

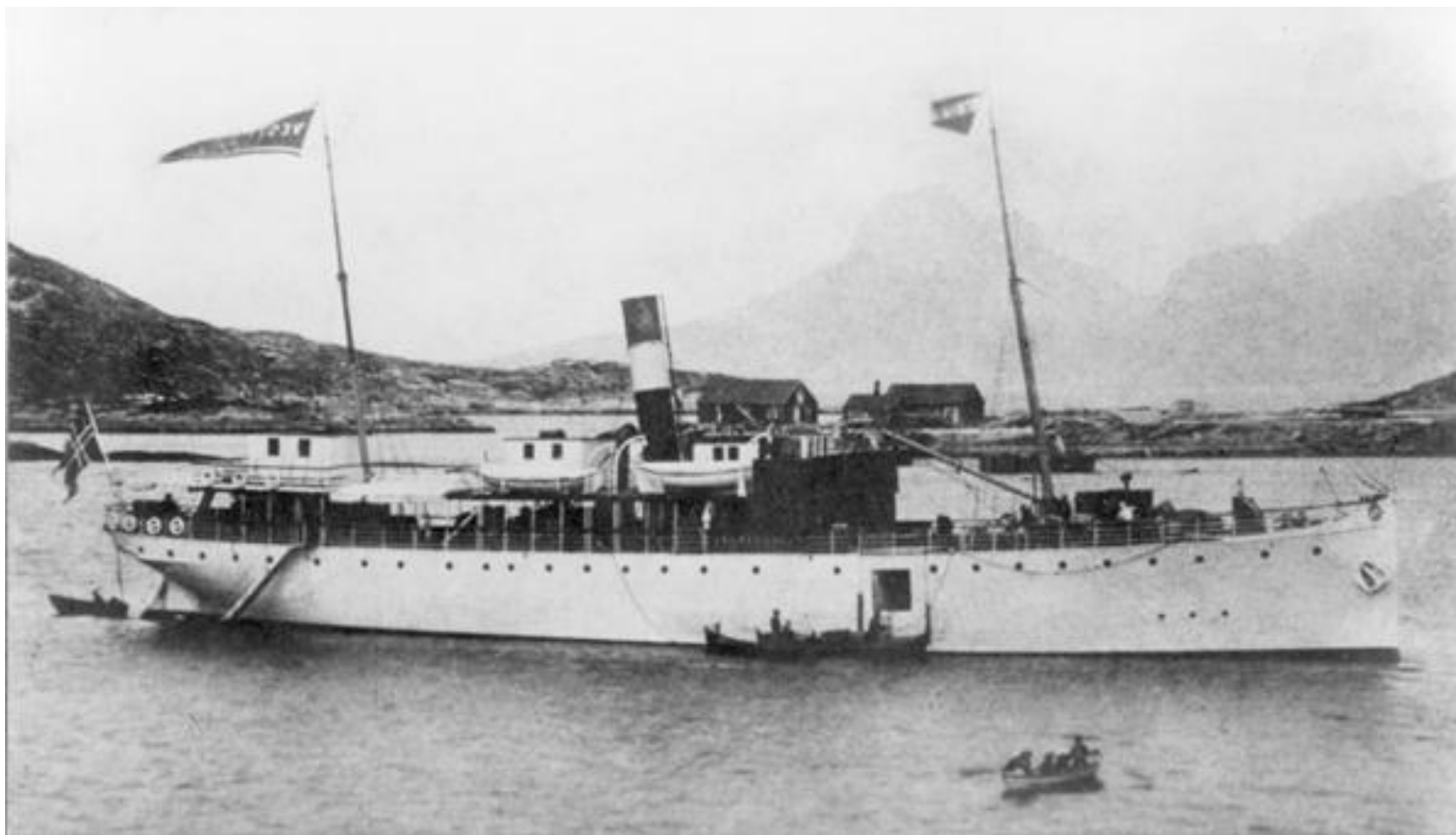
# CargoFerry

Recreating competitive  
coastal shipping





# Coastal Express





# Challenges

VELG SJØVEIEN

# Low-cost, reliable, eco-friendly, daily, over-night, simple and flexible



# Partners

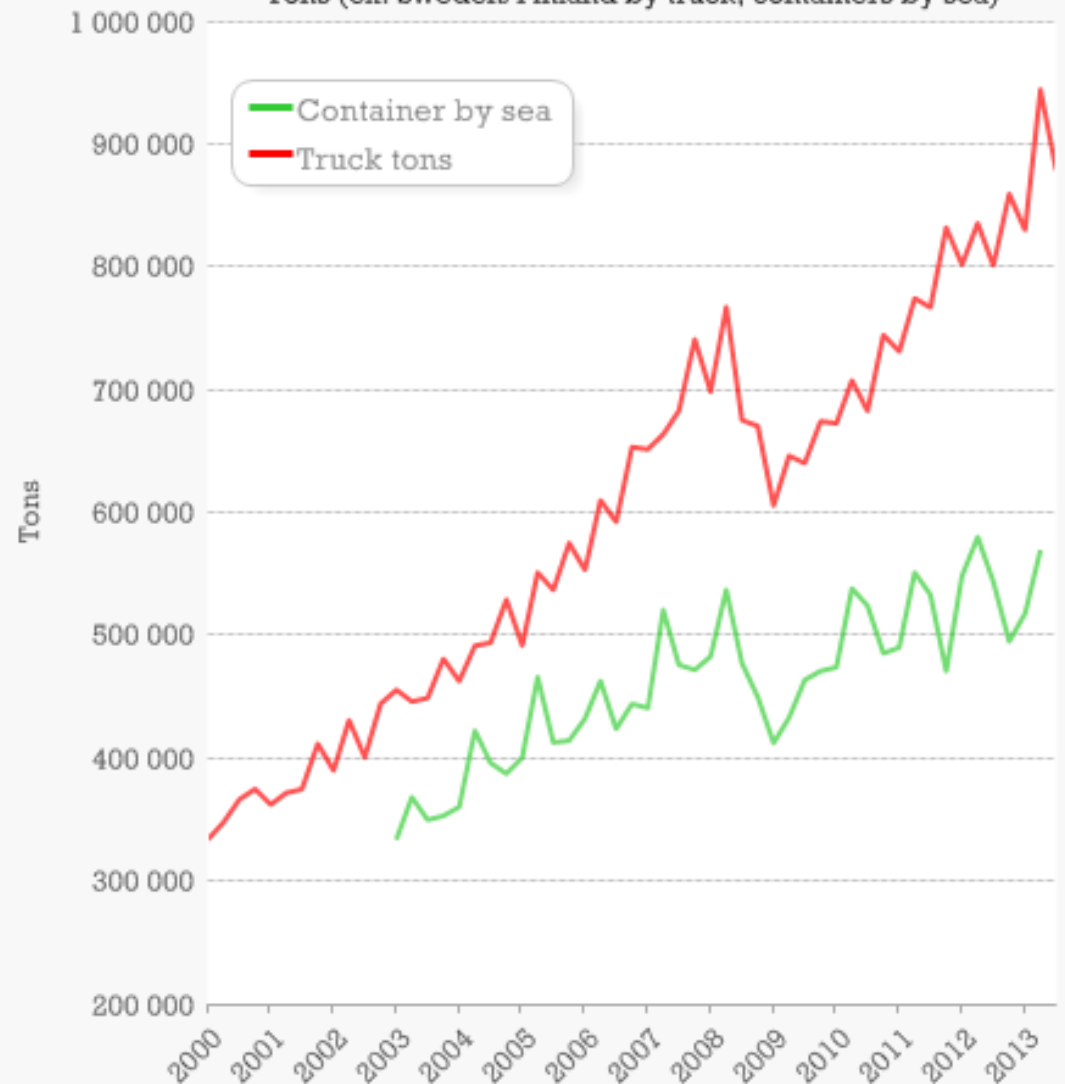
- Main partner
  - *SPC Norge*
- Research
  - *Marintek, DnV*
- Solution providers
  - *Rolls Royce, Fjellstrand, TTS, Seaway Innovation*
- Ports
  - *Havneforeningen, Oslo, Borg, Moss, Larvik, Grenland, Kristiansand, Stavanger, Bergen, Ålesund, Trondheim, Bodø*
- Customers
  - *NHO Logistikk og Transport, ASKO, DB Schenker, Tollpost, Bring, Nor Lines*



We are  
loosing  
market  
share!

## Import by truck or container

Tons (ex. Sweden/Finland by truck, containers by sea)



Kilde: SSB - Statbank

SHORTSEA SHIPPING

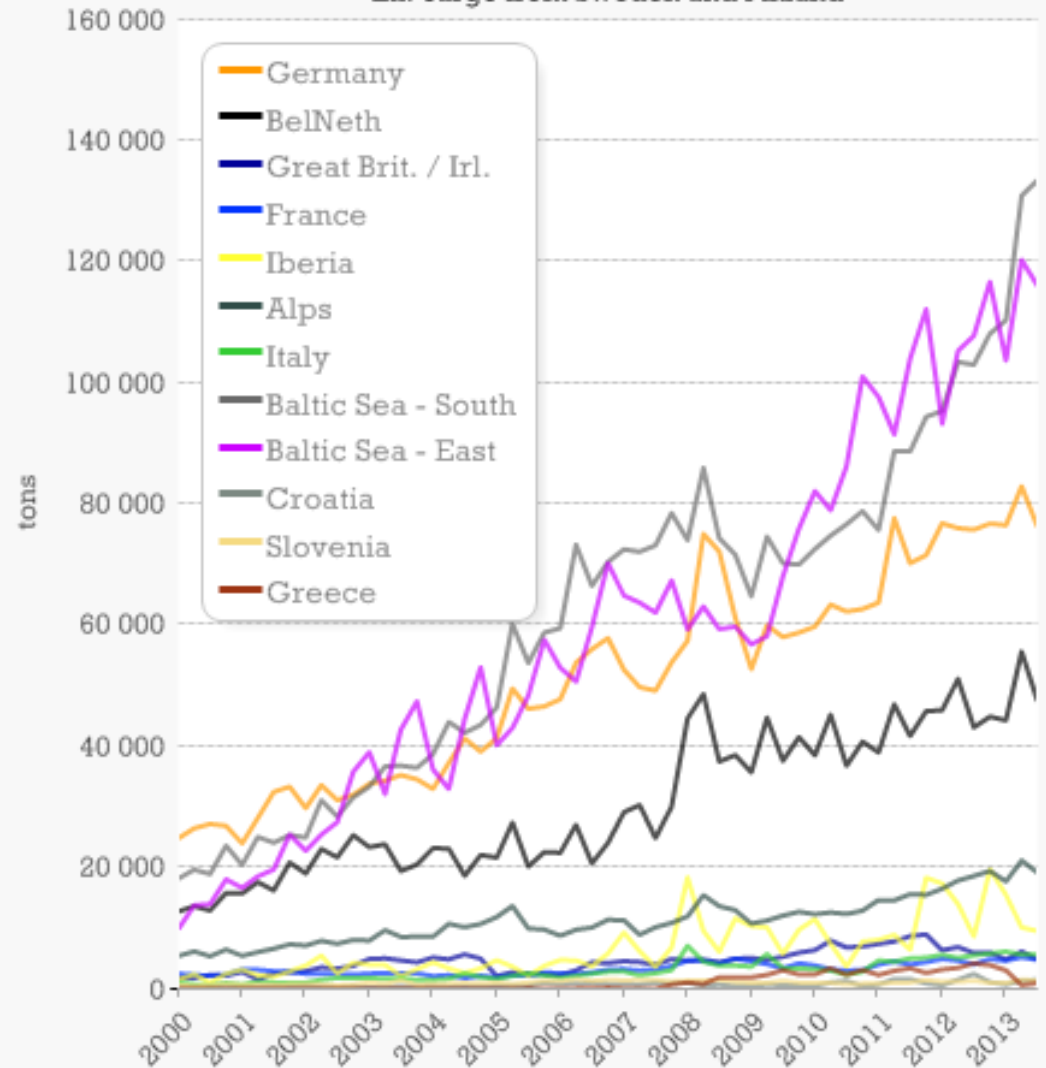
# 2500 trucks Sweden-Norway daily



Foreign  
trucks  
=  
Falling  
costs

## Import by country of truck

Ex. cargo from Sweden and Finland



Kilde: SSB - Statbank

SHORTSEA SHIPPING

# Future

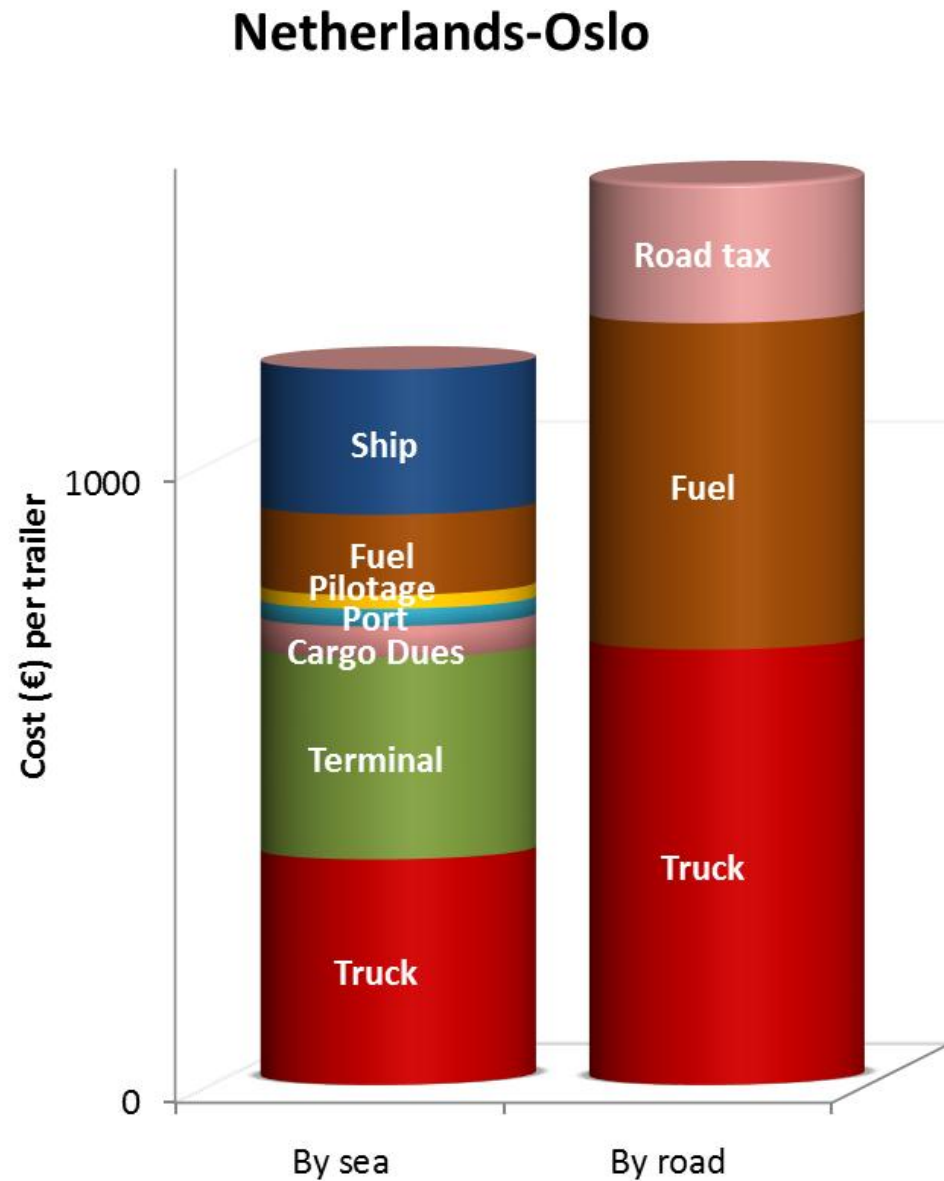
- Cabotage
- SECA
- Longer trucks



# Dock Workers



# Onshore battle!



# Radical Solutions Required



# Opportunities

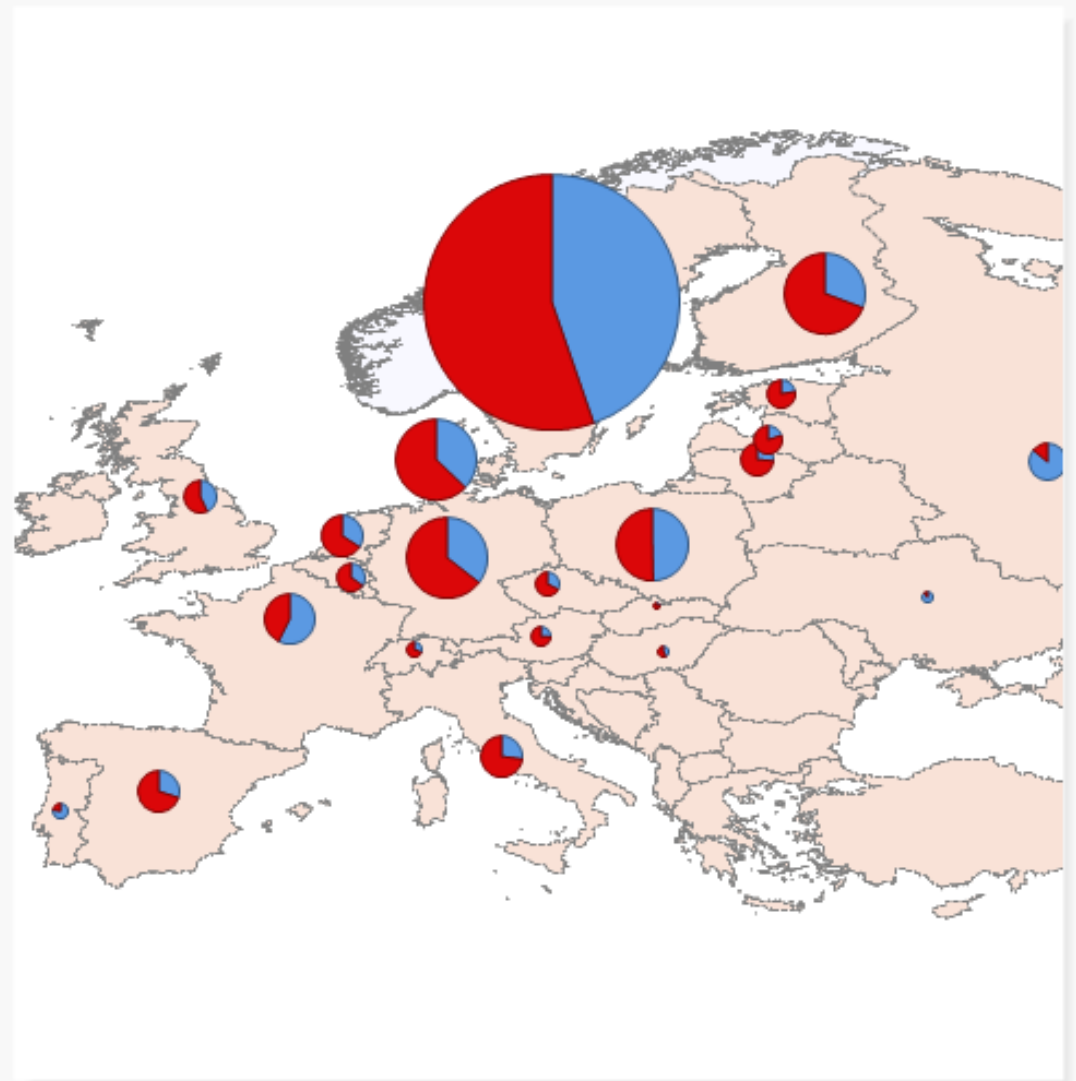
A wide-angle photograph of a coastal landscape. The sky is filled with heavy, grey clouds, with some light breaking through near the horizon. In the foreground, a calm body of water stretches across the frame. A small red boat is visible on the right side, moving towards the left and leaving a white wake. In the middle ground, there are several dark, rocky islands or peninsulas. On the left, a larger landmass with some buildings is visible, partially obscured by mist or low clouds. The overall mood is serene and atmospheric.

VELG SJØVEIEN

Plenty of cargo

# Import and export by country

By truck



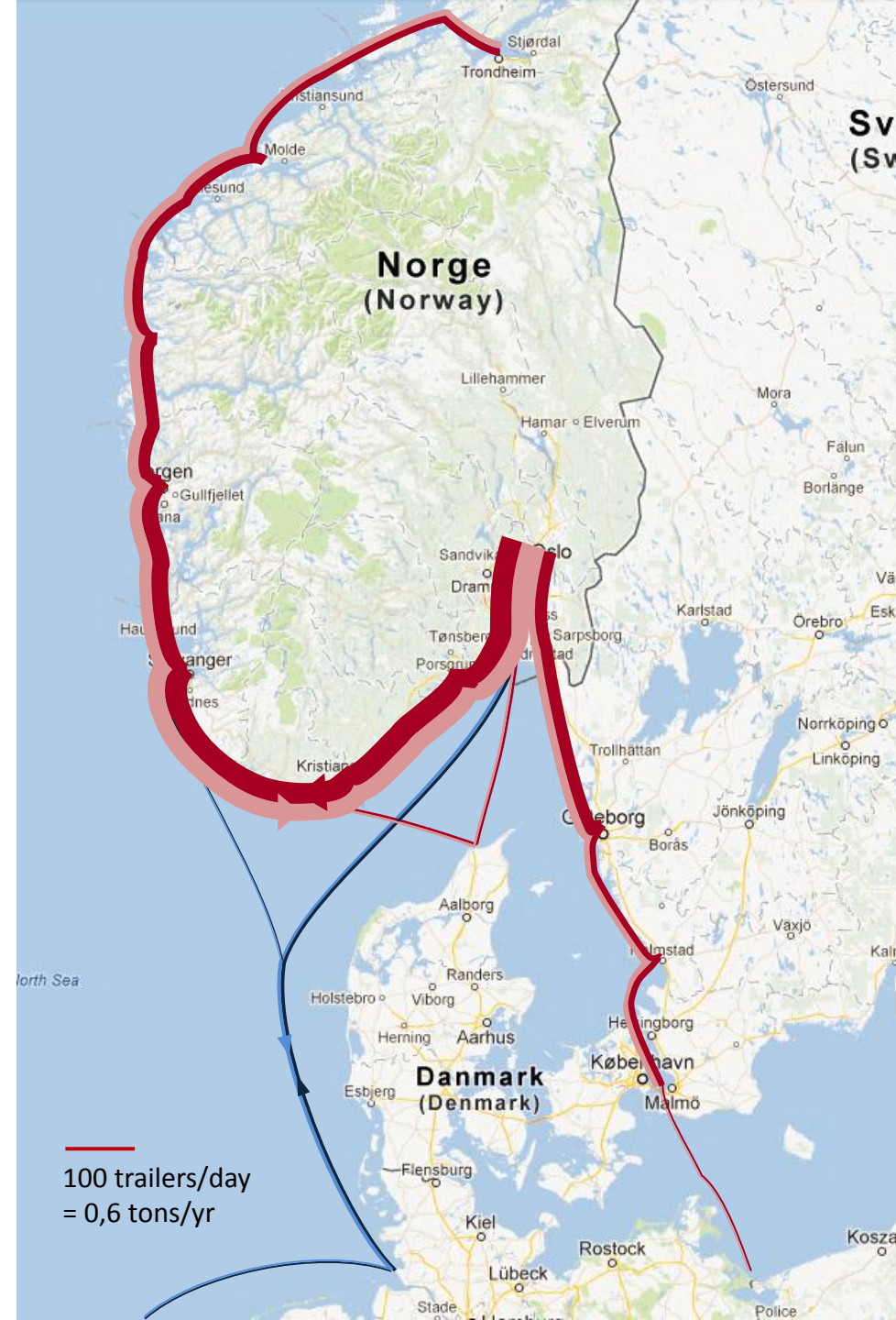
Kilde: SSB - Statbank

Eksport Import

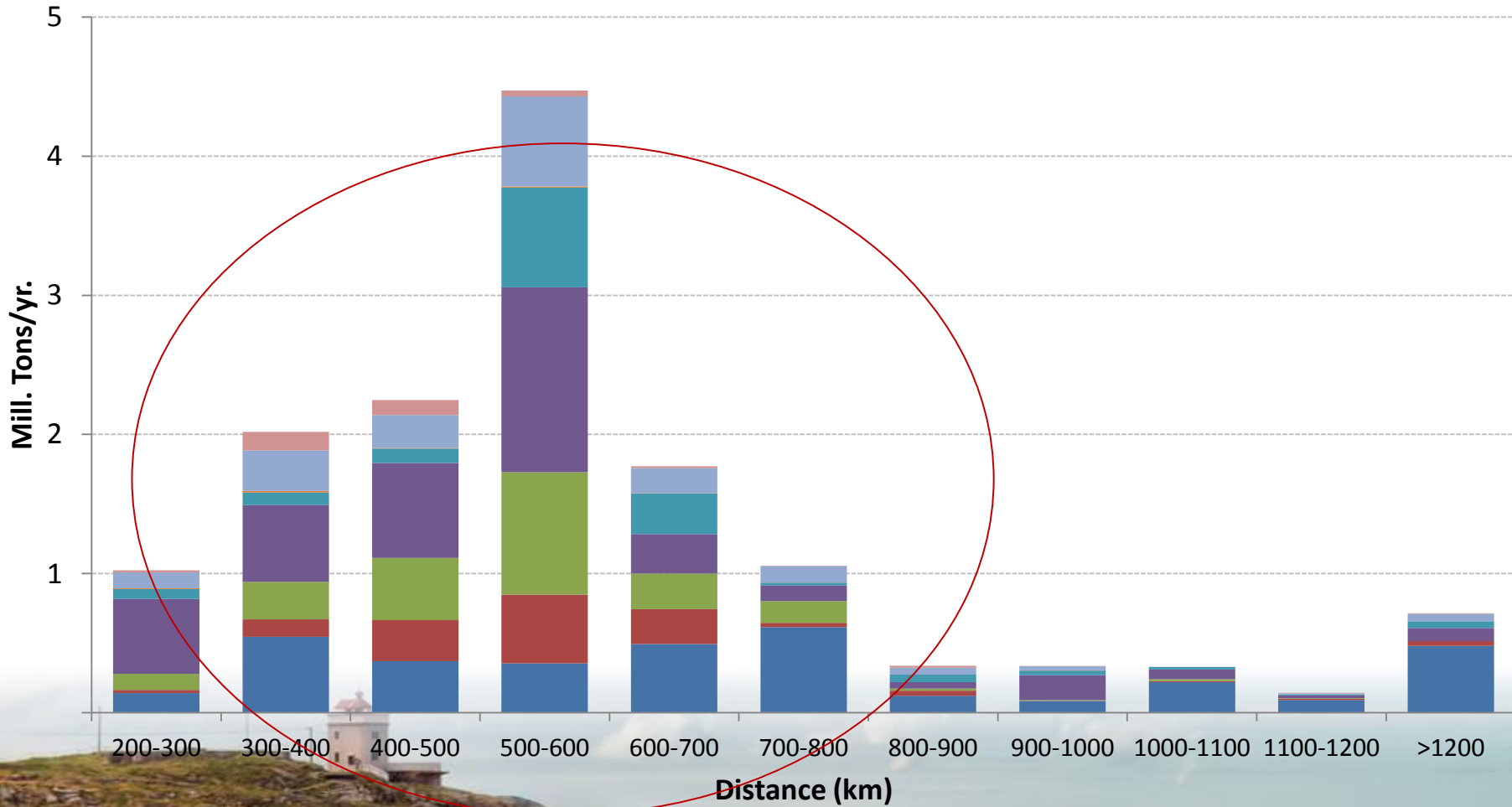
SHORTSEA SHIPPING

# Cargo by truck today

- 13-15 mill. tons/yr
- More than 200 km
- Less than 25 km from port

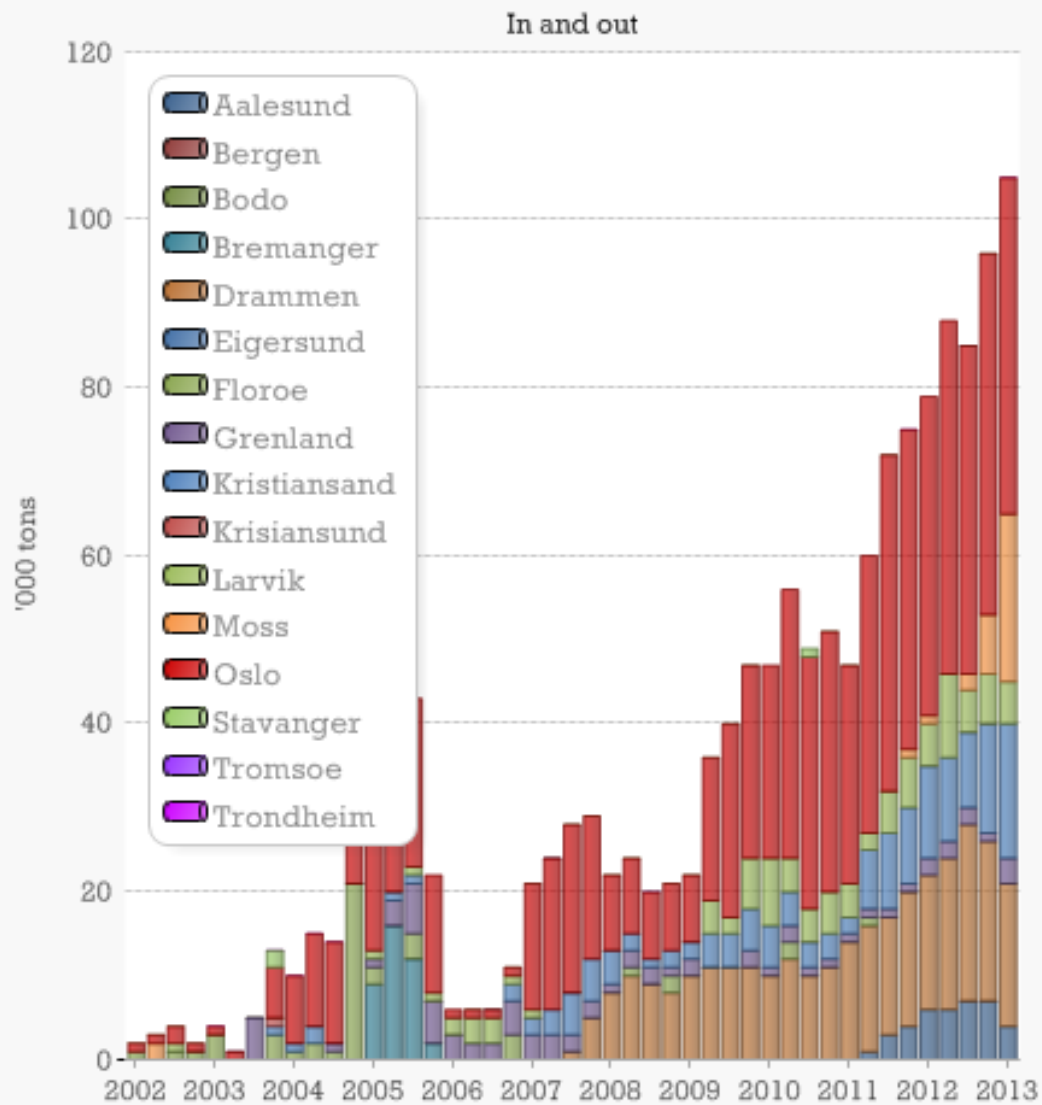


# Transport Distance



Strong growth in 45 ft. container

## Containers >40ft by port



Kilde: Eurostat

SHORTSEA SHIPPING

# Today's container handling

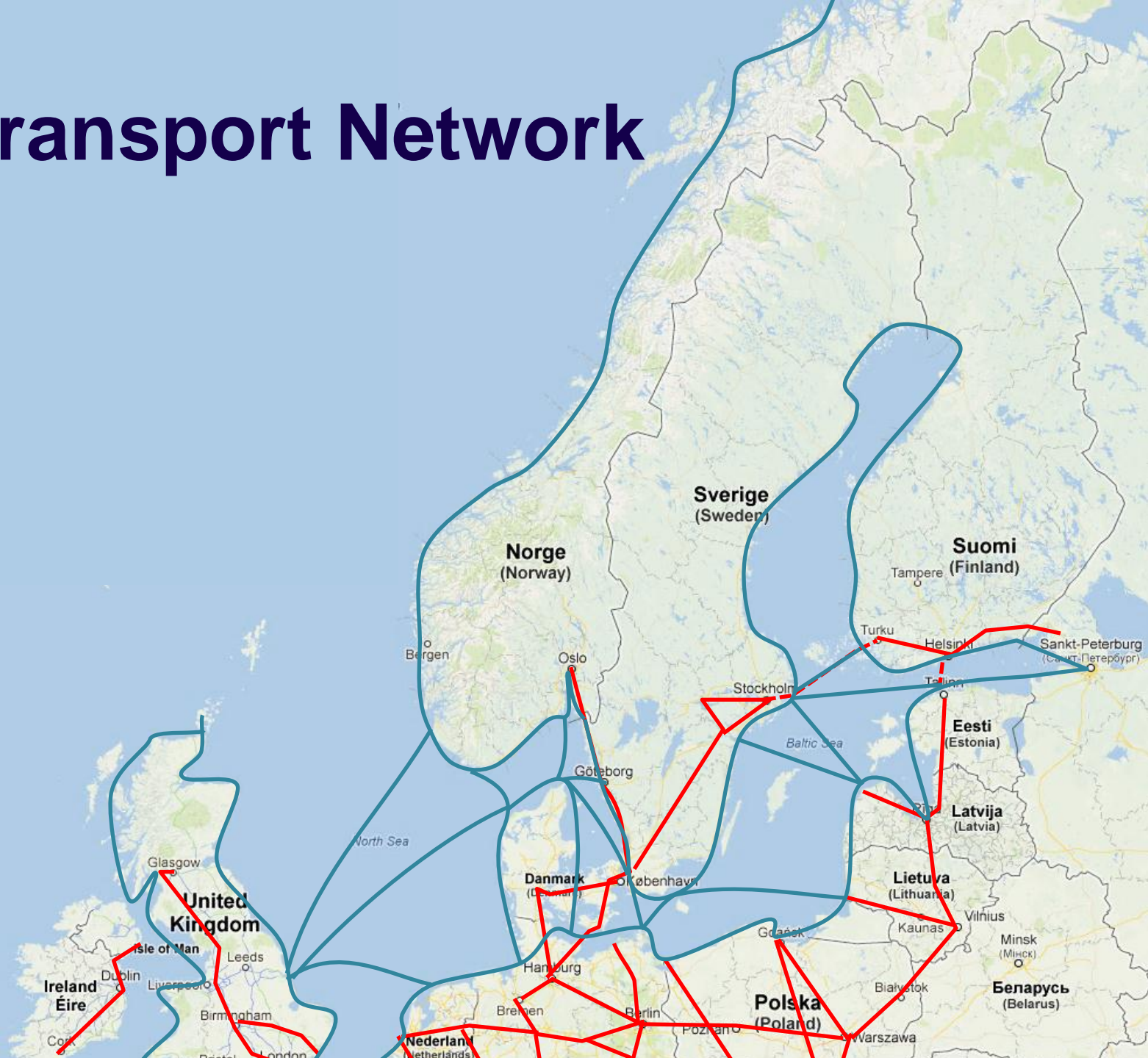


# Solution



VELG SJØVEIEN

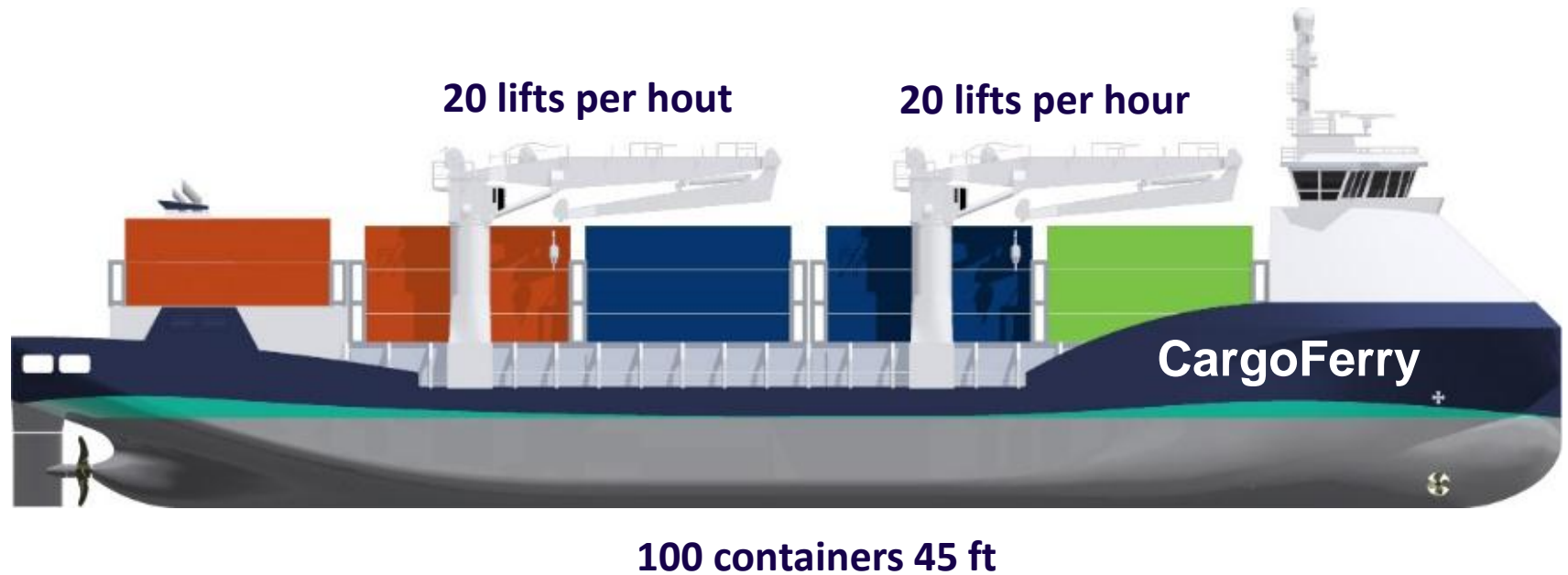
# EU Transport Network



# 1 500 meter cargo train



# Coast vessel of the future



# Coastal service

- 200-1000 km
- Daily schedules
- Transhipments

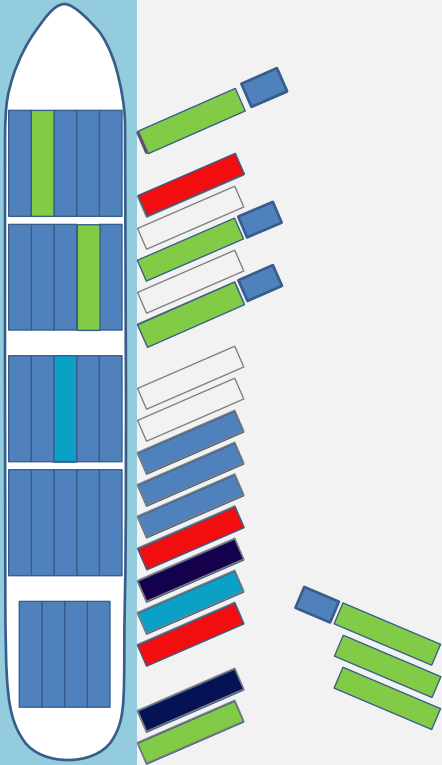


# Coast terminal of the future

- Unmanned!
- Access 24x7
- Secure
- In/close to port



# Loading and Unloading



- Unmanned port
- Robotized cranes on ship
- Loading directly to chassis
- Truck shuttle in and out

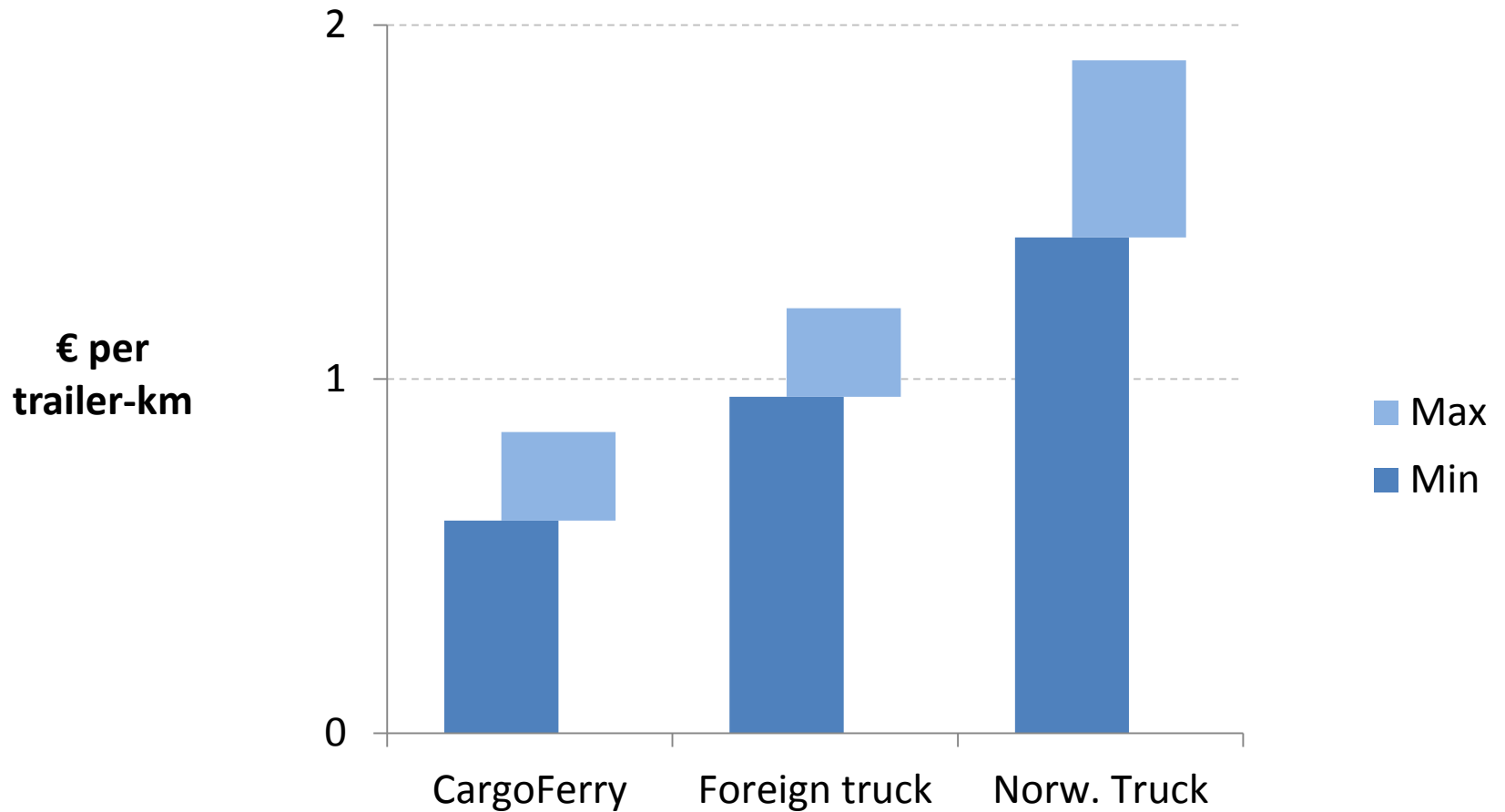
# Daily schedule

	Ankomst	Avgang	Ledetid til/fra Oslo i dager
<b>Swinoujscie</b>	10:00	14:00	-1,9
Malmø	22:00	00:00	-1,4
København	01:00	03:00	-1,3
Halmstad	07:00	09:00	-1,1
<b>Gøteborg</b>	14:00	19:00	-0,7
Fredrikstad	02:00	04:00	-0,3
Moss	06:00	08:00	-0,1
<b>Oslo</b>	10:00	17:00	0,3
Larvik	21:00	23:00	0,5
Grenland	01:00	03:00	0,7
Kristiansand	08:00	10:00	1,0
<b>Stavanger</b>	18:00	22:00	1,5
Haugesund	00:00	02:00	1,6
<b>Bergen</b>	07:00	10:00	2,0
Ålesund	21:00	00:00	2,5
Molde	02:00	04:00	2,7
Kristiansund	07:00	09:00	2,9
<b>Trondheim</b>	15:00	18:00	3,3

# € 700 per roundtrip



# € 0,70 per trailer-km



# Cheaper than trucks



# Prices – NOK\*

from/to	Swinoujscie	Malmø	København	Halmstad	Göteborg	Borg	Moss	Oslo	Larvik	Hirtshals	Grenland	Kristiansand	Stavanger	Haugesund	Bergen	Florø	Ålesund	Molde	Kristiansund	Trondheim
Swinoujscie		3800	4200	5000	6200	8100	8400	8900	10200	7700	9200	9500	11600	12500	14100	13400	14000	13900	14100	13400
Malmø	2400		2400	2400	2900	4800	5000	5600	6800	4200	7000	7100	9200	9500	10200	10200	10600	10600	10800	10100
København	2400	2400		2400	3400	5300	5500	6000	7300	4900	6400	6700	8800	10200	10200	10600	11100	10600	11200	10500
Halmstad	2900	2400	2400		2400	3600	3900	4300	5600	3500	4800	7400	8300	8300	8900	9000	9400	8900	9500	8800
Göteborg	3600	2400	2400	2400		2400	2600	3200	3200	2400	3500	5000	7100	7100	7300	7700	8200	7600	8300	7600
Borg	4600	2600	2900	2400	2400		2400	2400	2400	4100	2400	3200	5300	5300	5500	5900	6400	5900	6500	5700
Moss	4700	2700	3000	2400	2400	2400		2400	2400	4300	2400	2800	4900	4600	5200	5600	6100	5600	6200	5500
Oslo	5000	3000	3300	2400	2400	2400	2400		2400	4100	2400	3400	5500	4600	5000	5000	5600	5000	5900	5000
Larvik	5700	3700	3900	3000	2400	2400	2400	2400		2900	2400	2400	4300	4100	4900	5700	6800	6400	6900	6200
Grenland	5100	3800	3500	2600	2400	2400	2400	2400	2400	2400		2400	4100	3900	4300	5600	7100	6200	6900	6200
Kristiansand	5400	4100	3900	4000	2700	2400	2400	2400	2400	2400	2400		2600	3400	4700	7400	8500	8000	8800	7900
Stavanger	6500	5300	5000	4500	3900	2900	2700	3000	2400	2400	2400	2400		2400	2500	4700	8500	8000	8800	10000
Haugesund	6900	5200	5500	4500	3900	2900	2500	2500	2400	2500	2400	2400	2400		2400	4000	7800	7400	6400	7600
Bergen	7800	5500	5500	4800	3900	2900	2800	2700	2700	3300	2400	2500	2400	2400		2700	4400	4800	5400	6200
Florø	7400	5500	5700	4800	4200	3200	3000	2700	3100	4100	3100	4000	2700	2400	2400		3400	3600	4300	6000
Ålesund	7700	5700	6000	5000	4400	3400	3300	3000	3600	4600	3800	4600	4600	4200	2500	2400		2400	2400	3200
Molde	7700	5800	5700	4800	4100	3200	3000	2700	3500	4500	3400	4300	4300	4000	2600	2400	2400		2400	2500
Kristiansund	7800	5800	6100	5200	4500	3500	3400	3200	3700	4600	3700	4800	4800	3500	3000	2400	2400	2400		2400
Trondheim	7400	5400	5700	4800	4100	3100	2900	2700	3400	4600	3400	4300	5400	4100	3400	3200	2400	2400	2400	

\* Round trip

New

Refresh price Datasheet Tips

	Status	From	To	Equipment	Units	CargoType	StartDate	Freq.	Duration	Price	Search
<input type="checkbox"/>	Shared	Deliveien 33, 1540...	6037 Eidsnes, Norw...	45 ft container	66	Fish	1 Jan, 15	One of	1 weeks	Kr 4 700	Search
<input type="checkbox"/>	Shared	Deliveien 33, 1540...	Magnusvegen 10, 52...	45 ft container	5	General Cargo	1 Jul, 13	Every working day	52 weeks	Kr 5 666	Search
<input type="checkbox"/>	Shared	Deliveien 33, 1540...	Magnusvegen 10, 52...	Trailer	0	General Cargo		Weekly	52 weeks	Kr 3 800	Search
<input type="checkbox"/>	Shared	Deliveien 33, 1540...	Østre Rosten 104, ...	45 ft container	6	General Cargo	1 Jul, 13	Every working day	52 weeks	Kr 5 798	Search
<input type="checkbox"/>	Shared	Deliveien 33, 1540...	Vestre Kystvei 191...	45 ft container	5	General Cargo	1 Jul, 13	Daily	52 weeks	Kr 8 377	Search



# Social Benefits

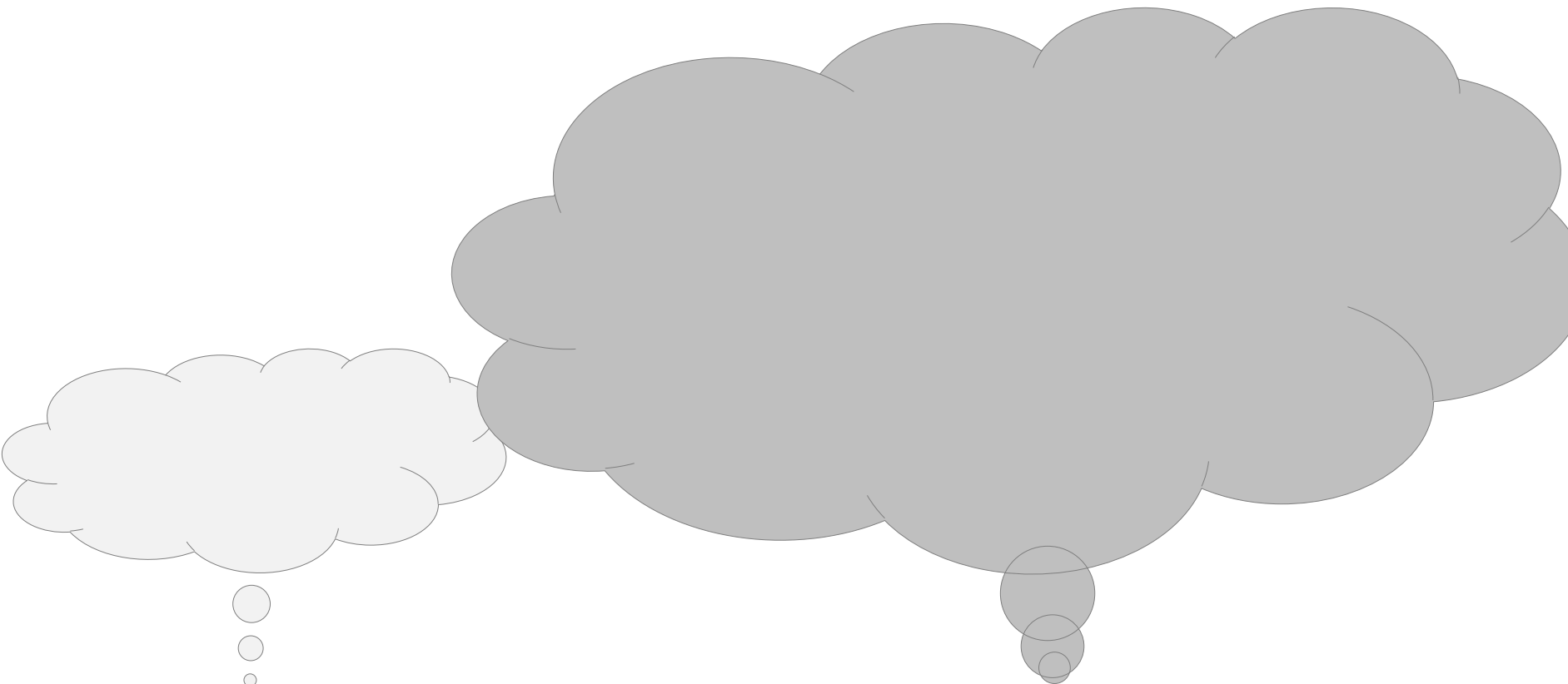


# Social Benefits

- No accidents
- Reduced road wear
- No investment
- Fast start-up
- Environment



# CO<sup>2</sup> Emmission



CargoFerry:

**20-30** gr/ton-km


Truck:

**60-150** gr/ton-km

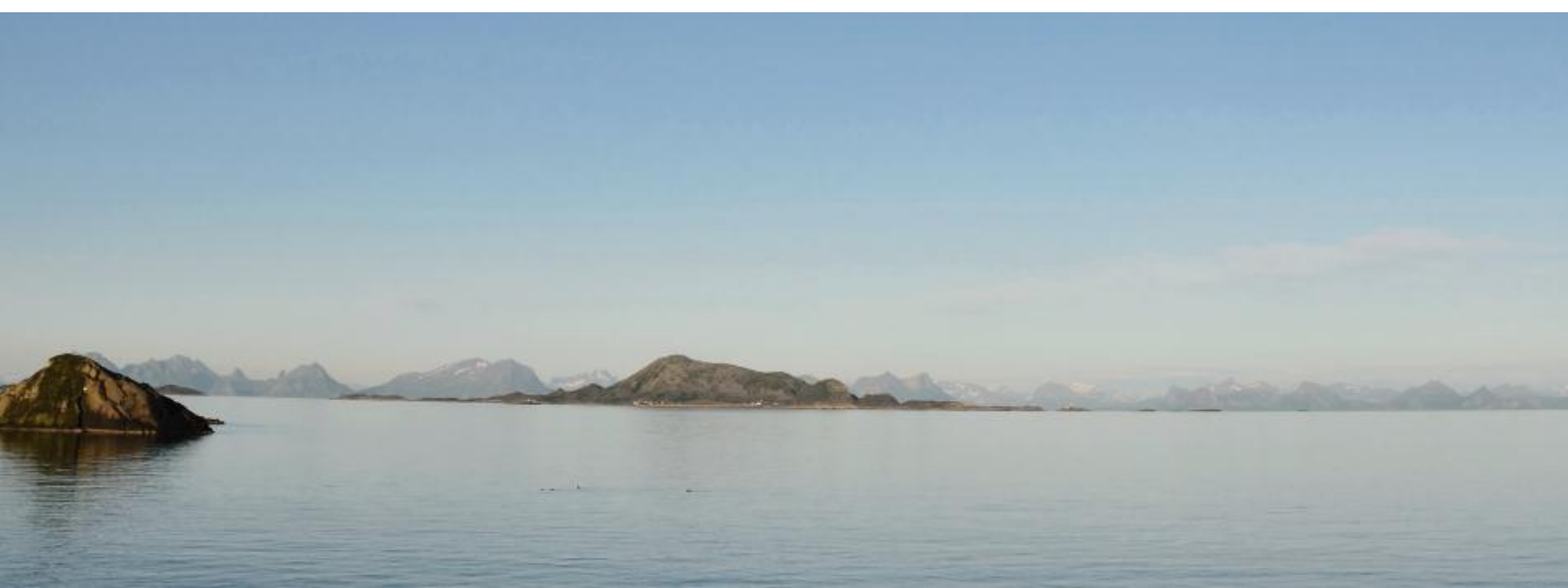
# Hybrid - LNG - Battery



# Social Benefits



	€ mill. / yr
Local pollution	14
Noise	20
Traffic jams	6
Accidents	10
Wear and tear	38
CO <sup>2</sup>	3
<b>Totalt</b>	<b>90</b>



# Potensial State Aid

- Incentives – Up to 30 %
- Port development aid
  
- (Road tax)



# Conclusion



**Low Cost, Reliable, Eco-Friendly**



**Thank you for the  
attention!**

**[www.godsfergen.no](http://www.godsfergen.no)**