Baltic Ports Conference 2009

Global economic slow-down - an impact on shipping and port sector

Fuel Oil Impact

Aarhus 3rd September 2009

Staffan Herlin, Finnlines Plc

Finnlines
a Grimaldi Group company

Grimaldi Group Network

Finnlines' flexible tonnage for short sea shipping

1994 - 1995

HANSA-CLASS

- 3.200 lane meters
- 120 passengers
- Speed 21 knots

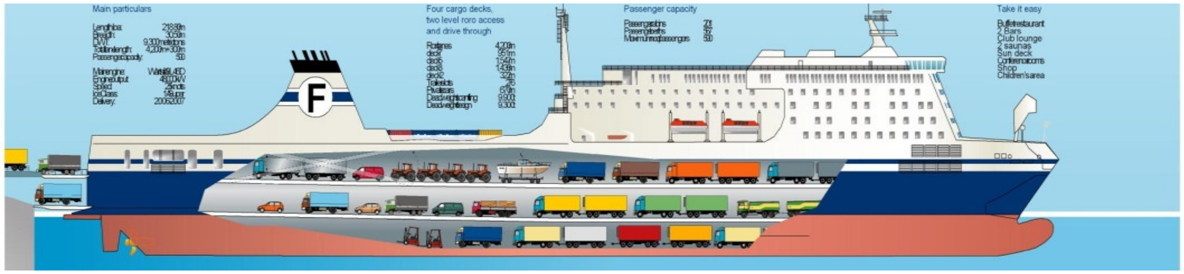
RoPax

2007 - 2008

STAR-CLASS

- 4.200 lane meters
- 500 passengers
- Speed 25 knots

RoPax



2010-2011

NEWBUILDINGS

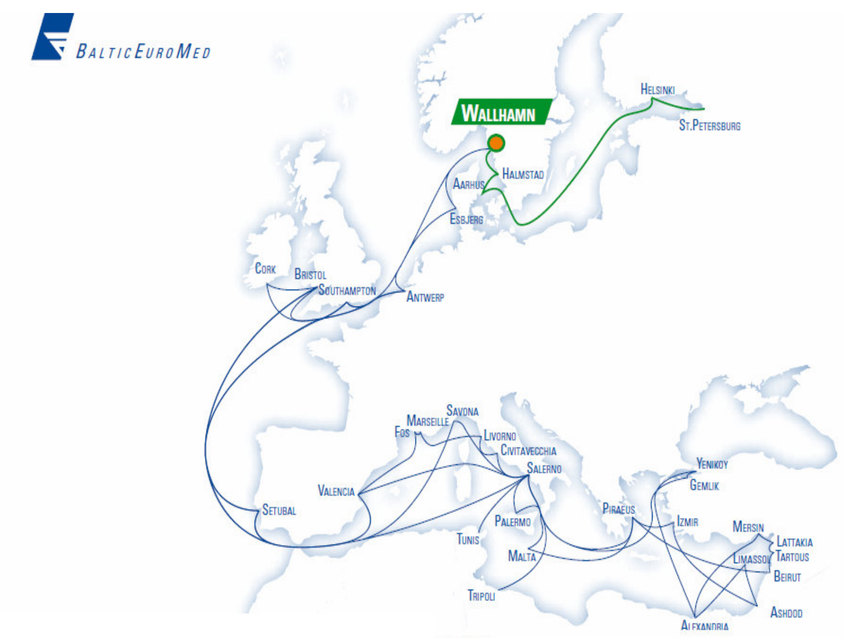
- 3.200 lane meters
- 12 passengers
- Hoistable car decks
- Speed 20 knots

RoRo

Finnlines a Grimaldi Group company

Finnlines two new HUB-services connecting Mediterranean & Russia

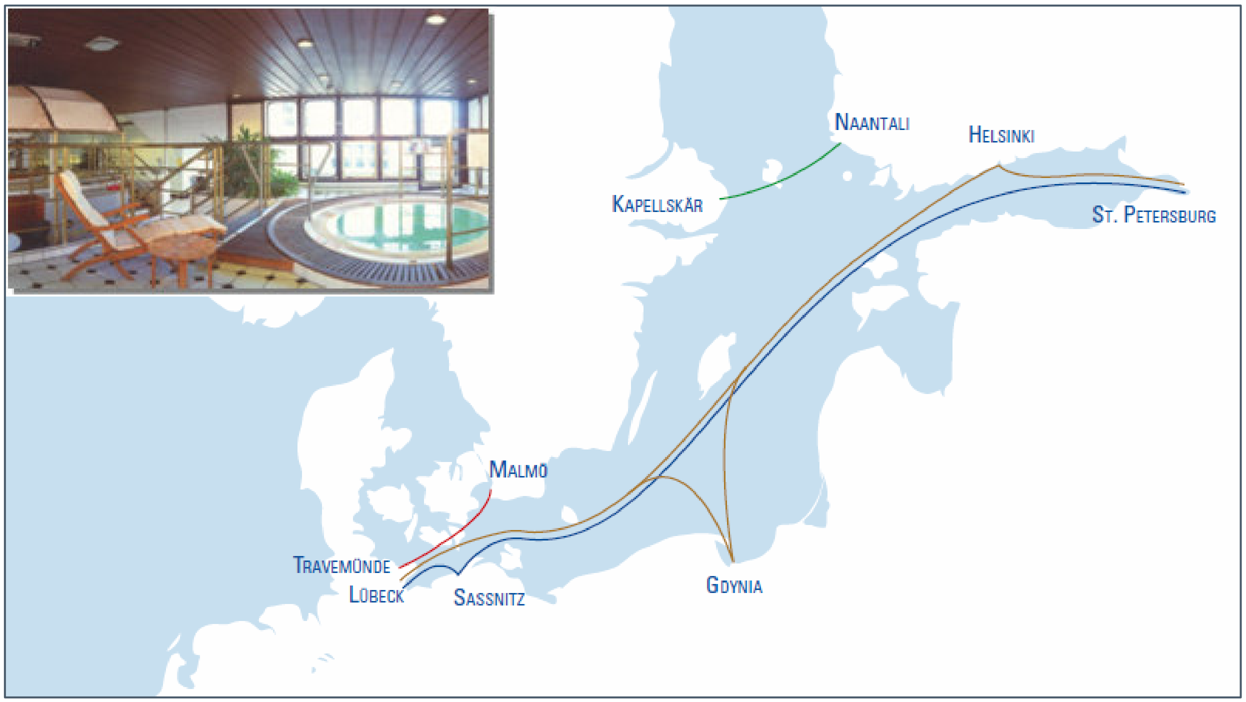
MEDITERRANEAN connected via Helsinki - Wallhamn



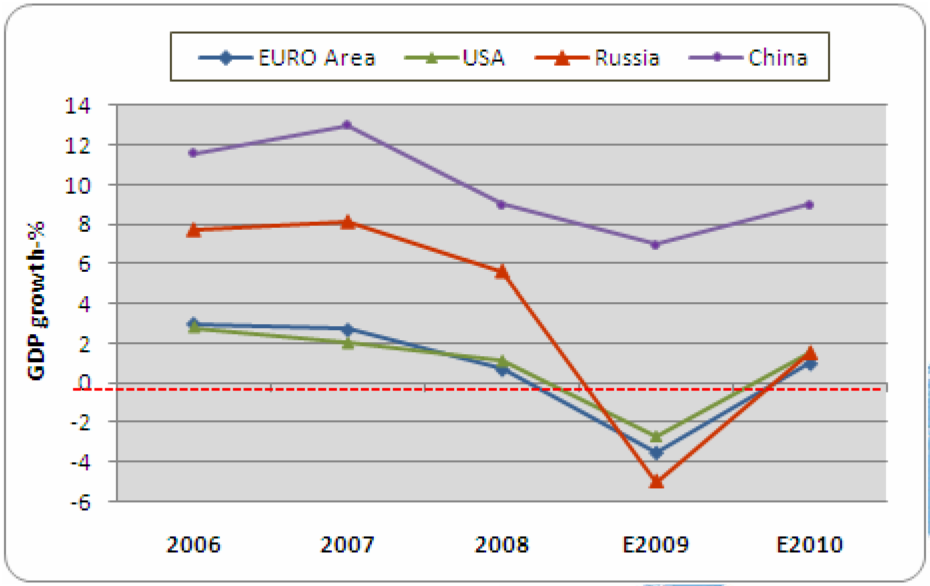
RUSSIA connected via Helsinki – St.Petersburg

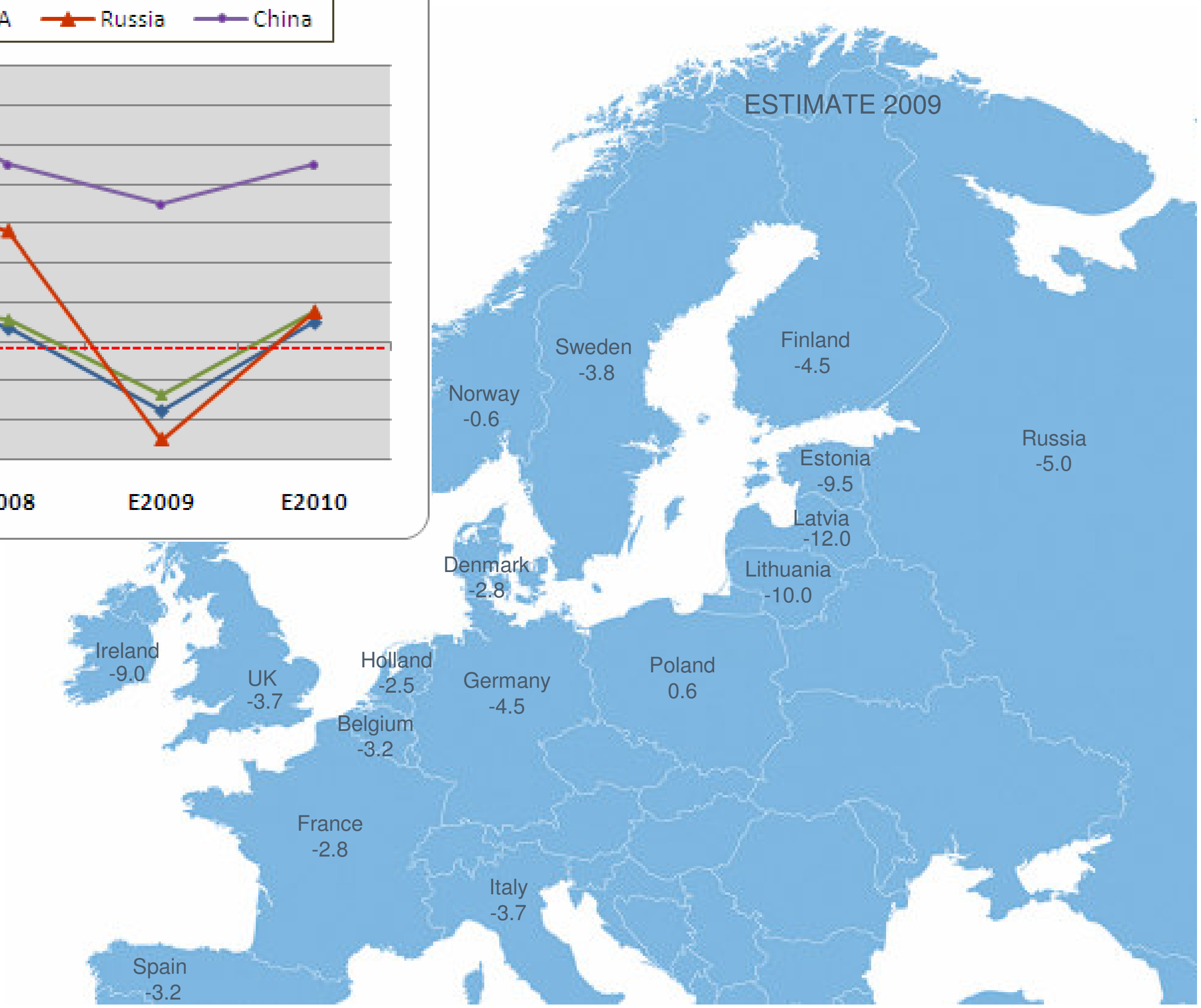
Finnlines for passenger round the Baltic

HansaLink FinnLink NordöLink TransRussiaExpress



Economic outlook – light in the horizon



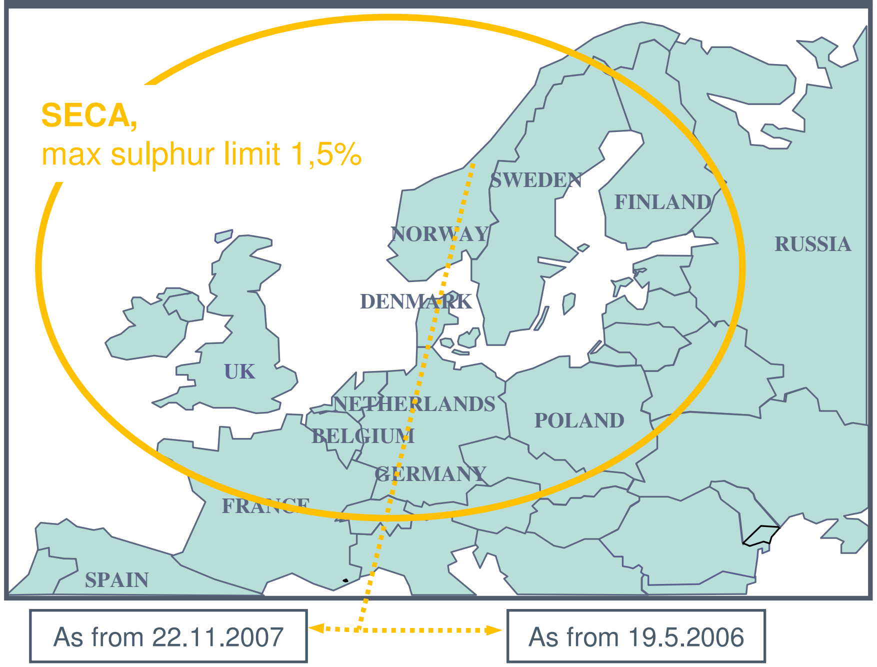


Source: Nordea Economic Outlook May 2009

Air pollution from ships restricted as from 2006 – further restrictions ahead

Sulphur Emission Control Area (SECA)

IMO/Annex VI of the Marpol 73/78 Convention



IMO NEXT STEPS TO FURTHER PREVENT AIR POLLUTION:

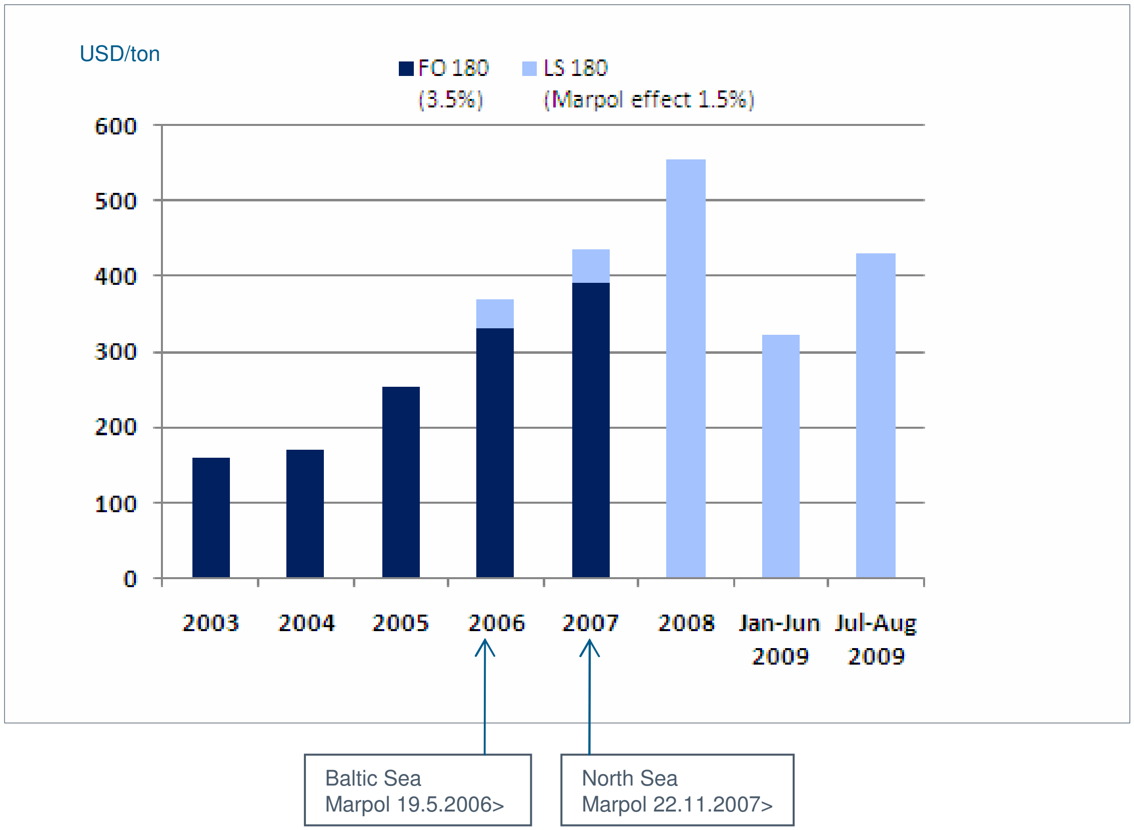
- As from 1.3.2010 max sulphur limit 1,0%
  ► vessel bunker costs increase estimation +7-21%
  ► freight increase assumption + 3-10%

- As from 1.1.2015 max. sulphur limit 0,1% (i.e. MGO)
  ► vessel bunker costs increase estimation +72-83%
  ► freight increase assumption +35-40%

Source, costs: Ministry of Transport and Communication Finland, Study April 2009

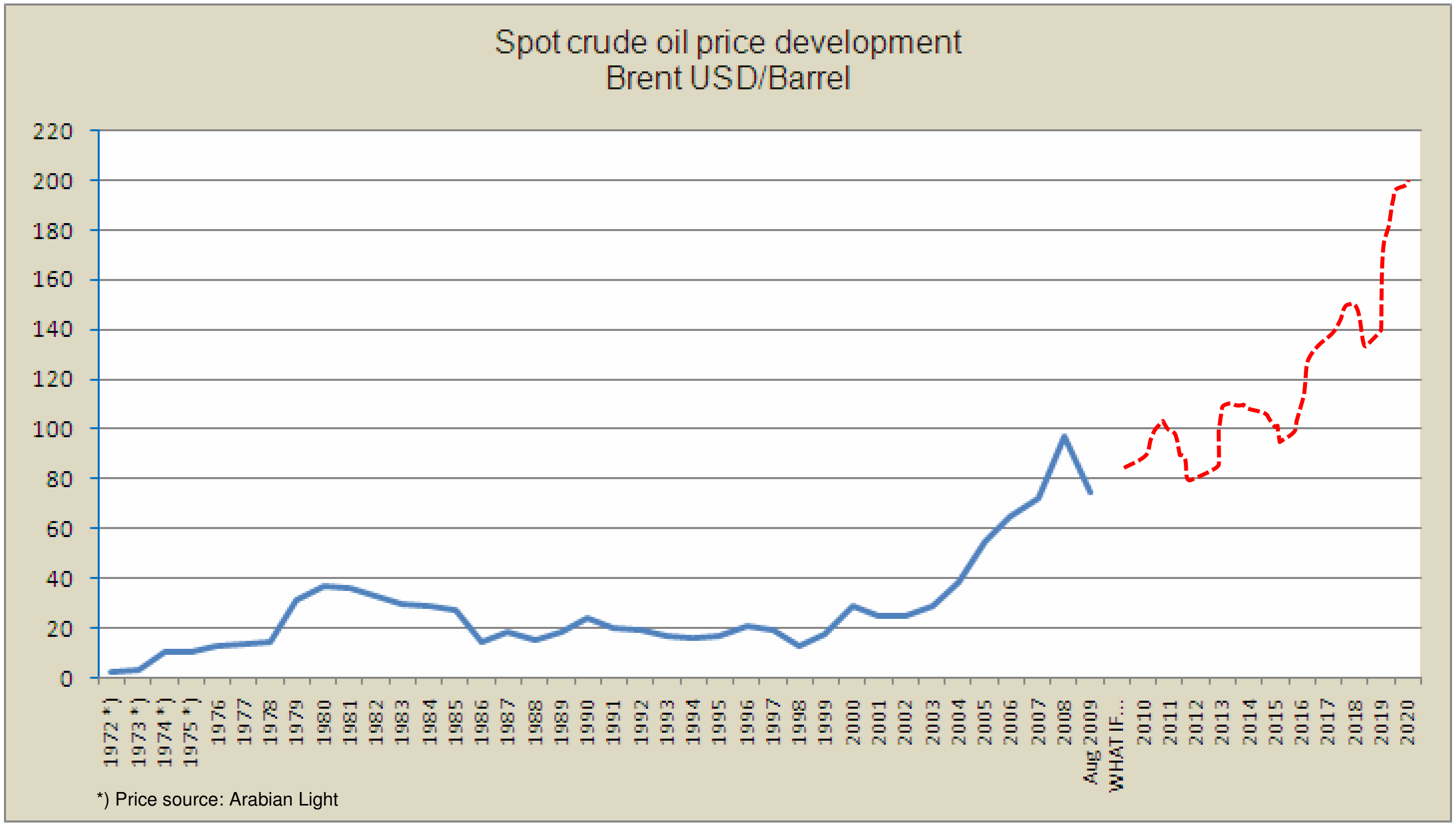
Maritime bunker price development 2003 - 2009

Bunker quality change from Heavy Fuel Oil to Low Sulphur within the Baltic Sea and North Sea areas



Source: Bunkerworld, Rotterdam

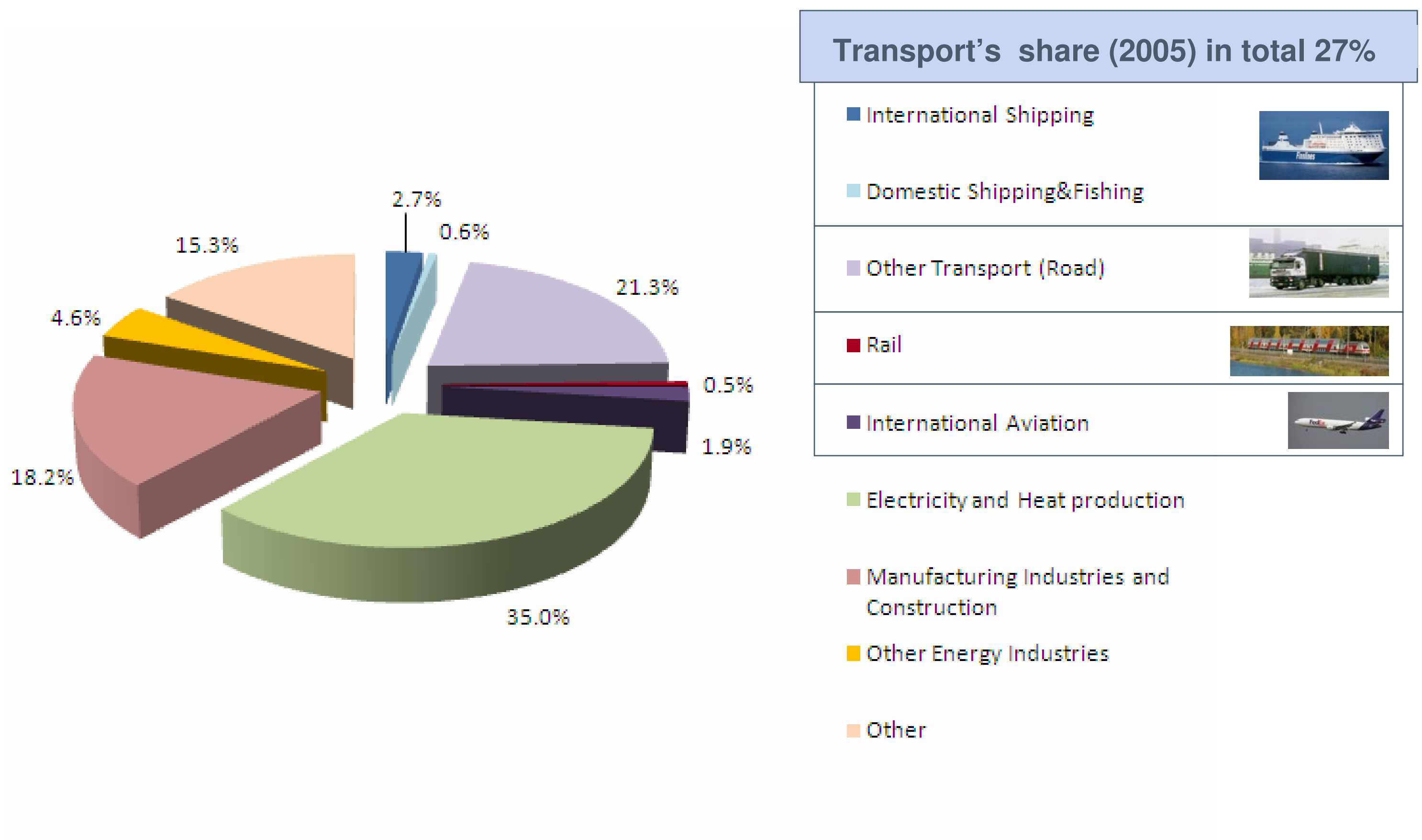
What if .....



- 1973 First energy crisis *(Yom Kippur War)*
- 1979 Second energy crisis *(Iranian revolution)*
- 2004 onward 'endless energy crisis'?

Source: IMO, Prevention for air pollution from ships April 2009 (Platts)

CO2 global emissions – share of transport by mode



Source: IMO, Prevention for air pollution from ships April 2009

Around ¾ of the increase in oil demand worldwide comes from the transport sector

Maritime bunker prices will rather keep on increasing than decreasing in the future:

- Air pollution down; sulphur content of maritime bunkers down - from 1,5% > 1,0% > 0,1%
- Availability of crude oil; OPEC countries share rising from 47% up to 51% (2030), as non-OPEC oil production is starting to decline around 2015 (‘peak oil’)
- New oilfield investments needed after 2010 to meet the future demand. In view of current financial crisis, there are growing doubts whether the needed capacity will be forthcoming.
- Renewable energy to compensate the needed bunker consumption not yet available. Technically feasible only as a partial source of replacement power.
- Fuels with lower CO2 emissions incl. biofuels and liquefied natural gas to compensate the needed consumption. Technically possible, but still poses some technical challenges.

Source: IEA, World Energy Outlook 2008 and IMO, Prevention for air pollution from ships April 2009

Sea transport is an integral part of efficient and sustainable logistic solutions – need more planned co-operation

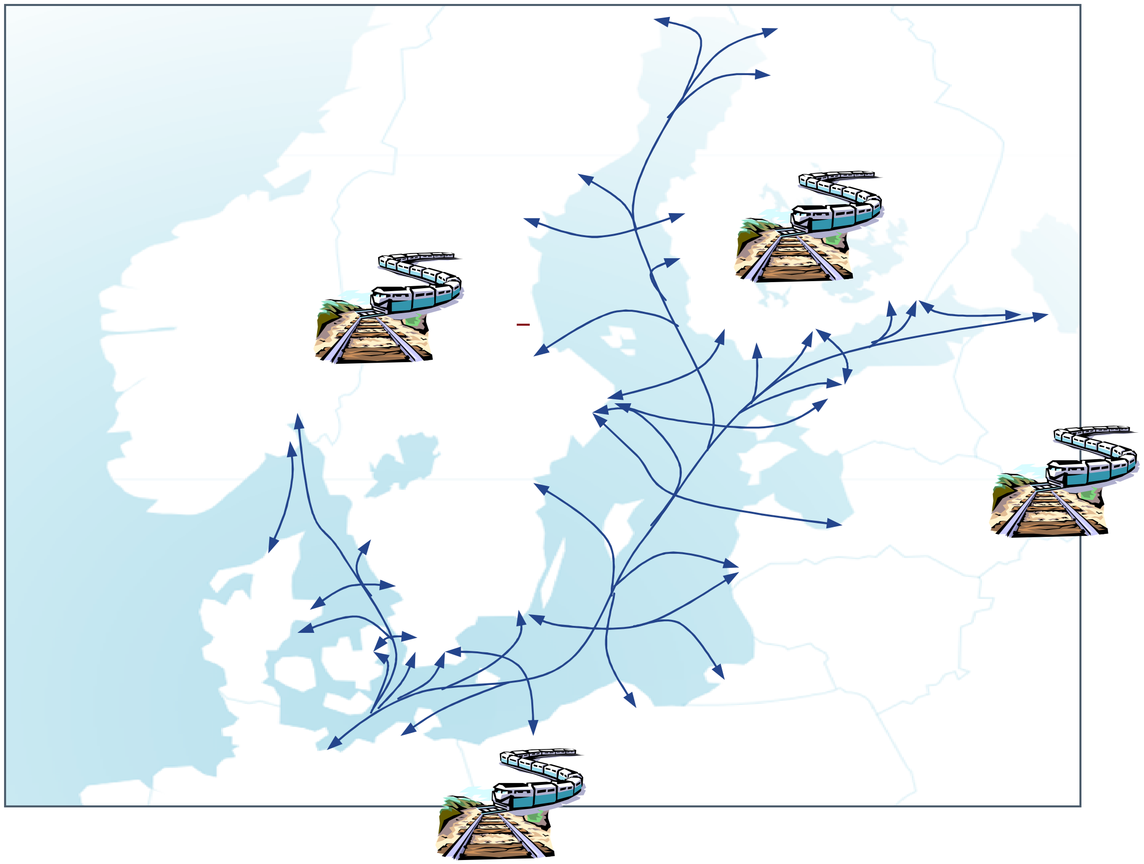
- Environmental requirements and legislation direct the development of logistic solutions
- Information and communication technology evolve into an on-line service throughout the whole supply chain, which also directs the development of logistic solutions
- Unitised cargo modes increase and combined intermodal transports will gain more and more foothold
- Volumes will concentrate to HUB-ports with good and diverse connections to production and market areas.
- Seamless cooperation between port -and land functions shortens the lead time remarkable
- Traffic balance and constant goods streams will be emphasized in cost efficient sea transportations

Balance in trade & commodities challenges short sea shipping in choice of efficient vessel-type

Finnlines
a Grimaldi Group company

Baltic Sea – a challenging RoRo, RoPax & Ferry market – to be integrated to sustainable landoperations

- Around 30 RoRo-, RoPax- & Ferry short-sea-operators serving in the Baltic Sea.
- Annually over 900 mtons of freight handled, out of which 1/3 consist of RoRo & mobile units, containers & breakbulk.
- Annual passanger throughput in and out over 125 million.



Source: Eurostat satistic 2007 (Russia volumes excluded)

More efficiency on the roads – industrial transports

EURO MODULAR SYSTEM – legal across Europe in the future?

Today road vehicle's weight and dimension have limitations in EU countries:
- ► In general: 18.75m length and 40t weight
- ► 25,25m and 60 tons accepted only in Finland and Sweden, since 1960's

FUTURE IN THE NORTHERN EUROPE

- EMS – Euro Modular System: existing truck-trailer combined differently, creating a longer vehicle (25,25 m)

- Efficiency on industrial road transports: usage as an unit for Intermodal and for Modalshift transports

Improving energy efficiency of vessels

Vessel

- Adaption of new technology and design
- Speed and capacity – scale of economy
- New generation power and propulsion systems (e.g. low carbon technology)

Operations

- Fleet management
- Energy management
- Voyage optimization
- Increased automatization (vessel-port)
- Logistic choices on sea take into account the whole cargo supply chain needs

Transport logistics on search for less polluting energy

NEWS 8/20/2009

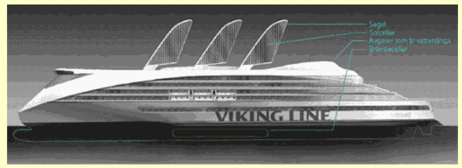
Volvo Logistics test drives with rapeseed oil in the tank

Environmentally adapted fuel is one step on the road to reducing carbon emissions at Volvo Logistics. The first petrol station in western Sweden selling ACP Diesel Bio30 is now opening at the Skandiahamnen port in Göteborg, close to Volvo's plants and the trans-shipment terminal in Arendal.

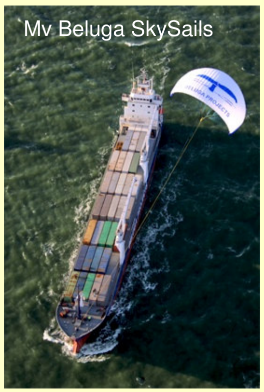
This is the result of a joint venture between IKEA, H&M, DHL, Preem and Volvo Logistics.

Source: Volvo Logistics

Innovative plans in shipping to increase energy efficincy

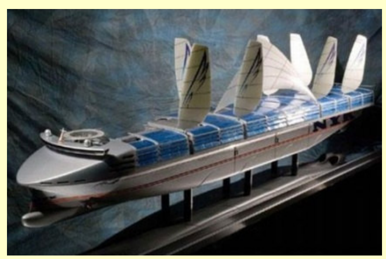


Source: Viking Line



Source: Skysails

Source: STX Europe, Eoseas



Source: Nippon Yusen KK (NYK),
Super Eco Ship 2030

Thank you!

Finnlines
a Grimaldi Group company