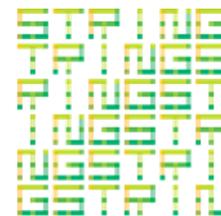


New Routes for Transport and Logistics in the STRING Corridor



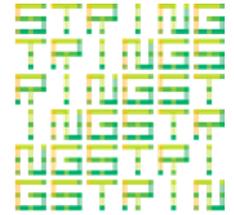
NOSTRA Workshop, 4th June, 2013

GREEN STRING CORRIDOR



STRING -
THE NEW GREEN GROWTH CENTRE
IN NORTHERN EUROPE

What is green transport and logistics?



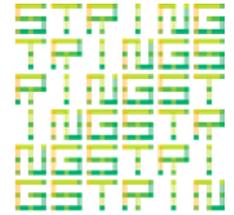
GREEN STRING CORRIDOR



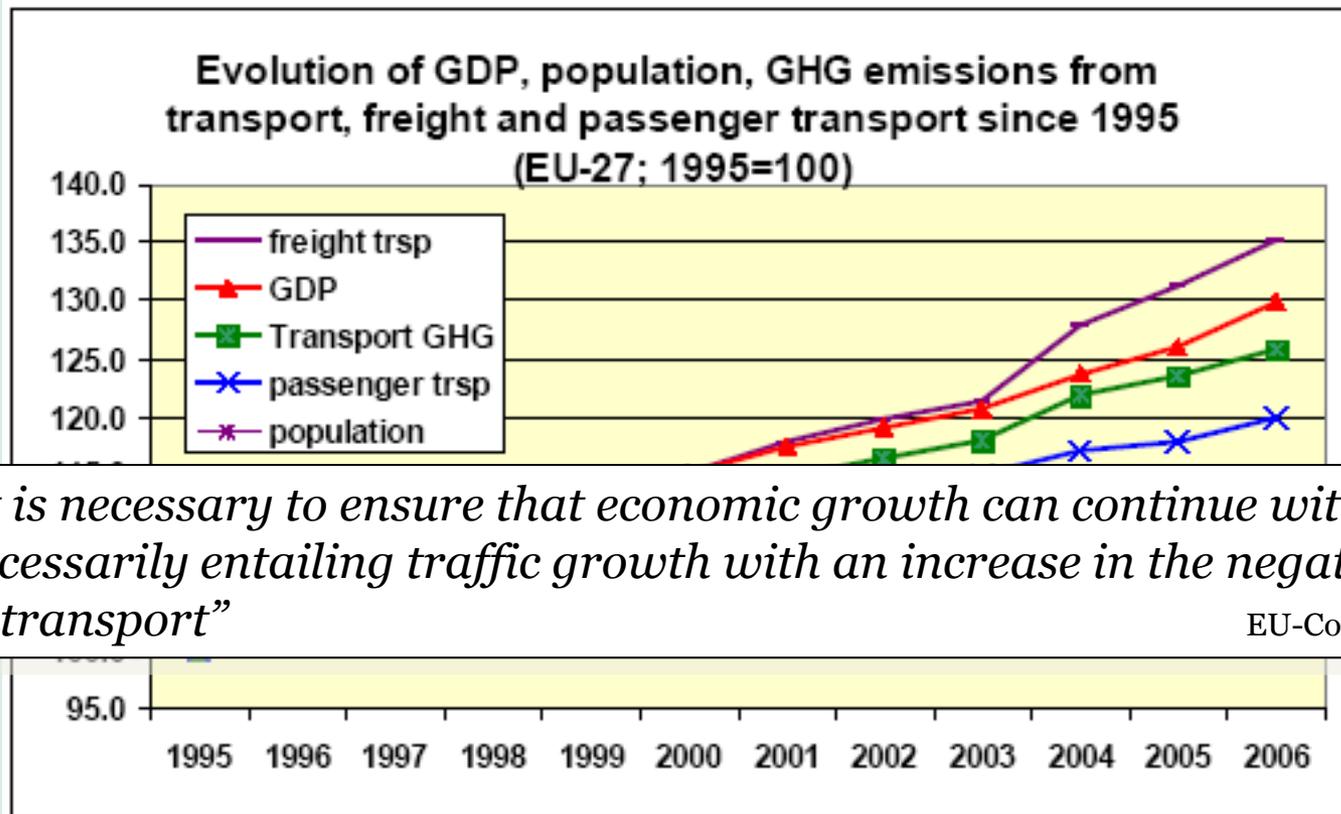
- Reduction of traffic and transport = reduced mobility
- Improved technology using cleaner fuels and engines
- Better use of existing capacity = more transport producing less traffic

- “Evolution not revolution”

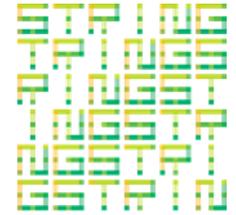
The challenge



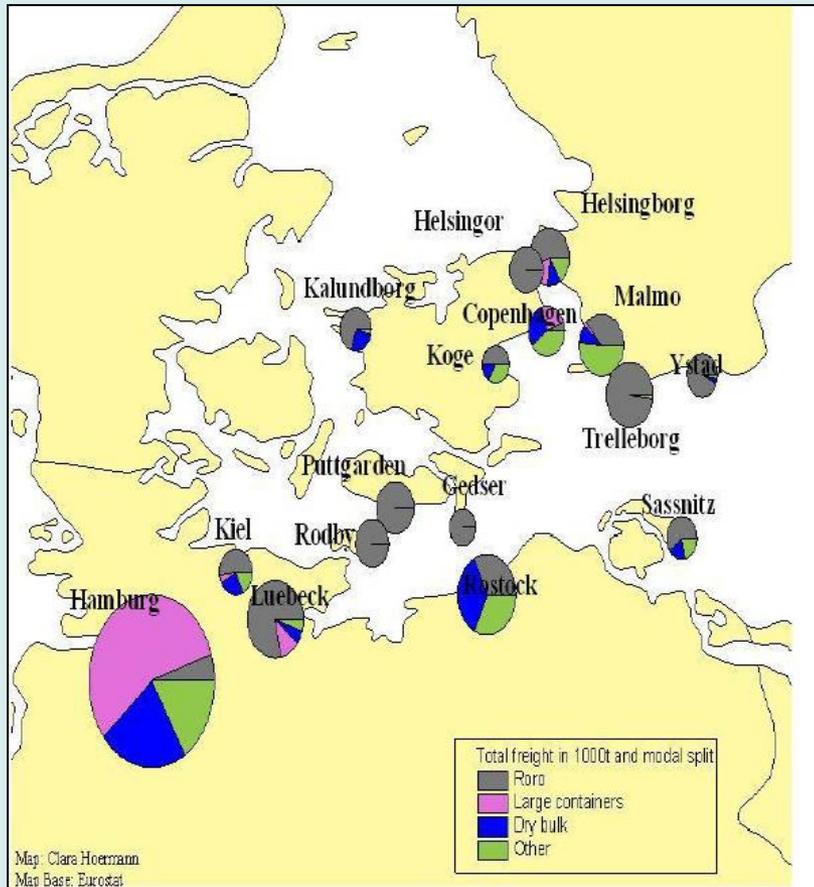
GREEN STRING CORRIDOR



The STRING Region – a functional region



GREEN STRING CORRIDOR

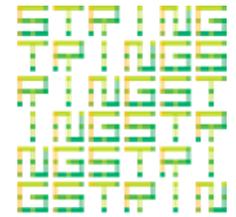


Source: Green STRING Corridor. Hansen, 2013.

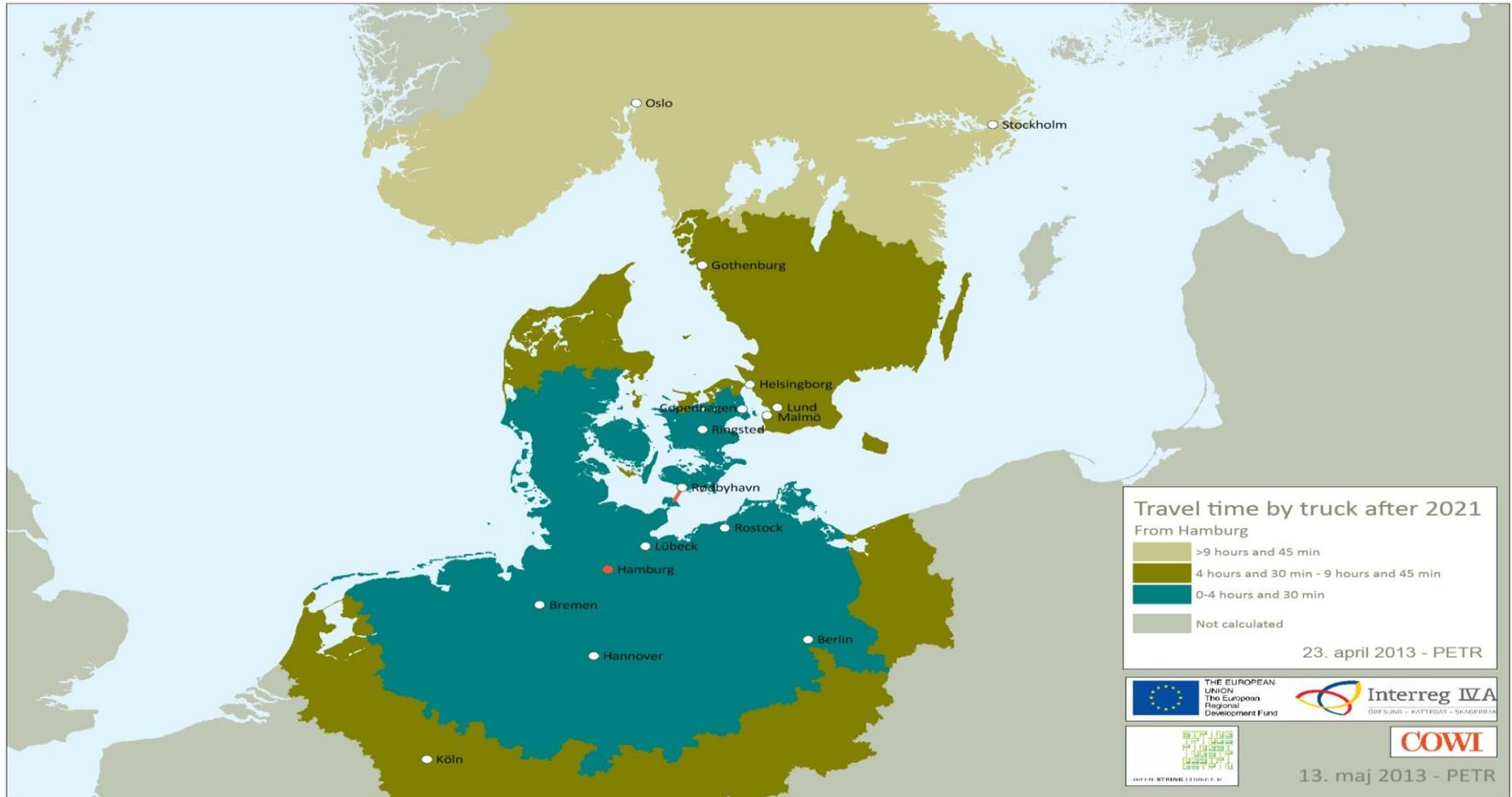
- ❑ The ports of the STRING Region forms a functional hierarchy:
 - Large intercontinental port(s)
 - Feeder and regional ports
 - Ferry and local ports
- ❑ Hamburg (and Rotterdam) main gate(s) for intercontinental freight flows to and from the STRING Region
 - 25 pct. of freight in transit via Port of Hamburg derives from Scandinavia
 - 50 pct. of all container transport to and from Zealand pass in transit the ports of Hamburg and Bremerhaven

Transport effects of a Fixed Fehmarn Link

Transport time by truck in 2021



GREEN STRING CORRIDOR



The Green STRING Corridor

An interregional co-operation

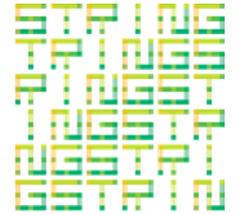


GREEN **STRING** CORRIDOR

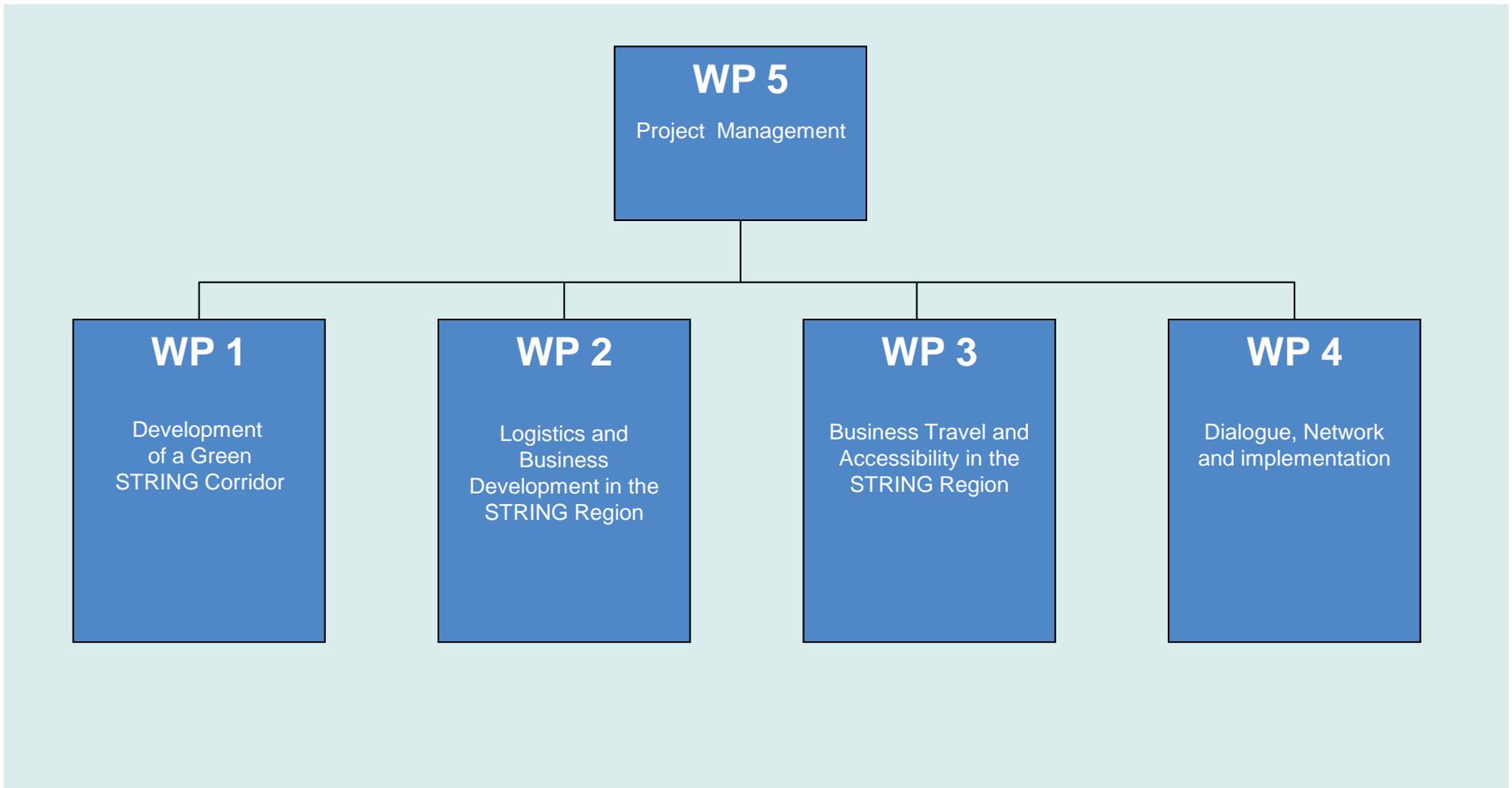


- ❑ The project is funded through the Interreg IVA Öresund Programme
- ❑ 11 Swedish and Danish partners
 - 3 regions
 - 5 municipalities
 - 2 universities
 - 1 national authority
- ❑ Project period: 2012-2014
- ❑ Budget: 2,8 mill. EURO

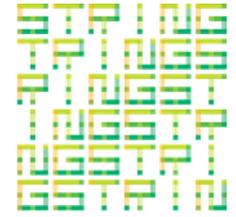
Activities



GREEN **STRING** CORRIDOR

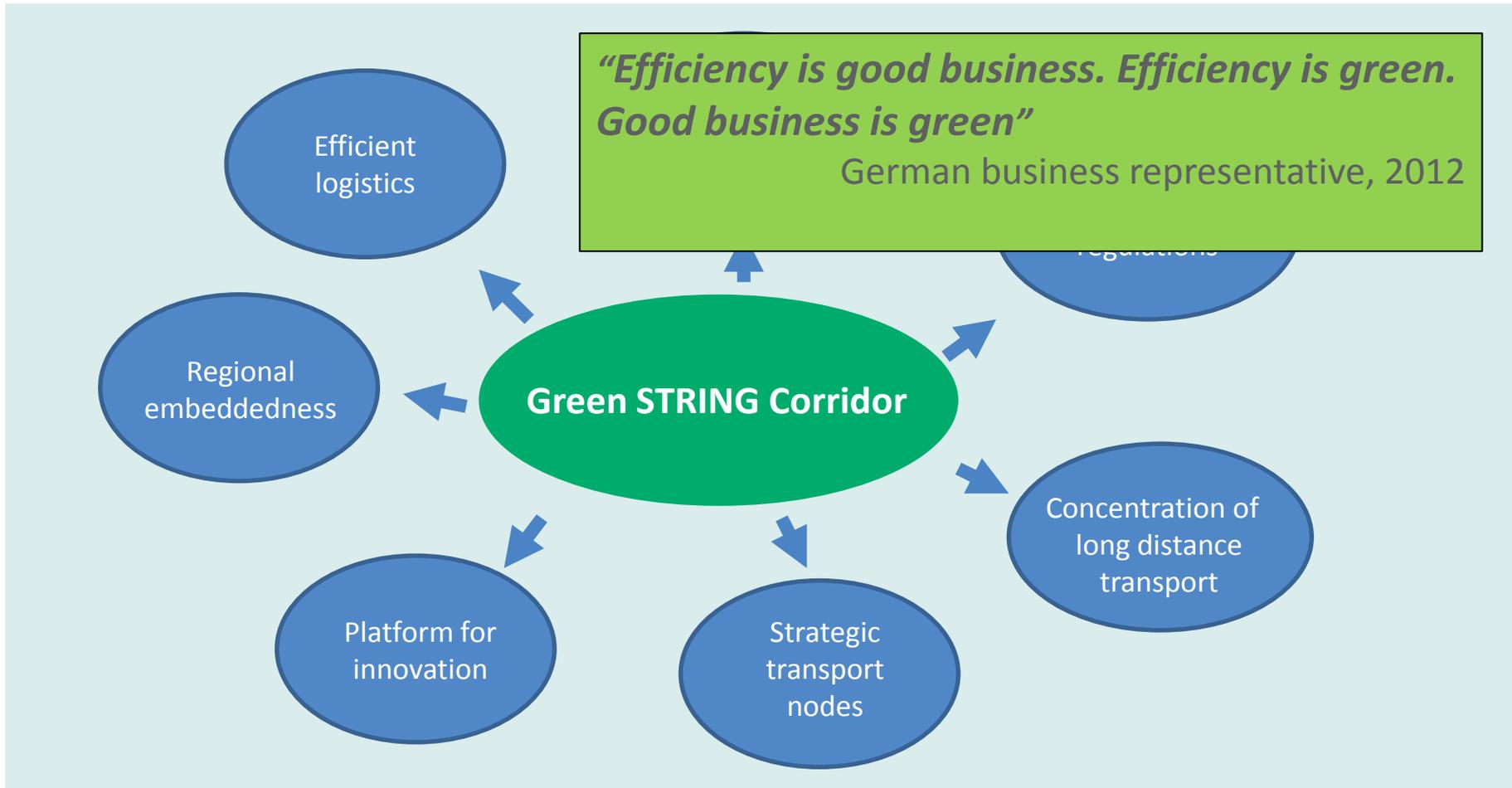


Issues for greener transport and logistics in the STRING Corridor

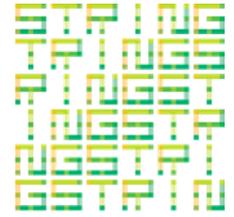


Theme 1 Development of a Green STRING Corridor

GREEN **STRING** CORRIDOR



Example of new fuels and zero emission technology in logistics and transport



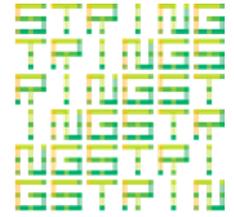
Theme 1 Development of a Green STRING Corridor

GREEN STRING CORRIDOR

- The road haulage firm Plyms Åkeri a first mover to use the alternative fuels of biogas and compressed natural gas (CNG) for trucks in Scania
- Average reduction in carbon dioxide emissions from using biogas or CNG instead of petrol is approximately 44-52 per cent
- Very nervous about upfront investment, but the payoff has been two-fold: keeping the customer plus efficiency gains
- Customer-driven innovation
- Available public infrastructure for LNG and CNG



Example of efficient intermodal logistics and transport



Theme 1 Development of a Green STRING Corridor

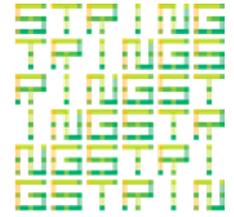
GREEN STRING CORRIDOR

Source: COOP, 2008



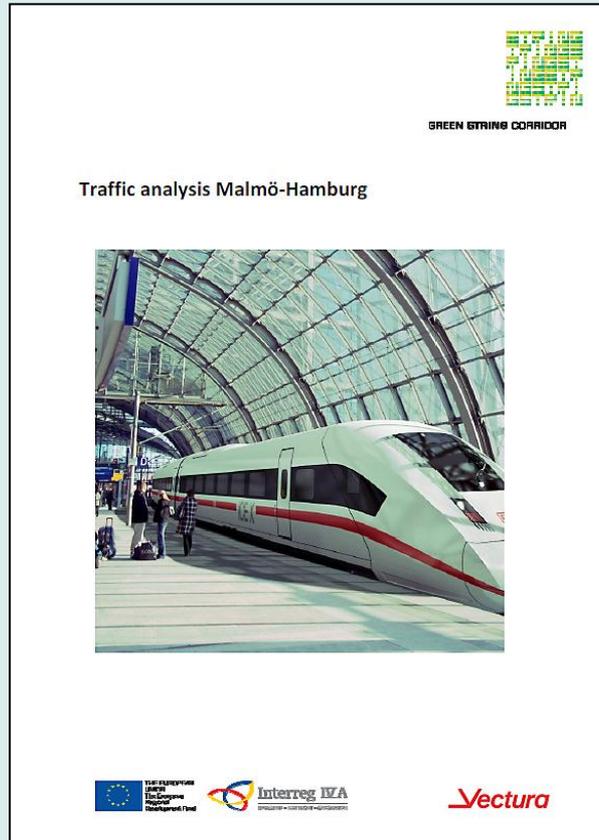
- COOP Sweden has decided to reduce the company's CO2 emissions with 40 pct. until 2020. A major step towards the aim has been to transfer large volumes of the domestic freight flow from trucks to freight trains. The gains are estimated to be 10 pct. of the targeted reduction of CO2.
- COOP Sweden started to run a system train with daily departures from Helsingborg with imported goods to the distribution terminals around Stockholm. From 9 to only 3 distribution terminals.
- Each train loads 36 trailers and results in 350 fewer trucks on the E4 every week and with an estimated reduction of CO2 of 6.500 ton per year.
- Risk management is required: 'putting all eggs into one basket' can be difficult if train service is interrupted

The railway corridor Öresund - Hamburg

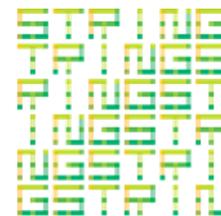


Theme 3 Business Travel and Accessibility in the STRING Region

GREEN **STRING** CORRIDOR



- How often can international passenger trains drive between Öresund and Hamburg
 - Every hour?
 - Every second hour?
- Can a fast ICE-train system be combined with an interregional train system between Öresund and Hamburg?
- The study has analysed relevant combinations of infrastructure and service levels
- A pre-condition for the study has been to combine passenger services with the already agreed level of freight train frequency in the corridor in 2021 (2 freight train per hour in each direction)

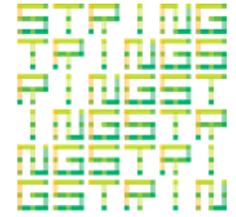


Travelling time Öresund - Hamburg

Theme 3 Business Travel and Accessibility in the STRING Region

GREEN **STRING** CORRIDOR

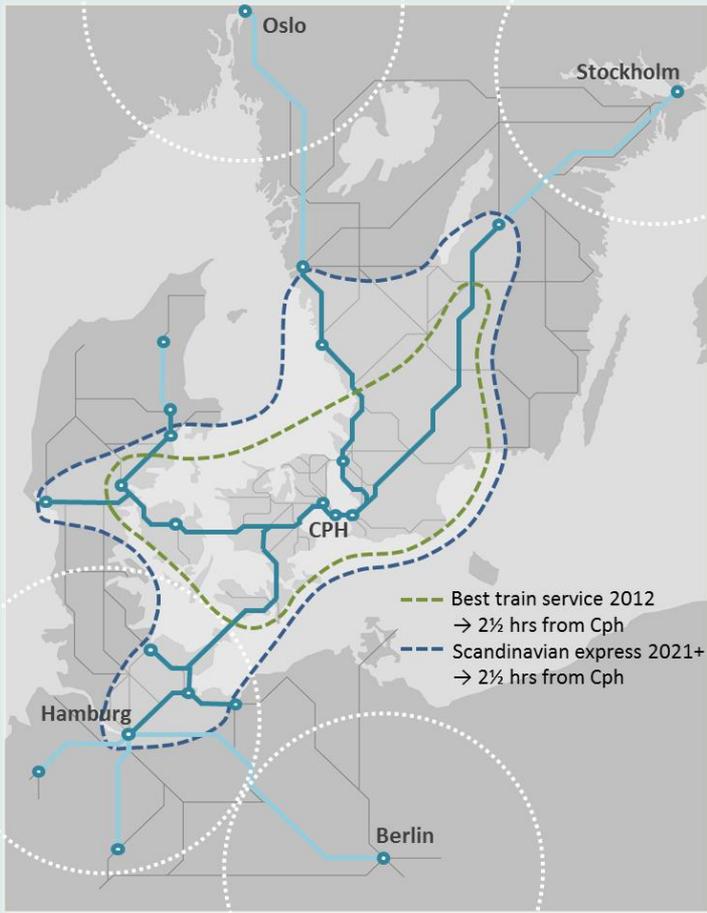
	Scenario 1 1IR/2h	Scenario 2 2IR/2h	Scenario 3 1IR+2ICE/2h
IR Hamburg – Copenhagen	3:15	3:05	3:05
ICE Hamburg – Copenhagen	-	-	2:15
ICE Hamburg – Kastrup	-	-	2:40
ICE Hamburg – Malmö	-	-	2:55



A Railway Corridor Öresund - Hamburg

Theme 3 Business Travel and Accessibility in the STRING Region

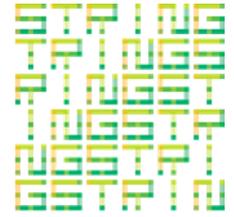
GREEN STRING CORRIDOR



- ❑ Travel times with double track in Germany and at the Storströms Bridge:
 - 3h 05 min for InterRegional trains Hamburg – Copenhagen
 - 2h 15 min for ICE trains Hamburg – Copenhagen – Malmö (3 hours)
- ❑ ICE travel times is comparable to air travel Hamburg – Copenhagen
- ❑ Possible to combine freight trains, ICE trains and regional trains with high speed and local accessibility in the corridor

Scandinavian Link

A business case for more efficient transport and logistics



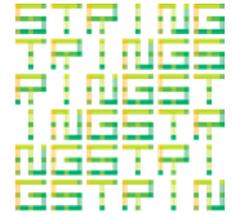
Theme 4 STRING Logistics Platform

GREEN STRING CORRIDOR



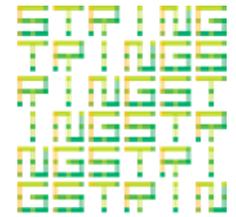
- ❑ Development of a dry port terminal in Zealand connected to global container ports on the European Continent
- ❑ Dry ports:
 - Increase the handling capacity in large continental ports
 - Gives regional accessibility to the railway corridor – minimizes the risk of just being a “transit corridor”
 - Offers an alternative to future road-based freight transport to continental ports

Summary



GREEN **STRING** CORRIDOR

- ❑ A competitive and efficient railway system for passengers and freight between Öresund and Hamburg is realistic and achievable, but it depends on...
 - Securing a coherent transport corridor with double tracks, electrified infrastructure and minimum speed of 200 km/h
- ❑ The STRING Region constitutes a functional region of trade.
 - Clusters of logistics and transport services could potentially be developed to a Northern European Logistics Hub for distribution between Scandinavia and the European Continent.
- ❑ A corridor perspective on freight and passenger transport is needed
 - Not only a question of physical infrastructure
 - Stronger emphasis on developing cross border cooperation between transport, and logistics providers and public authorities



GREEN **STRING** CORRIDOR

Thank you!

Leif Gjesing Hansen

Region Zealand

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