

Clean Shipping Financing — Challenges and Best Practices

Fare-free Public Transportation in Tallinn - a Possible Business Model Change for Clean Shipping

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How does it work?

- Since January 2013 the first capital in the EU providing free public transport to its citizens
- To be entitled the citizen must buy and own a contact free 'green card' (2€).
- Travellers from outside Tallinn can use the same card, but they need to load money to that.





Kas sul on pileti ostetud?
"40€"
А у тебя билет куплен?

Pilet kohtis

X ← OK

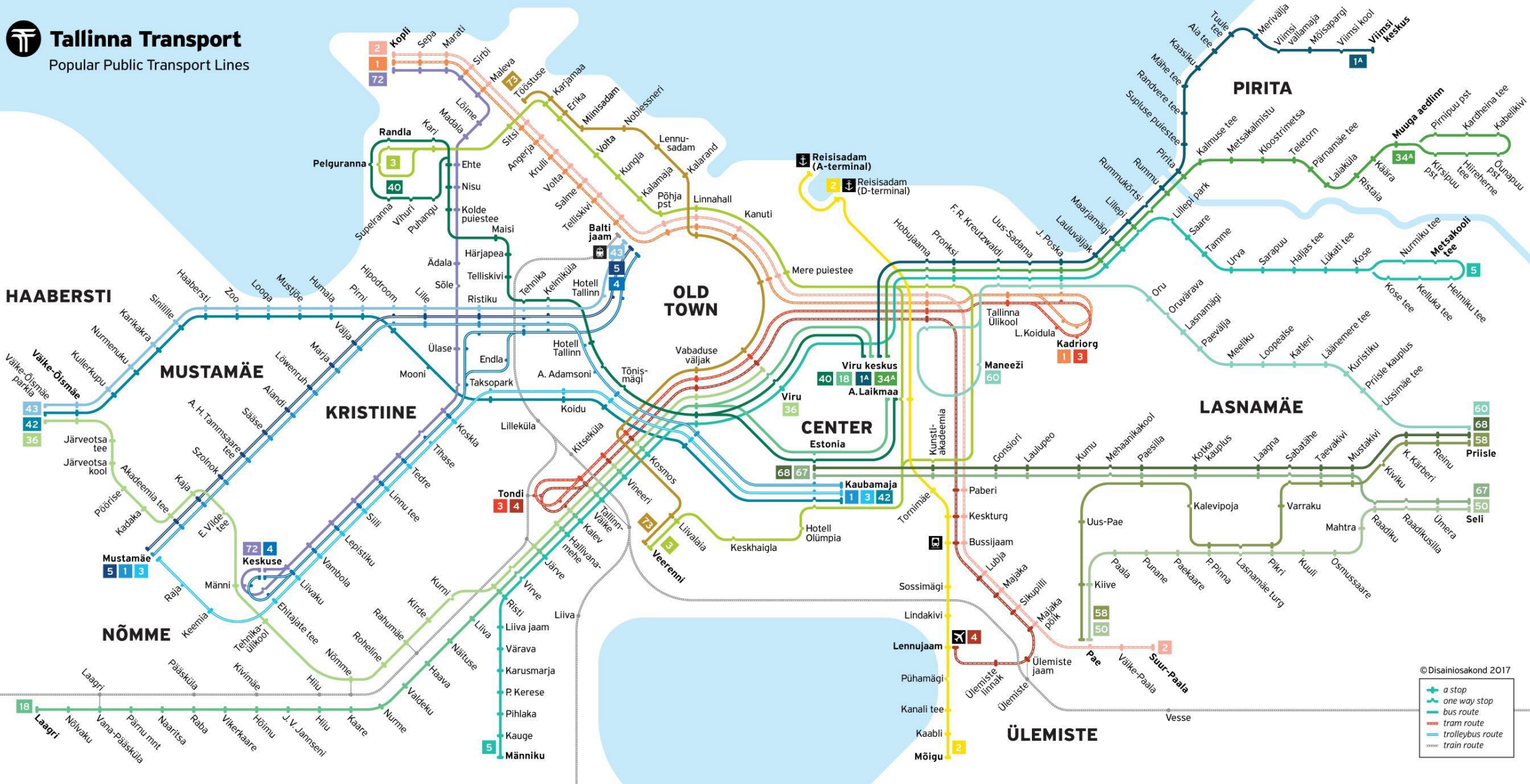
Results and Impacts 2013-2019

- Increase of using of the public transport +10%
- Slight decrease of car traffic in the City centre (-6%)
- Slight increase of car traffic around the City centre (+4%)
- Increase of parking tariffs in the City centre (e.g. now 6€ per hour in Tallinn Old Town, 4.80€ in City centre)
- Increase of private car ownership in Tallinn dropped to 0.6%.
- But in neighbouring municipalities continued 10 % growth a year as it was before also in Tallinn.



Tallinna Transport

Popular Public Transport Lines



© Disainiosakond 2017

- a stop
- one way stop
- bus route
- tram route
- trolleybus route
- train route

Supported by the Residents

- Plebiscite 19-25 March, 2012
- By informing the **community was involved** into decision-making and political **decision was locked**.
- **Yes/No** votes were respectively **75.5%/24.5%**
- The decision was not legally binding. The City Council decided based on this vote that Fare-Free Public Transport (FFPT) will be implemented since **1 January 2013**.
- Today FFPT has been **extended to national train traffic** within the borders of the City of Tallinn.
- The bus lines were prolonged 19-23 km after this change, but more importantly, new lines were implemented which tresspassed the City center where are/were the traffic jams.

Economic and Social Impact

- Can be understood in terms of indirect indicators
- There is no proper technology to estimate and measure the impact
- People's mobility increased, not only for unemployed, but also for those who looked better jobs use public transport more often
- People started to go out more in the evenings and weekends, for consumption of local goods and services
- They save from paying taxi services, emission of CO₂ is decreasing
- Families go out more on weekends, leaving their cars at home

Attraction and Arrival of More Taxpayers

- This was **not** an aim in itself, but this was an instrument to finance free public transportation
- During 2013-2019 the number of Tallinners increased by ~**30,000** residents (from ~410,000 to ~443,541). Every 1,000 of new residents brings ~1 mill. EUR to the City budget.
- The public transport budget has grown from €53 million in 2012 to €73 million in 2019.
- In 2012 tickets revenue was 17 mill. EUR (12 mill. EUR from residents and 5 mill. from non-residents of Tallinn). In 2012 tickets revenue formed **32%** of City transport budget.
- By making the City transport free, the government lost 12 mill. EUR per year, but by attracting new taxpayers to register in Tallinn the win was ~20 mill. EUR a year.
- Actually, most of the people who registered themselves were already living in Tallinn. When they registered they transformed themselves also to taxpayers.

Possible Business Model for Clean Shipping

- Tallink annual reports 2017-2018
- Total number of passengers carried by the Group in 2018 was 9.8 million. The total number of cargo units carried exceeded 364 thousand.
- Fuel costs grew by EUR 16.6 million due to an increase in bunker prices. At the same time, the Group achieved fuel savings. Through various energy efficiency initiatives, in 2018 the ships' average fuel consumption per nautical mile decreased by 3.2%.
- Tallink has 14 vessels.

Tallink Megastar (2017) and MySTAR (2021)



Ticket sales by Tallink in thousand EUR

(Source: Tallink Annual Report 2018)

Geographical segments	2018	%	2017	%
<u>Finland - Sweden</u>	337 471	35.5%	344 833	35.7%
<u>Estonia - Finland</u>	355 995	37.5%	354 497	36.7%
Estonia - Sweden	118 991	12.5%	117 246	12.1%
Latvia - Sweden	71 292	7.5%	66 453	6.9%
Other	74 831	7.9%	94 185	9.7%
Intercompany eliminations	-8 857	-0.9%	-10 237	-1.1%
Total revenue of the Group	949 723	100.0%	966 977	100.0%
Operating segments	2018	%	2017	%
Restaurant and shop sales on-board and on mainland	524 416	55.2%	536 742	55.5%
<u>Ticket sales</u>	243 807	25.7%	242 748	25.1%
Sales of cargo transportation	124 852	13.1%	117 718	12.2%
Sales of accommodation	19 183	2.0%	20 810	2.2%
Income from charter of vessels	8 030	0.8%	18 802	1.9%
Other	29 435	3.1%	30 157	3.1%
Total revenue of the Group	949 723	100.0%	966 977	100.0%



https://travelfree.info/hit-tallink-cruise-helsinki-tallinn-e125-per-person/



HIT! TALLINK CRUISE FROM HELSINKI TO TALLINN FOR €1 PER PERSON!

Posted on [February 28, 2019, 11:58](#) by [Admin](#)

Tallink cruise from Helsinki to TALLINN for €1 per person! Get super cheap Tallink cruise from Helsinki to Tallinn just from 1.25 EUR per person (5 EUR for 4 persons in a cabin).

Tallink is an Estonian shipping company currently operating Baltic Sea cruise-ferries and ropax ships from Estonia to Finland, Estonia to Sweden, Latvia to Sweden and Finland to Sweden. They also own Silja Line and a part of SeaRail. It is one of the largest passenger and cargo shipping companies in the Baltic Sea region.

Travel dates:

March 2019

FinEst Smart Mobility: Interreg Project 2014-2020



Smart GPS/Mobile solutions to avoid trucks' traffic jams in the ports of HEL and TLN. Incl. dynamic connections to transport cargo to airports.

FINEST
SMART
MOBILITY

Helsinki and Tallinn plan combined travel card by 2021

(Source: yle.fi 16.10.2019)

- From spring 2020 commuters will be able to use Helsinki Regional Transport's (HSL) travel card app for public transportation in Tallinn.
- The biggest winners under the proposed system will be Estonians travelling in Helsinki as they will be able to use a travel app purchased via the Estonian service pilet.ee to move around on HSL routes. Currently, they have to download the HSL app separately and link it to a bank card – or purchase tickets from automated ticket vending machines.
- HSL is also looking into the possibility of using contactless payment options used already in Tallinn public transportation in the HSL fleet. But there is no fixed timetable for that project.
- Helsinki has 2,000 vehicles where new system (card readers) has to be implemented. Tallinn has ~470 vehicles.

E-Ticketing Project: Cross-usage of Estonian and Finnish electronic ticketing systems

- In addition to Helsinki and Tallinn, also the City of Tartu, where similar ticketing system to Tallinn is used, is also involved. It is possible that ferry companies (e.g. Eckerö Lines) and bus companies (e.g. goBus) will also take part, so that the entire trip could be bought onto one travel card, e.g. Helsinki 1-day ticket + ferry ticket + Tallinn 1-day ticket + Tallinn-Tartu bus ticket + Tartu 1-day ticket + Tartu-Valga bus ticket, etc.
- European Commission supports cross-border public transport ticketing systems and it has been discussed about in many countries. However, it has not been realised yet. Successful implementation of E-ticketing project would be a valuable best practice example for entire Europe.
- InterReg Central Baltic Project, duration: 1 May 2018 – 30 April 2021

Tallinn-Aegna FFPT

Island Aegna – located 10 km north of Tallinn is the only island within Tallinn municipality.

Tallinn residents have fare-free ride to the island by ship that operates daily in summer time (May-Sept).

Aegna is a resort island with forest sand beaches, it has currently 11 permanent residents.

Since 01.06.2015 have Tallinn residents to show their personalised travel card and ID when boarding the ship. In order to use this advantage passengers have to be at the port 15 minutes before departure. 4€ for one-way ticket. 6€ with return ticket.



TalTech-developed autonomous ship shows the future of the maritime industry

Autonomous ship, called NYMO, can be used for parcel delivery, mapping the seabed, conducting rescue operations or detecting pollution.



Autonomous ship NYMO

- The idea came from self-driving delivery robots (Starship)
- TalTech has developed power electronics and software

With partners:

- MEC Marine Engineering – with shipbuilding experience
- Hyrles is involved in mass production of equipment.
- Small Craft Competence Centre contributed to the design of the enclosure.



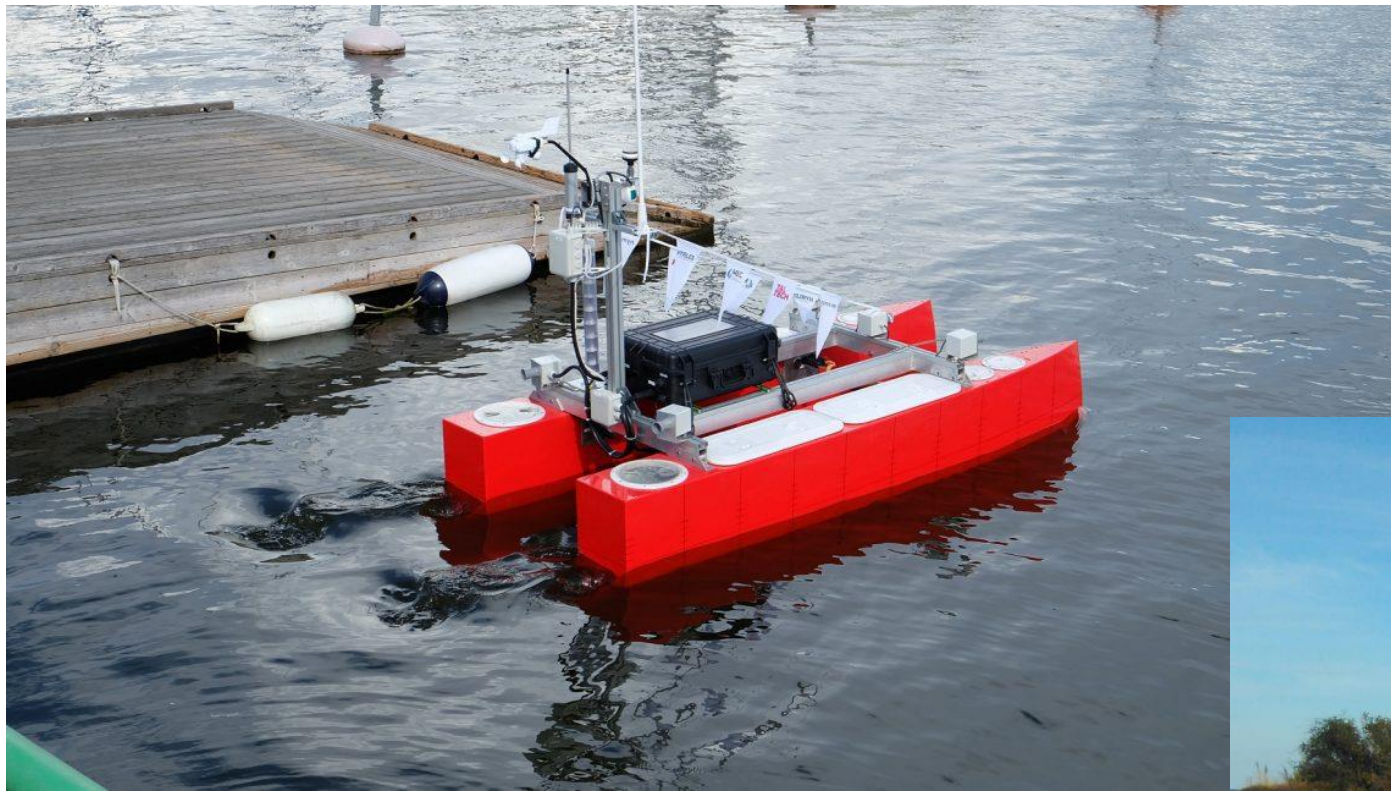
Autonomous ship NYMO

- 2.5 metres long and 1.1 metres wide (8.2 x 3.6 ft)
- The vessel can move from one point to another across the sea.
- The ship has a running range of 100 kilometres (62 miles),
- It takes up to 100 kilos (220 lbs) of cargo
- It has a top speed of 13 km/h (8 mph).
- The ship monitors both the surroundings and the weather.
- It's built modularly and the most important element on it is a black suitcase that is packed with electronics and can be lifted to another platform if necessary.
- Software development accounts for up to 80% of the total development.

NYMO can be used for:

- To map the seabed and conduct rescue operations both on the lake and at sea.
- It can be used for intelligence activities, as a drone landing platform and as a pollution detector.
- It can be a part of the micro-grid, as it has a smart battery on it. If the ship is in port and has solar panels on it, the batteries are charged and we could sell this emerging power directly into the grid. Thus, the ship is like a mobile electricity generator and a battery at the same time.

„There is quite a lot of news about autonomous vessels, but as we get deeper, it turns out that these are not autonomous, but remotely operated, and there is a big difference.“



NYMO is unsinkable, has survived 1.5 meter (5ft) waves on the sea.





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Clean Shipping Project Platform

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Thank you!