of waste water from vessels, as a result of which the Port introduced fixed sewer connections for the reception of waste water from vessels in both the West Harbour and the Linnanaukko area in 2016. With the previously built fixed connection in the passenger harbour, there are three reception points for waste water plus an option for emptying the waste water by tank truck. That ensures sufficient waste water reception capacity for all passenger and cargo vessels calling in Turku. In addition to the reception of waste water, the project promoted the readiness for shore-side electricity supply in the Linnanaukko area, which, once completed, will decrease the noise, particle and nitrogen emissions from vessels during their stay in the port.

Year 2018 saw the start of the *NextGen Link investment project* of the Ports of Turku, Stockholm and Mariehamn and Viking Line with financial support through the European Union's CEF Transport programme. The most important environmental objectives of the project were to increase the sustainability and environmental safety of maritime traffic as well as promoting the demand for alternative fuels in the Baltic Sea region. The project included, for example, additional environmental investments of the new passenger ferry relating to the introduction of LNG and rotor sails, as well as port investments to respond to the needs of the new, bigger vessel and the growing cargo and passenger volumes. The project partners were the Port of Turku, City of Turku, Viking Line, Port of Mariehamn, and the Ports of Stockholm.

*Once completed, the Ferry Terminal Turku project will increase the touristic attraction of the route between Turku and Stockholm. The keys to the success of Origami, the winning proposal of the architecture competition of the terminal building, were clear functionality and expressive architecture. "Origami matched best the goals set for the design work in terms of both the Port's operations and the Turku cityscape. The architecture breathes maritime symbolism and combines sense with emotion into a package that convinced the jury."
– PES-Architects*



WITH CONFIDENCE TOWARDS THE 2030S

As the year 2025 is approaching, the world is very different compared to the turn of the millennium. In the early 2020s, crises have emerged one after the other, first in the form of a global pandemic, and after that Russia's attack in Ukraine brought full-scale war to Europe for the first time in decades. These crises continue to affect the global politics and economy, including extreme escalation of the situation in the Middle East towards the end of 2023.

In spite of the crises, the Port of Turku looks into the future with confidence. The Port has a strong market position in both cargo transports and passenger traffic, and the investments decided on are believed to further strengthen the Port's competitive advantage once implemented. The Port's position in the core network of the European Union's TEN-T transport network supports for its part the development of the Port e.g. through the EU's project funding.

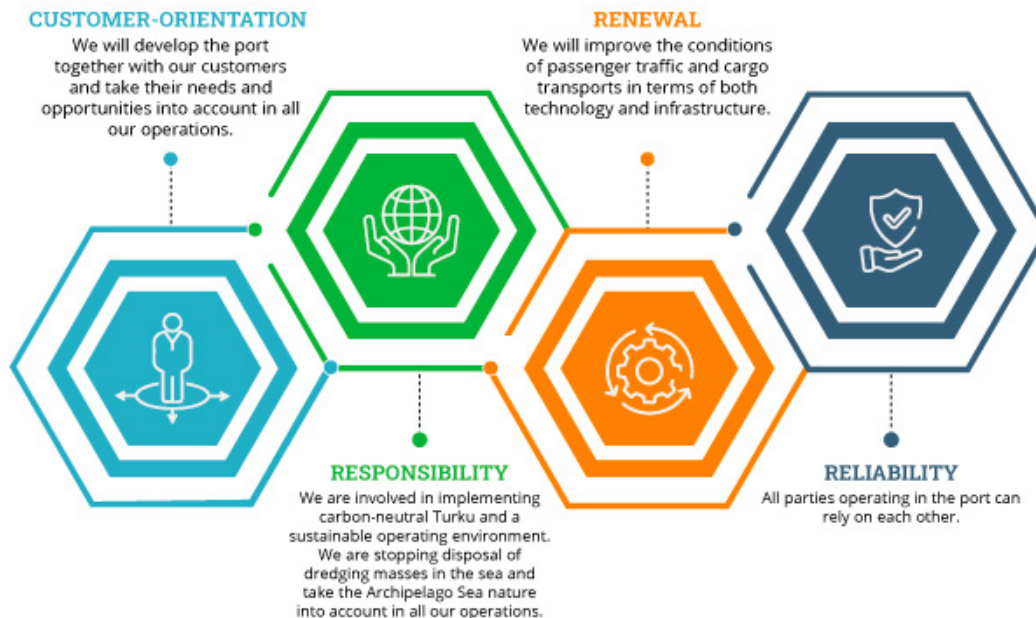
Vision and strategy guide the development

The Port of Turku's operating environment is fluid and changes continuously. The leading drivers of change are related to environmental protection, digitalisation, and the City of Turku's town plans. The market conditions and competition between ports are affected most by decisions on traffic policy which guide the development of the transport routes in Finland. By working proactively in different forums we aim at steering the changes and reacting quickly to their effects on the Port's operations.

The Port of Turku's main strategy is to strengthen the Port's position in passenger traffic and cargo transports as well as added value services in logistics. The foundation of the strategy is formed by customer-orientation, reliability, renewal, and sustainability. Our future vision is to focus on operations that support passenger traffic and transports of processed goods between Finland and Scandinavia and Central Europe. In these sectors Port of Turku Ltd is boldly

renewing and the best option with the capacity to respond to significant growth of transport volumes, too.

The goal of the strategy is to respond to the changes of the operating environment and new demands directed at the operating of the Port. The most significant changes in the operating environment include improved cost-efficiency in merchant shipping enabled by larger vessels sizes, the effects of political decision-making on the development of transport networks, as well as quick fluctuation in Finnish exports. Emphasis on environmental and safety issues as well as increasingly common digitalisation and automation also have a major effect on the port operations. Road traffic is going electric and maritime traffic is gradually shifting to carbon neutral fuels as their production and availability develop, which has an effect on the operating of ports in terms of both infrastructure and services.



Attraction of passenger traffic is increased by many factors

In ship traffic, the route between Turku and Stockholm will continue to remain the Port's trunk line. The attraction of the route for tourists is increased by the newest vessel stock of the highest quality in the Baltic Sea and the completion of the new Ferry Terminal Turku in 2027.

The constantly strengthening green trend on the tourism market supports the development of the entire line of business. More and more people try to avoid flying for environmental reasons and switch to greener tourism, such as sea cruises and travelling by land. The Port of Turku has an advantage in that respect, too. The implementation of the carbon neutral green corridor being developed between Turku and Stockholm is already in progress, and within the next few years, new opportunities will emerge via Turku to continue by train from Stockholm overnight to different European cities and the rest of Scandinavia.

The passenger volumes are also expected to increase as Asian and Russian tourists will return to the Baltic Sea when the travelling options will improve after the war in Ukraine is over. The Port of Turku is preparing for the restoration of international cruise traffic through active marketing and by converting Viking Line's current terminal into a terminal that will serve cruise liners and their passengers.

Speed and connections are still key in cargo transports

Finland's geographical location means that functioning maritime traffic is necessary for the country's foreign trade and emergency supply. In 2022, sea transports accounted for 92.4 per cent of all foreign trade cargo transports, while the number stood at 82.4 per cent in 2021. The Port of Turku's role in Finland's foreign trade chain mainly comprises of transports of processed goods and ranging from consumer goods to highly demanding shipments of the heavy industry.

Sweden will also continue to be the Port of Turku's main

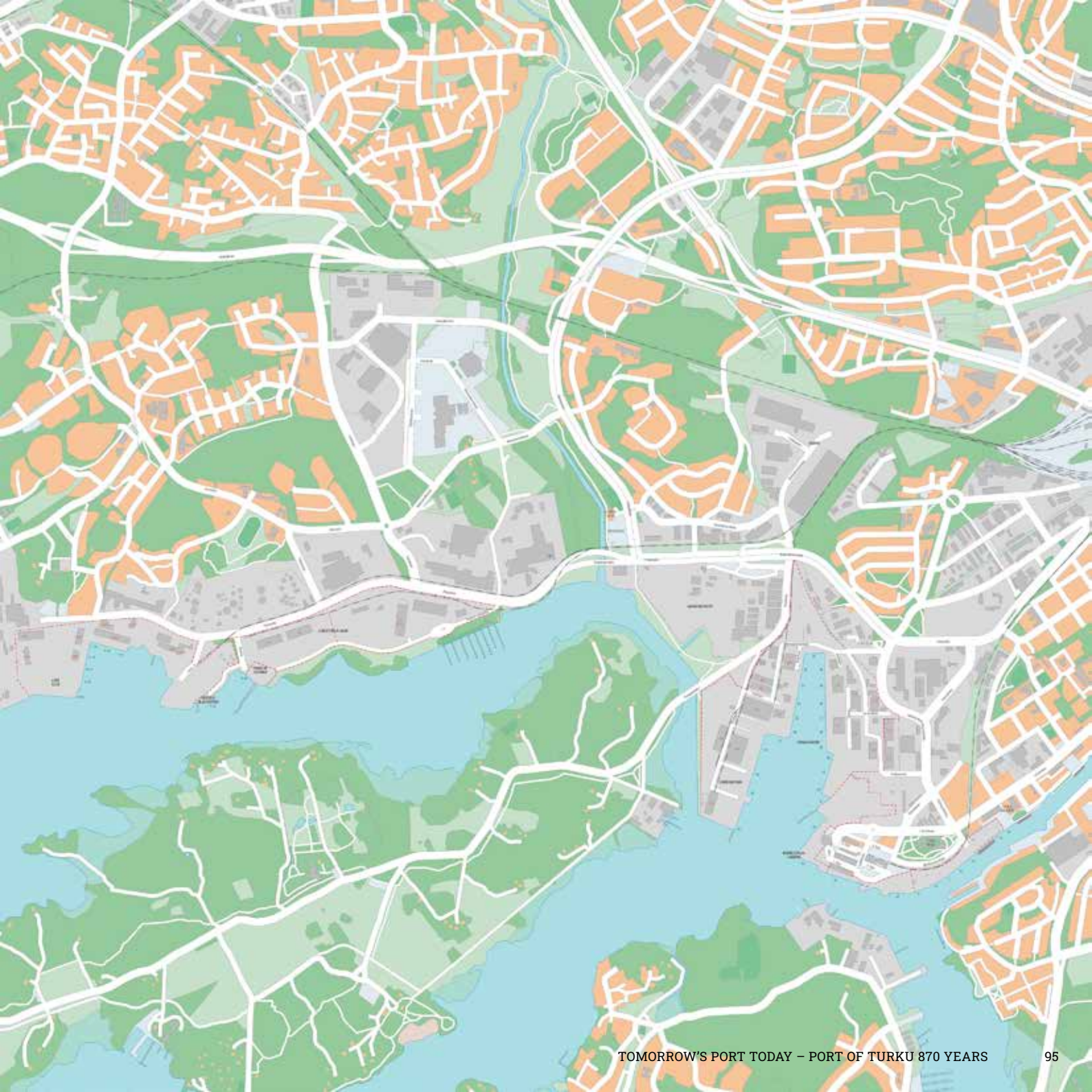
“
Finland's geographical position makes functioning maritime transports necessary for the security of supply.

direction for cargo transports, and there the co-operation port is Stockholm. Fast and frequent connections to Sweden are increasingly important in terms of the security of supply of the businesses, as big international players in e.g. car sales and online sales concentrate their warehouses serving the logistics in the Nordic countries to Sweden. For truck transports destined to Sweden and via Sweden to the rest of Scandinavia and continental Europe, Turku is still the most competitive port, and the routes enable using the sea voyage for the mandatory rest periods of drivers of heavy vehicles. The arrival of the vessels in Stockholm also saves driving time and fuel compared to ports located further north.

In addition to Sweden, the Port of Turku's objective is to maintain functioning ship connections to the other Nordic countries as well as Germany and England, and open new cargo and passenger lines among others to Poland. We are developing the existing connections in co-operation with the current operators, and conduct active dialogue with the new ones to map different options and to find solutions that serve all parties involved. When the right solutions are found, the Port of Turku is ready to react quickly and flexibly to the investment needs they require, including the warehouse space which is important to cargo transports.



Finland's geographical location means that functioning maritime traffic is necessary for the country's foreign trade and emergency supply. Fast and frequent connections to Sweden are increasingly important in terms of the security of supply of the businesses. For truck transports destined to Sweden and via Sweden to the rest of Scandinavia and continental Europe, the Turku-Stockholm route enables using the sea voyage for the mandatory rest periods of drivers of heavy vehicles.



WE THANK THE FOLLOWING PEOPLE FOR THE INTERVIEW:

Pirkko Mikkola

Chairman of the Managing Board of
the Port of Turku 2009–2013

Matti J. Niemi

Technical Director of the Port of Turku 1984–2010

Marjukka Parpola

Chairman of the board of the Directors of
the Port of Turku 2013–2017

Christian Ramberg

Managing Director of the Port of Turku 2000–2019

Erik Söderholm

Managing Director of the Port of Turku

Antti Pekanheimo

Chief Operating Officer of the Port of Turku

Markku Alahäme

Technical Director of the Port of Turku