Onshore Power Supply

Margus Vihman
Chief Commercial Officer/ Member of the Management Board

PORT OF TALLINN
The Port of Good News

Port of Tallinn is a Listed Company

Port of Tallinn is listed on Nasdaq Tallinn Stock Exchange since June 13, 2018.

Shareholders include:

67% Republic of Estonia
33% Investment funds,
pension funds, private investors

Nasdaq acknowledged Port of Tallinn as the most remarkable stock exchange debut of the year.

NASDAQ BALTIC AWARDS 2019
STOCK EXCHANGE EVENT OF THE YEAR
IPO OF TALLINNA SADAM IN ESTONIA

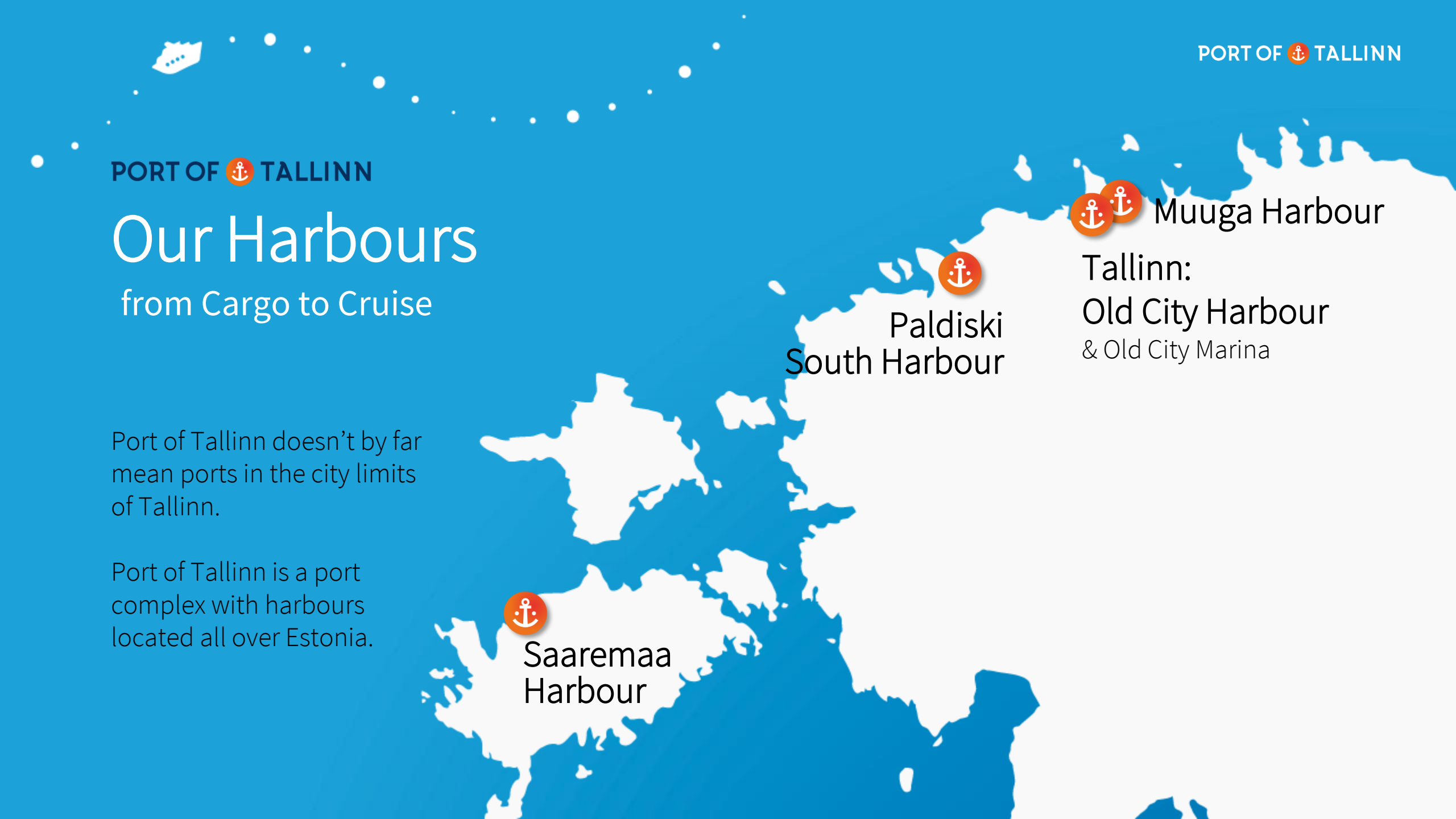
PORT OF TALLINN

Our Harbours

from Cargo to Cruise

Port of Tallinn doesn't by far mean ports in the city limits of Tallinn.

Port of Tallinn is a port complex with harbours located all over Estonia.



PORT OF TALLINN

BUSINESS FIELDS

Passengers

- 10,6 mln passengers a year
- 5800 ferry calls a year
- Old City Harbour and Saaremaa Harbour
- Welcoming passenger ships, offering and developing the port infrastructure, serving passengers and vehicles

Cargo

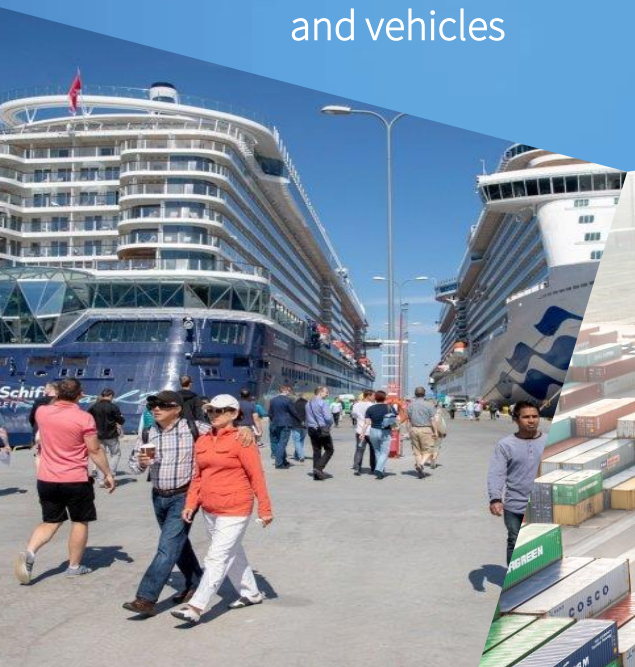
- 20 mln tons of cargo a year
- 1700 cargo ship calls a year
- Muuga Harbour, Paldiski South Harbour
- Welcoming cargo ships, offering and developing the port infrastructure, serving passengers and vehicles

Shipping

- Operating ferry traffic between the mainland and major islands
- 2 mln passengers, 1 mln vehicles a year
- Ice breaking in the ports of Northern Estonia

Real Estate

- 16 ha Old City Harbour real estate development
- 76 ha Muuga Industrial Park
- 34 ha Paldiski South Harbour Industrial Park
- 10 h Saaremaa Harbour
- Land and commercial space



PORT OF TALLINN

2 of our harbours service passengers: Old City Harbour and Saaremaa Harbour

Regular passenger lines from Tallinn's Old City Harbour:

Tallinn – Helsinki – Tallinn
Tallinn – Mariehamn – Stockholm – Mariehamn – Tallinn
St. Petersburg – Helsinki – Stockholm – Tallinn– St. Petersburg

TALLINK

ECKERÖ LINE

VIKING LINE

MOBY • SPL

PORT OF TALLINN

SUSTAINABLE DEVELOPMENT AND CSR

PASSENGERS CARGO SHIPPING REAL ESTATE

PRIORITIES

- Innovation
- Development based on R & D
- Sustainable business, development and choice of partners
- Employer attractiveness

- High quality public space and regional development
- Health, safety, security
- Raising awareness on CSR and sustainability

- Energy efficiency, sustainable consumption
- Clean Baltic Sea, increasing circular economy
- Clean air

ECONOMIC IMPACT

SOCIAL IMPACT

ENVIRONMENTAL IMPACT

GOALS FOR 2030

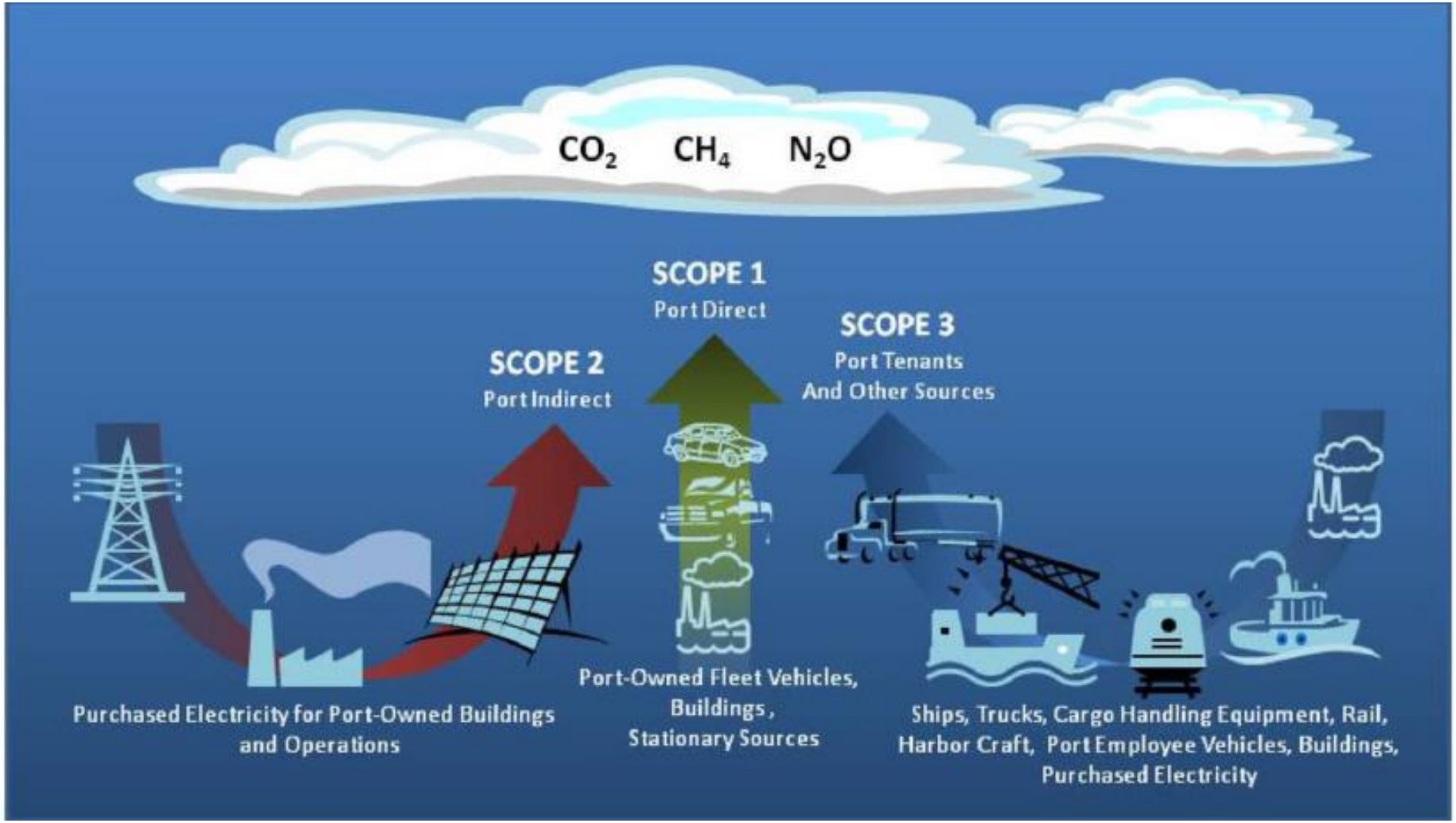
- The most innovative and competitive port in the Baltic Sea region
- Compliance with dividend policy
- Ensuring high quality service
- TOP 10 employer (in Estonia)
- Dedicated personnel
- Competitive remuneration

- Port area is part of a public space and connected to the local community
- Quick access and mobility
- 0 serious work accidents
- 0 complaints/disturbances
- Raised cyber security awareness
- Employees, clients and visitors act responsibly
- Gold level in Responsible Business Index

- Climate neutrality by 2050
- Sustainable consumption of resources
- We use 90% renewable energy
- 70% of received ship waste directed to the circular economy
- 0 marine pollution incidents
- 0 emission from ships calling our harbours by 2050

OUR KEY STAKEHOLDERS:
employees, clients, investors, communities/society

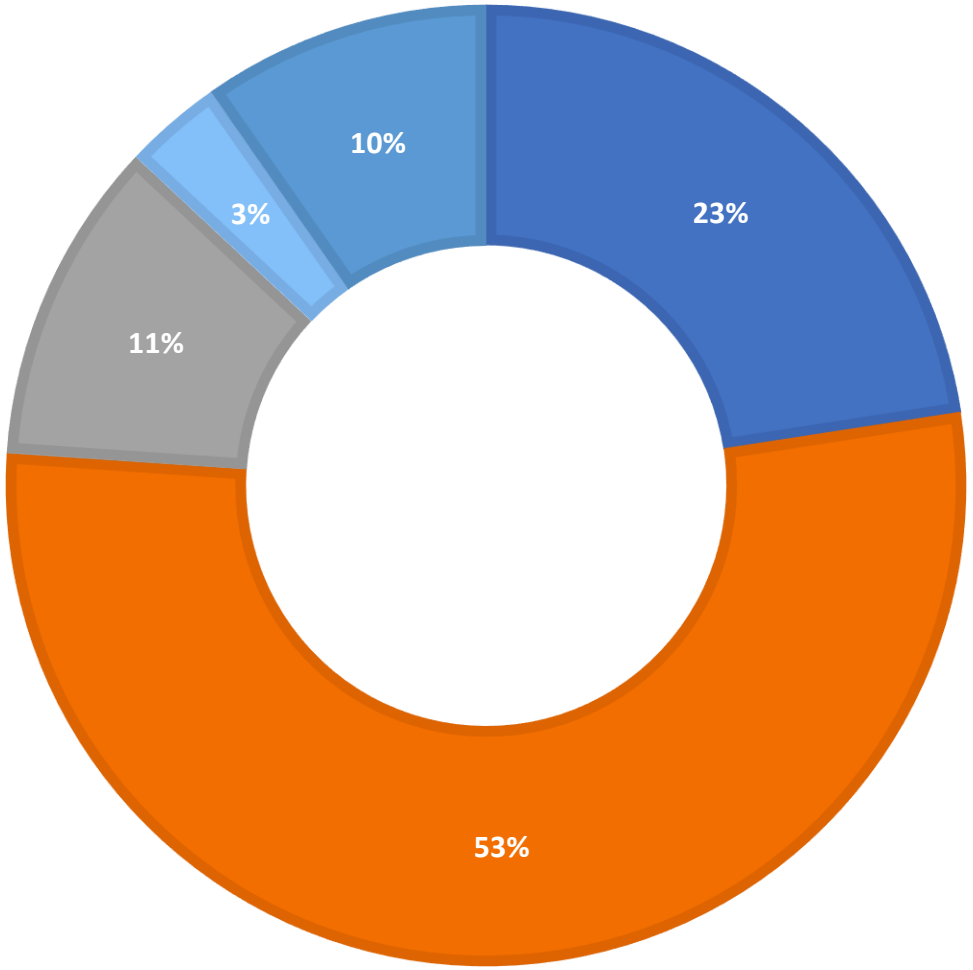
CO_2 mapping


CO2 CH4 N2O
SCOPE 1
Port Direct
SCOPE 2
Port Indirect
SCOPE 3
Port Tenants
And Other Sources
Purchased Electricity for Port-Owned Buildings and Operations
Port-Owned Fleet Vehicles, Buildings, Stationary Sources
Ships, Trucks, Cargo Handling Equipment, Rail, Harbor Craft, Port Employee Vehicles, Buildings, Purchased Electricity

CO_2 calculation 2019

Emission by source (scope 1,2,3 , excl. subsidiaries)

PORT OF TALLINN



- Electricity
- Vessels
- Wheel traffic and ro-ro
- Machinery and loading equipment
- Heating

Grandtotal 97 426 t CO2eq

On-shore power supply

Cooperation with the **Port of Helsinki, Port of Turku and Ports of Stockholm** to agree to provide in all their ports **on-shore power supply for 11kV** for Ro-Pax vessels.

PORT OF HELSINKI

PORT OF TURKU FINLAND

Ports of Stockholm

TALLINK | SILJA LINE

ECKERÖ LINE

VIKING LINE

Motorways of the Sea Project via HELSINKI & TALLINN

New infrastructure solutions for cargo traffic

1,5 million transport units &
8 million passengers a year

Co-financed by the European Union
Connecting Europe Facility

Follow-up Project
to TWIN-PORT

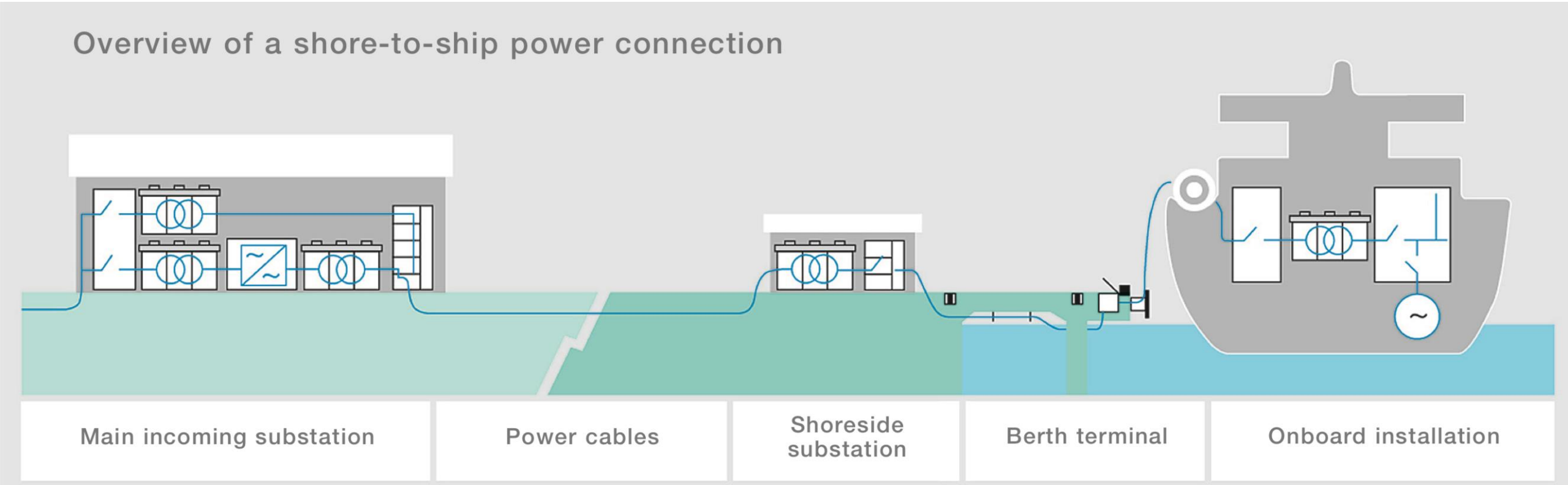
Onshore power supply for the vessels on the quays 3, 5, 7, 12 and 13

PORT OF TALLINN

HELSINKI
TWIN PORT
TALLINN

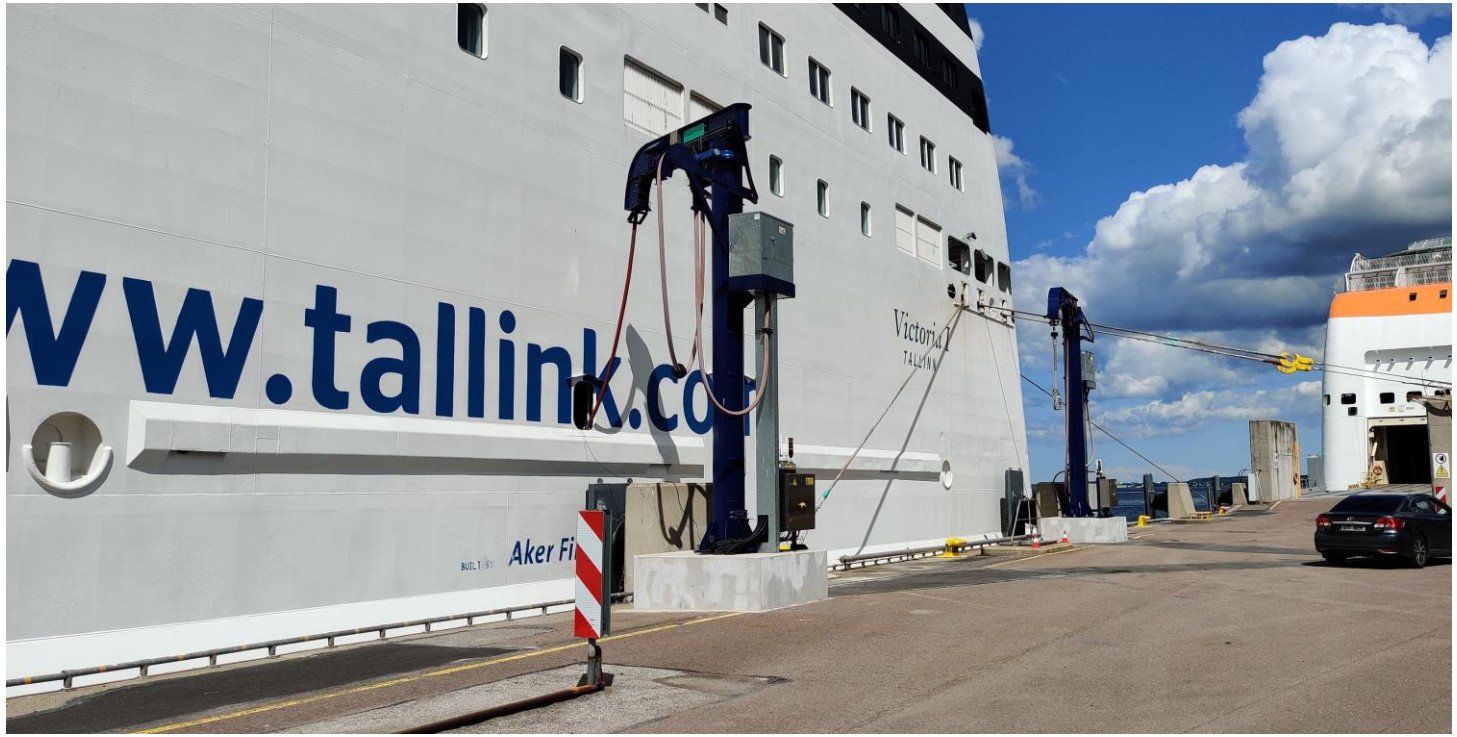
Overview of OPS connection

PORT OF TALLINN



Port of Tallinn
Ro-Ro vessels shorepower system

- Project scope:
  - 6 cable dispenser units
  - 5 Shore- Substations
- System parameters: 11 kV, 50 Hz, no SFC, 2,5-4 MVA per connection point.



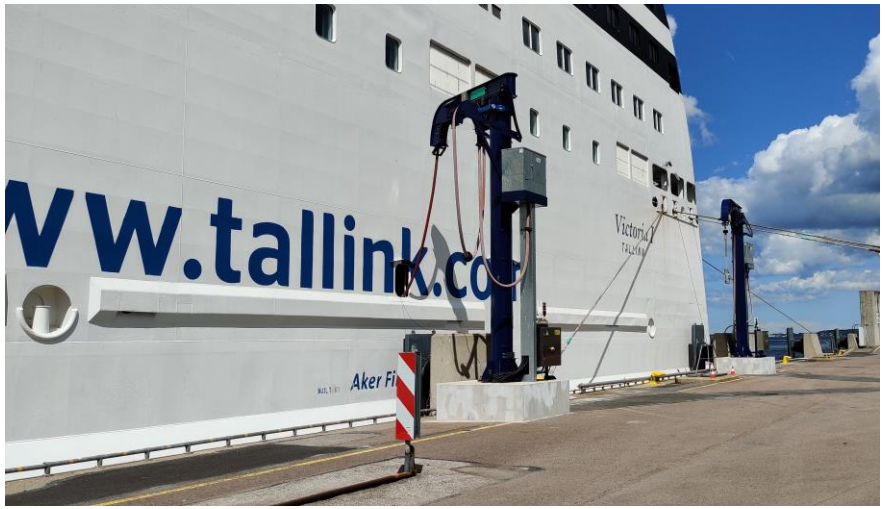
HITACHI ABB

Port of Tallinn
Ro-Ro vessels shorepower system

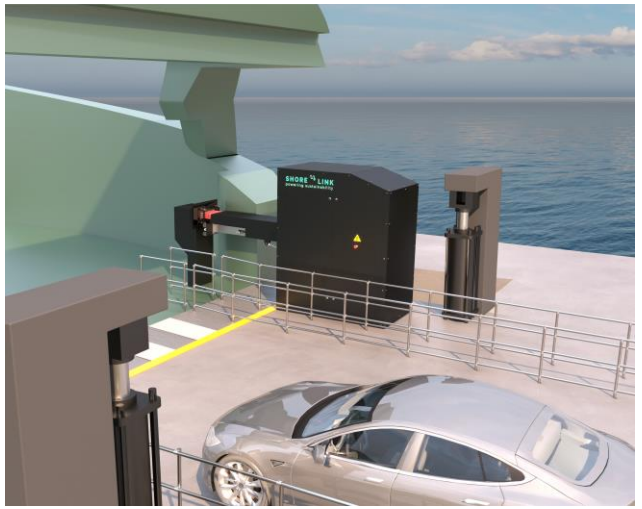
- 5 quays
- Total shorepower capacity: 14,5 MW
- Project duration: 1 year
  - Dispenser units- 6 mo.
- Environmental benefits:
  - 1440 t COx
  - 20t Nox
  - 820 kg SOx

Points to consider to implement shorepower successfully

- Following IEC 80005-1 and IEC 80005-2 is mandatory
- Suitable spot on the quay
- Grid power capability
  - Power availability
  - Short-circuit current
  - Additional battery packs or local power generation unit in case grid is week and there is no enough power.
  - Shore-link capability to provide feasibility study analysis to investigate shorepower possibilities



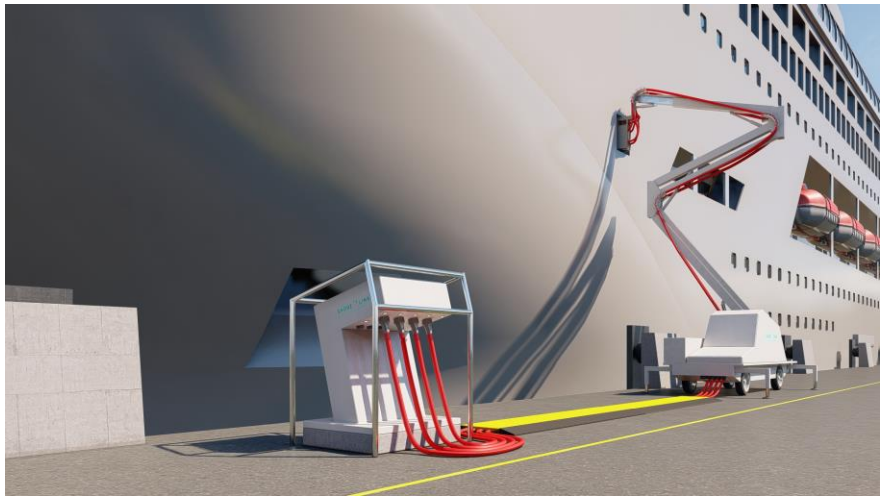
Ro-Ro/Ropax ferries



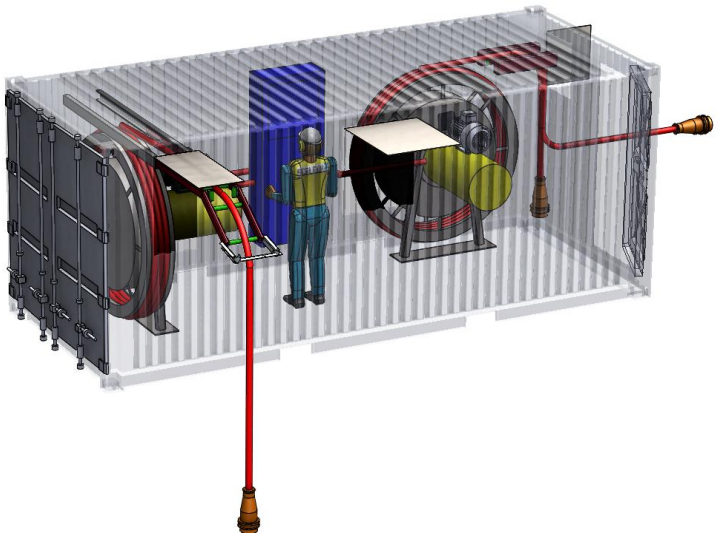
Electric ferries

SHORE LINK
powering sustainability

Cruise ships



Container ships



Founding member of:

EOPSA
EUROPEAN ONSHORE POWER SUPPLY ASSOCIATION

shore-link.eu

Thank You!

PORT OF TALLINN

ts.ee/en

ts.ee/en/investor

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