

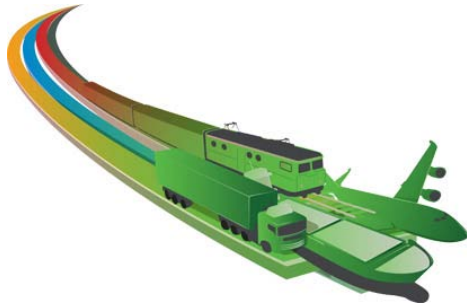
Swedish Green Corridor initiatives

Arvid Guthed, Port of Gothenburg and Maria Jobenius, Scania
EU GREEN CORRIDORS CONFERENCE
TOWARDS CLIMATE NEUTRAL FREIGHT TRANSPORT

Brussels 9 December 2009



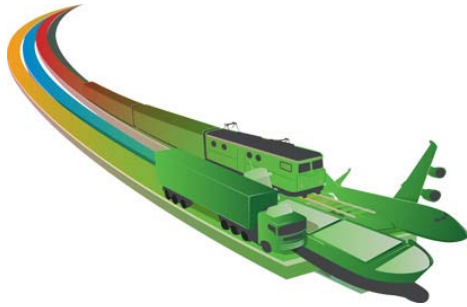
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The Swedish approach

- § **Bottom up**
- § **Involvement from government, authorities and companies**
- § **Anchored with the EU Baltic Sea Strategy**
 - § East West Transport Corridor II
 - § Scandria
 - § TransBaltic
- § **Continuous dialogue**
 - § Working groups: Market, Intermodal, Innovation & Technology, Policy and Communications
 - § More than 30 running projects and proposals
 - § Visby Meeting and Seminar 30 June
 - § ITS World Congress 21-25 September i Stockholm
 - § Green Corridors conference 24 November Stockholm

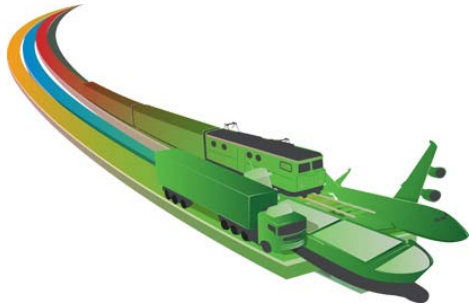




Challenges ahead

- § **A safe and sustainable low carbon, resource-efficient economy**
- § **Sustainable production in the transport sector**
- § **More sustainable life-styles**

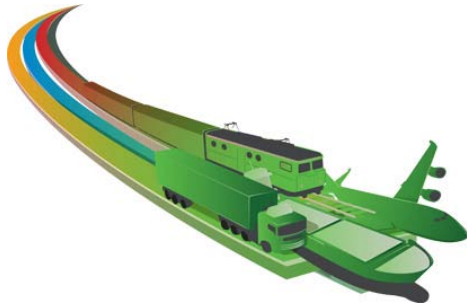




Green Corridors – the Swedish initiative

- § **Swedish initiative within the Logistics Forum**
- § **Kick-off 1 October 2008**
- § **Objectives:**
 - to demonstrate efficient transport solutions
 - to promote development of Green Corridors in EU transport policy
 - to establish partnership for European Corridors

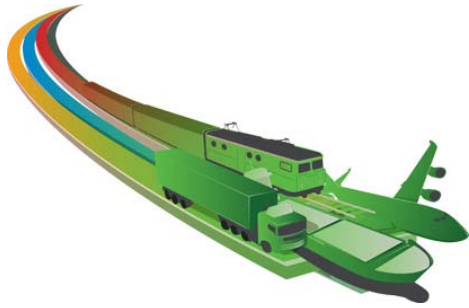




What is the aim of Green Corridors?

- § **Enabling cost-efficient, reliable logistics solutions that address the negative impact of transportation**
- § **Proof of concept – it can be done!**

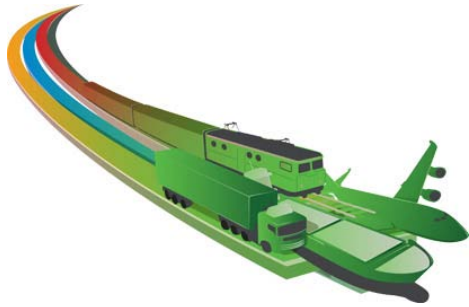




How to achieve Green Corridors?

- § **Sustainable logistic solutions**
- § **Co-modality**
- § **Harmonised system of rules**
- § **Concentration of freight flows**
- § **Effective transshipment points**
- § **Platform for innovation**

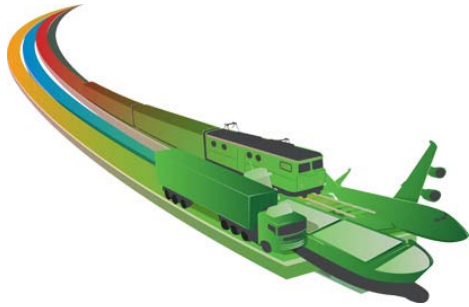




Sustainable logistic solutions

- § **Environmentally**
- § **Financially**
- § **Reliability**
- § **Socially**

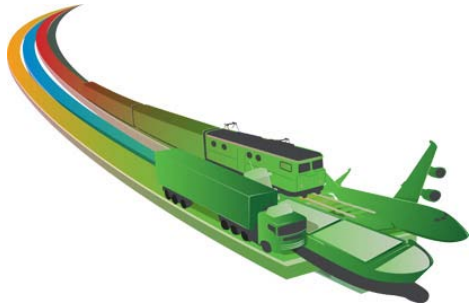




Co-modality

Use of different modes on their own and in combination with the aim to obtain an optimal and sustainable utilisation of resources in the supply chain

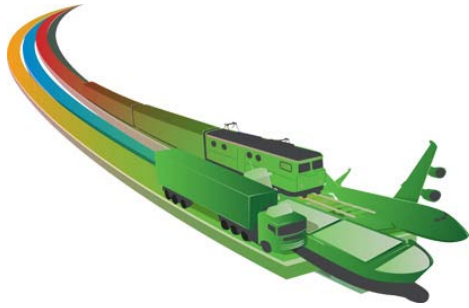




Harmonised system of rules

**Focus on transport from a customer
perspective with harmonised system of rules
with openness for all actors**



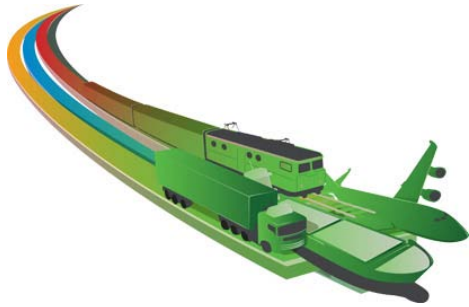


Concentration of freight flows

Creating economies of scale for co-modality

A concentration of national and international goods traffic on relatively long transport stretches.

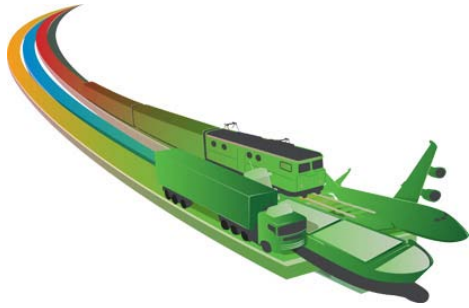




Effective transshipment points

- § **Co-modality is made possible through co-modal terminals providing technical interfaces to various modes** (*enabling physical handling*)
- § **Co-modal terminals must also provide an information interface** (*ordering physical handling*)



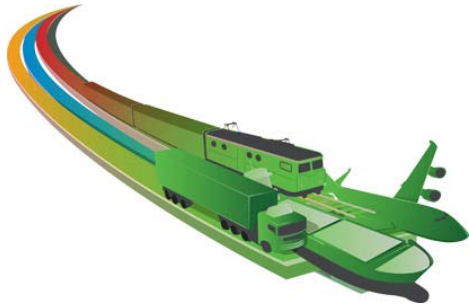


Platform for innovation

From effectiveness to efficiency

- § Green Corridors – *do the right thing*
- § Green Corridors as platform for innovation – *do the right thing right*

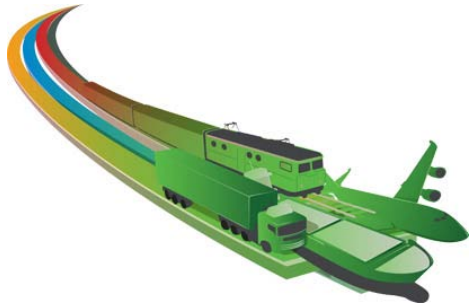




Green Corridor 2.0 – what is needed?

- § Political support – all levels**
- § Stakeholders involvement; goods owners etc**
- § Pilot corridors**
- § Innovative solutions**
- § Low hanging fruits**
- § New business models**
- § Rules/regulations for test period/area**
- § Eliminated bottlenecks**





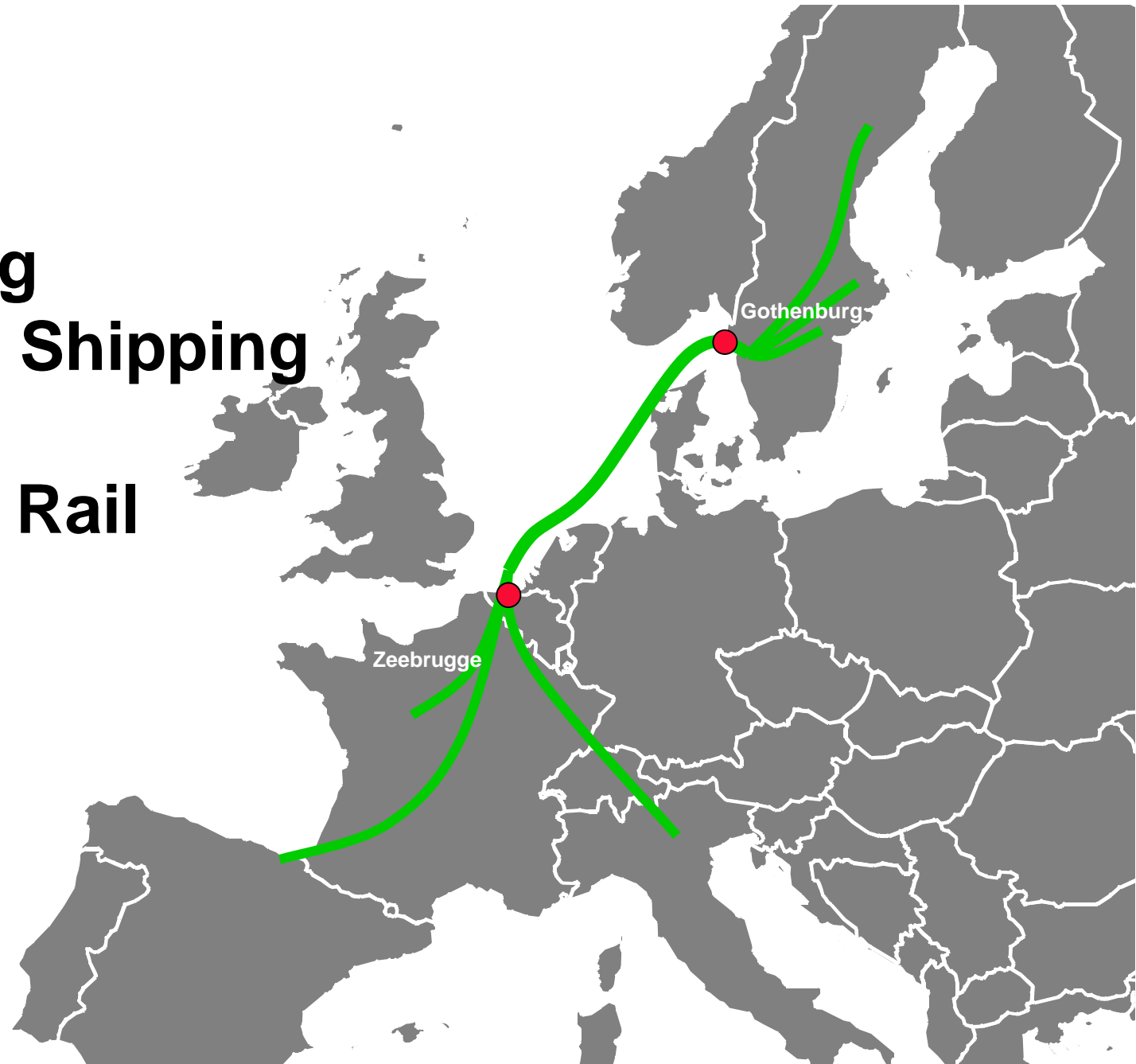
Proof of concept

§ **Green Corridor Gothenburg – Zeebrugge**

§ **Intermodal fashion transport**




Combining Short Sea Shipping with Co-modal Rail



Joint Venture Partners

 STORAENSO goods owner

 green cargo Rail operator

 GÖTEBORGS
HAMN Port terminal operator
THE PORT OF SCANDINAVIA

 COBELFRET Shipping line

 sea-ro terminal nv Port terminal operator

 B CARGO Rail operator

 TRANSCORE System provider



Building on "green" performance.....



Reduced Fairway Due (NOx)



Signal	Fartygsnamn	Land	Kväve	Svavel
1	PCHB SLINGEBORG	NEDERLÄNDERNA	0.1	1
2	PCHC SCHIEBORG	NEDERLÄNDERNA	0.2	1
3	SEAI VIKING CINDERELLA	SVERIGE	0.2	0.5
4	OVIC2 TYCHO BRAHE	DANMARK	0.3	0.2
5	OZMH2 HAMLET	DANMARK	0.3	0.2
6	PCGE SPAARNEBORG	NEDERLÄNDERNA	0.3	1
7	SCQX AURORA AF HELSINGBORG	SVERIGE	0.3	0.2
8	SKEC TRANSPAPER	SVERIGE	0.4	1
9	SKEI TRANSPULP	SVERIGE	0.4	1
10	OJLF BIRKA PARADISE	FINLAND	0.4	0.5
11	SLGW SIGYN	SVERIGE	0.93	0.5
12	OJDM BIRKA SHIPPER	FINLAND	1	1
13	SEBR OBBOLA	SVERIGE	1	1
14	SECN ORTVIKEN	SVERIGE	1	1
15	OJDA BIRKA EXPORTER	FINLAND	1.1	1
16	OJMP BALTIC EXCELLENT	FINLAND	1.1	1
17	OVS2 MERCANDIA VIII	DANMARK	1.1	0.2
18	SEAN STENA JUTLANDICA	SVERIGE	1.2	0.5
19	SECG OSTRAND	SVERIGE	1.2	1
20	OXIE2 MERCANDIA IV	DANMARK	1.3	0.2

Presentation to Sea Line
2008-03-04 by Sig Wiklund

Logistics

- Shoreside electricity in ports (no emissions, no noise)
- Low sulphur fuel, (approx. 0,8 % S)
- NOx reduction >95% (SCR, 0,2 g NOx/kWh).
- OXI-step for perfect combustion (reduction of hydrocarbons and particles)

One Stop Shopping

Multimodal Control Tower:

- Webbased interface
- Status reporting
- e-administration
- Carbon footprint
- KPI:s
- Analytics



Carbon Footprint Calculator

THE GREEN MACHINE
Carbon Footprint Analyzer

Lane Level
 Network Level
 Help

Current Network

Step 1: Enter the total tons of freight shipped:

Enter average truck weight(tons):

Step 2: Enter the length of haul:

Enter Distance
 Route Between Cities

Green Network

Step 3: What if : You went green?
Move the sliders to see emissions savings

Truckload to Intermodal 0%

Truckload to Rail 0%

Emissions Profile: Current Network

Truck CO2

Footprint(tons)

Emissions Profile: Green Network

Truck, Rail, Intermodal

Footprint(tons)

What do these savings mean?

Number of Cars off the road!

Number of Trees Planted!

Shipping by Rail reduces emissions by tons

*The emissions analysis provided above was developed by Norfolk Southern for estimating purposes only. For a detailed analysis of actual emissions savings opportunity please contact Modalgistics at www.modalgistics.com or contact your Norfolk Southern account representative.

Courtesy Norfolk Southern & Modalgistics

Project status

Transport system analysis



Frequency

Schedules

Capacity

Market analysis

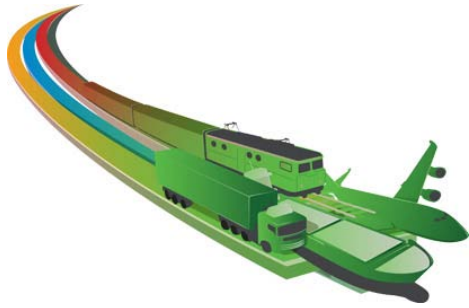


Green corridor vs. road on selected destinations

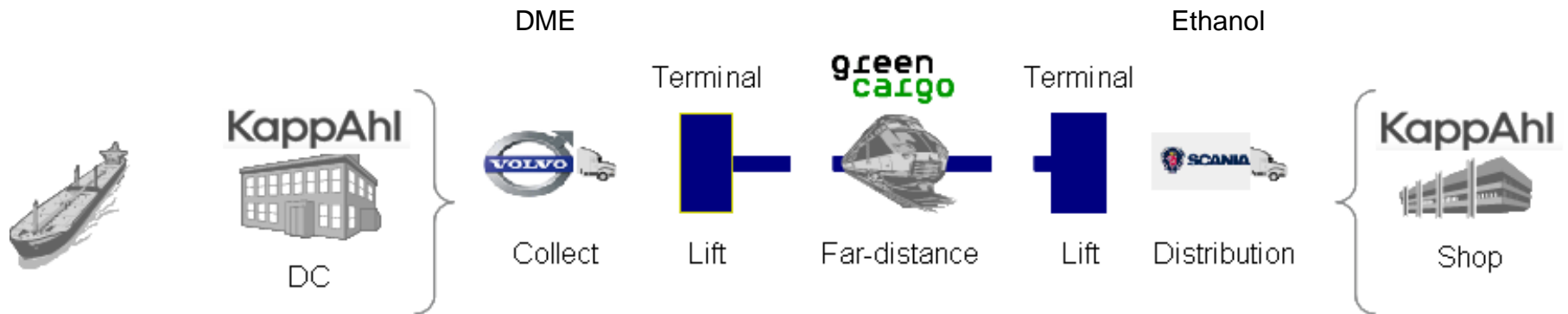
Work in progress/ahead

Deepened market analysis

Start-up



A new standard for sustainable transports



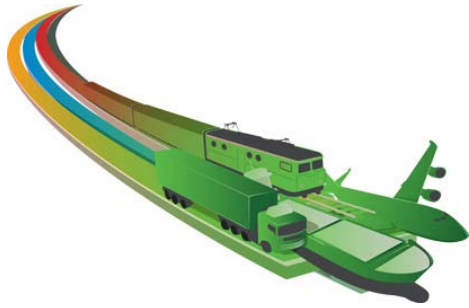
FILM GreenCargo, Scania, Volvo

www.greencargo.se

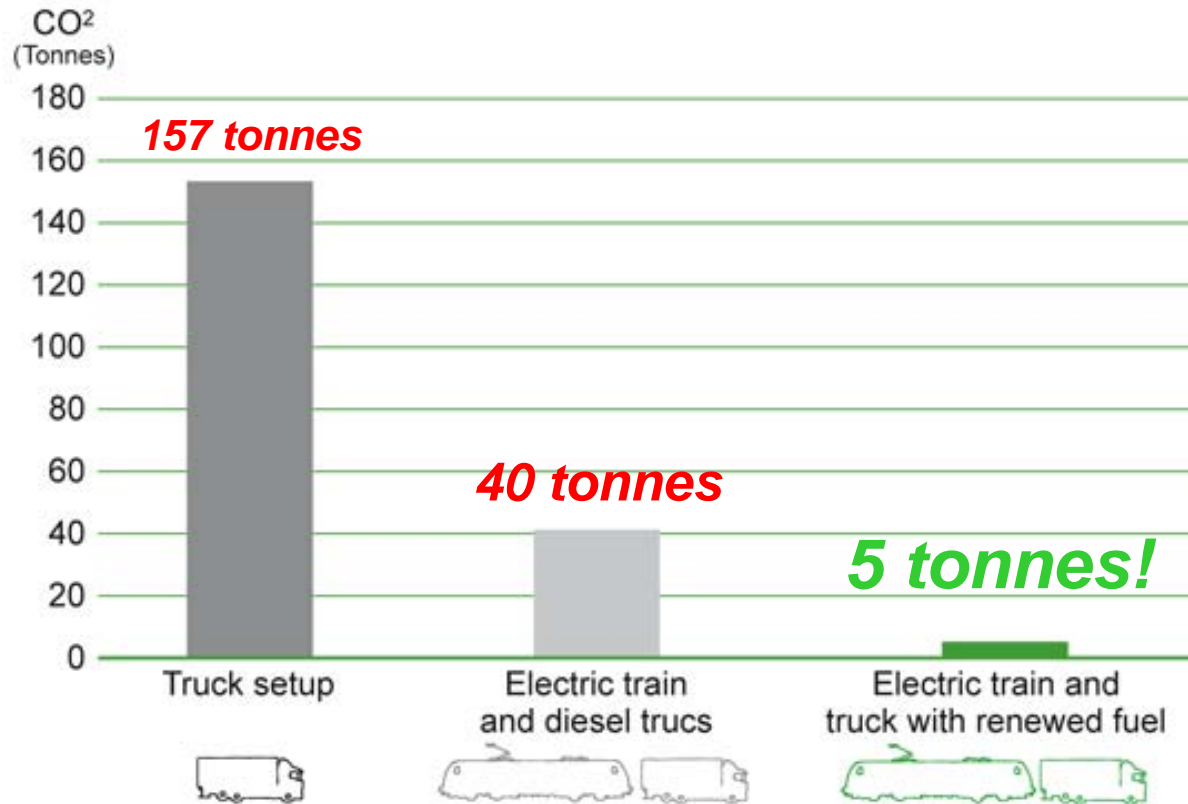
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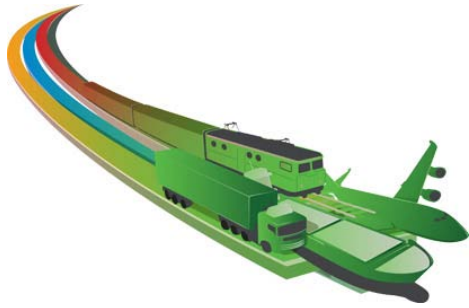


SCANIA



With the new solution KappAhl- transports goes from good to great





Proof of concept

- § **Alternative fuels**
- § **Standardised cargo modules**
- § **IT solutions**

- § **MENTAL SHIFT, complete and not compete**

