

Green Logistics at DB Schenker



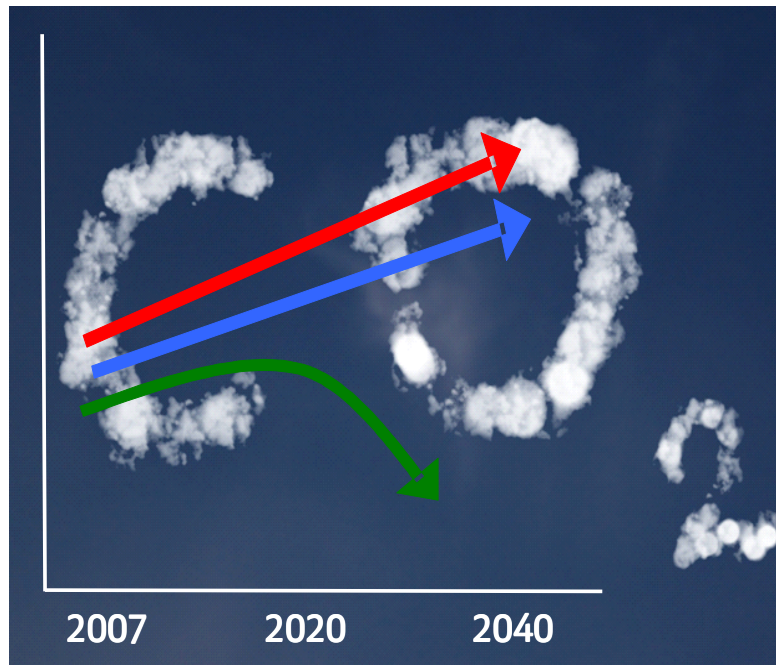
Green Corridors

Green Logistics Team, HO Essen

Brussels, December 9, 2009

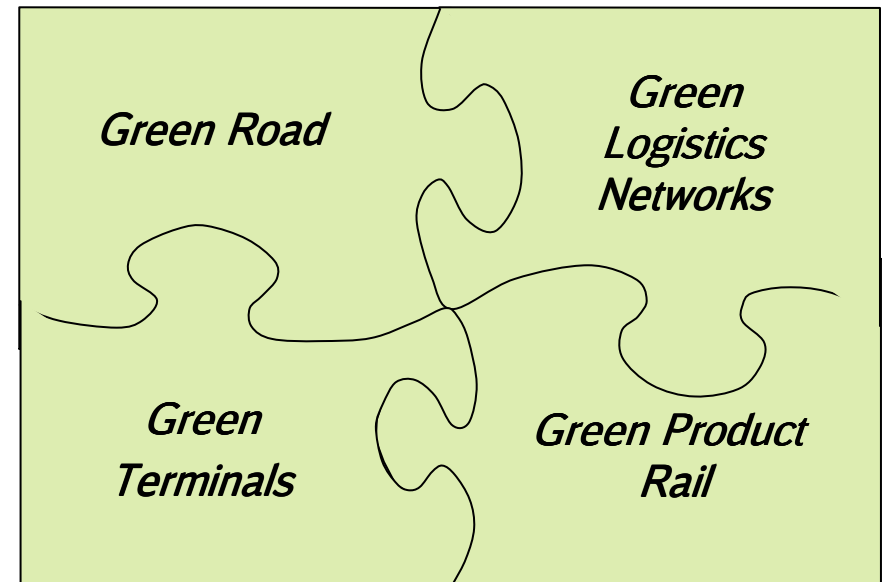
DB Schenker's claim: Becoming the leading green transport and logistics provider

We decouple CO₂-emissions from transport growth...



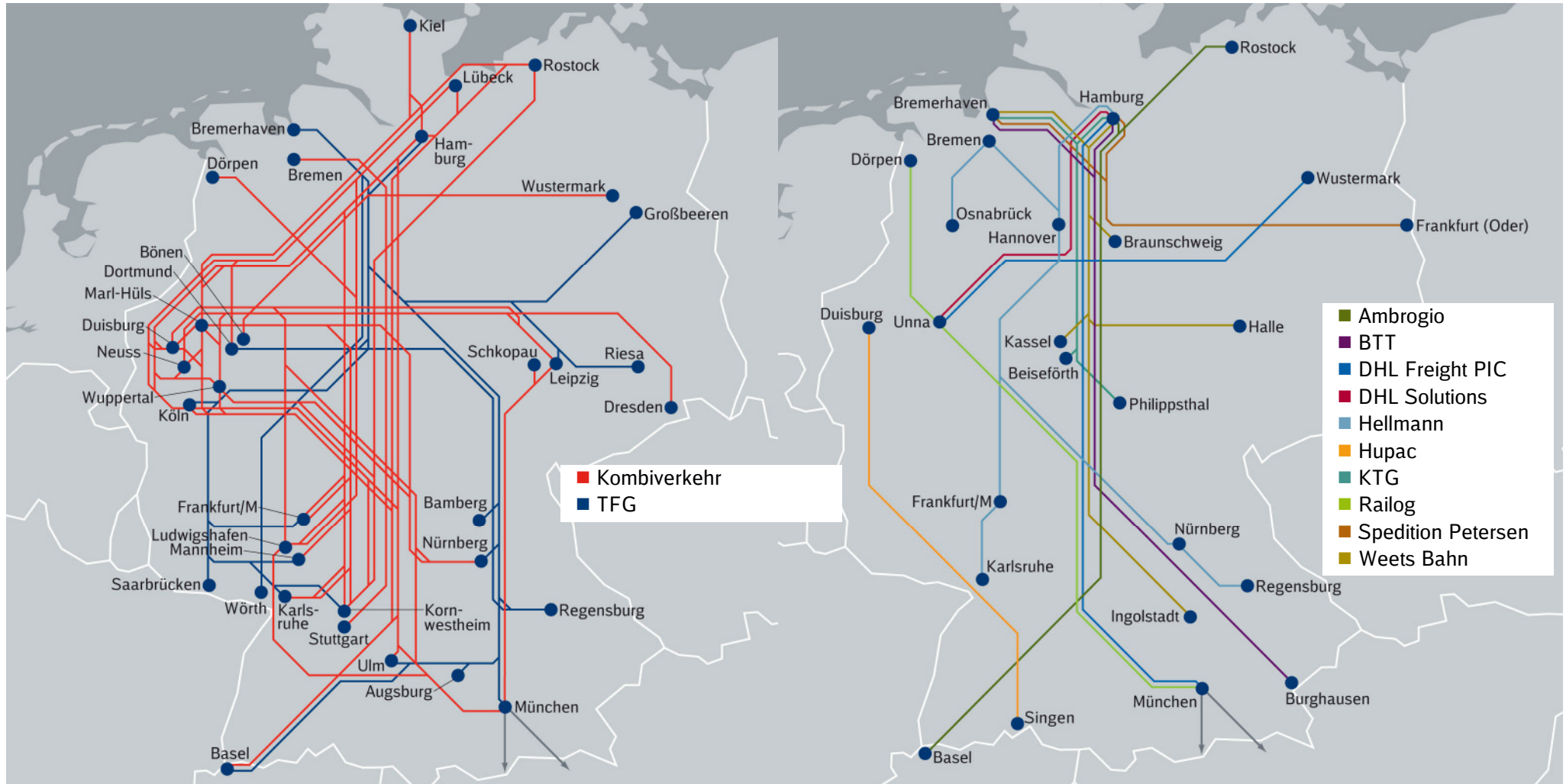
- Transport growth
- World GDP
- CO₂ by transports

...and further develop sustainability as USP for DB Schenker

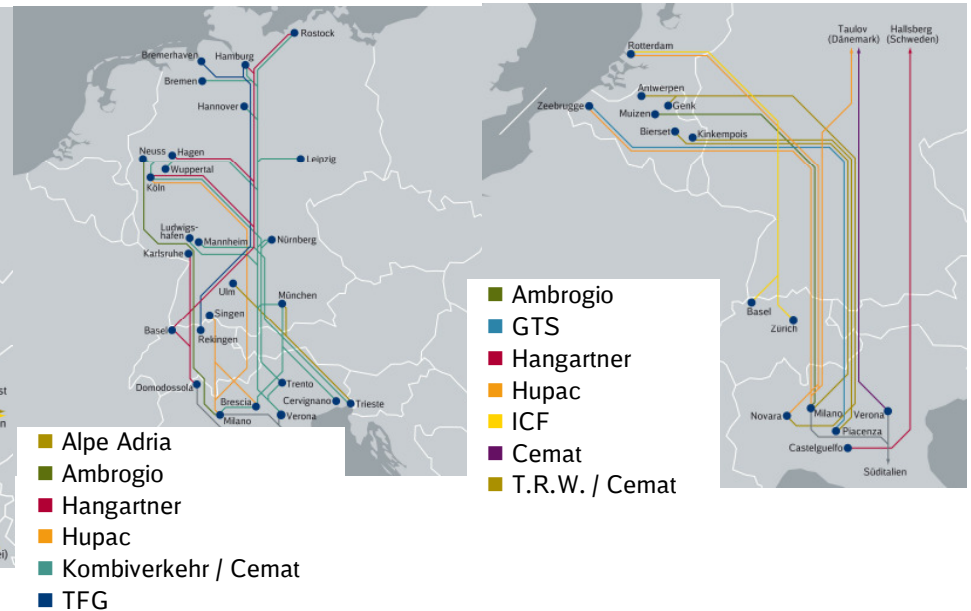
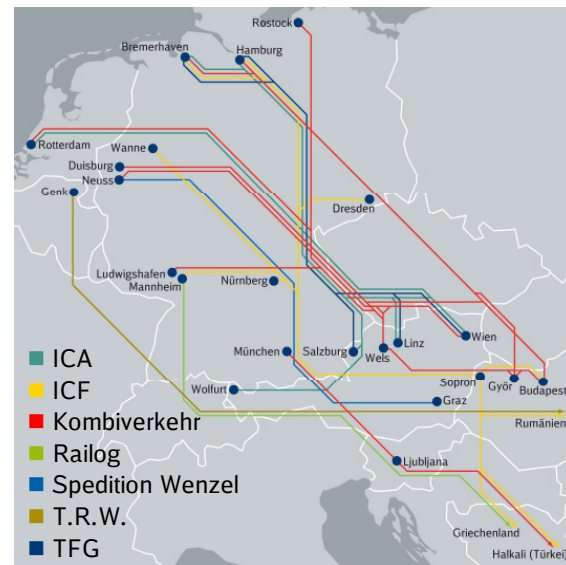
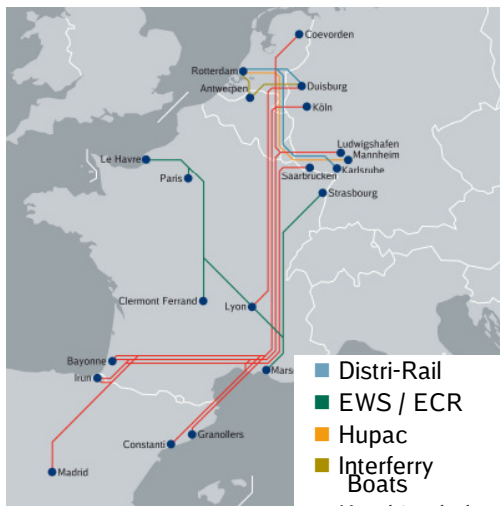
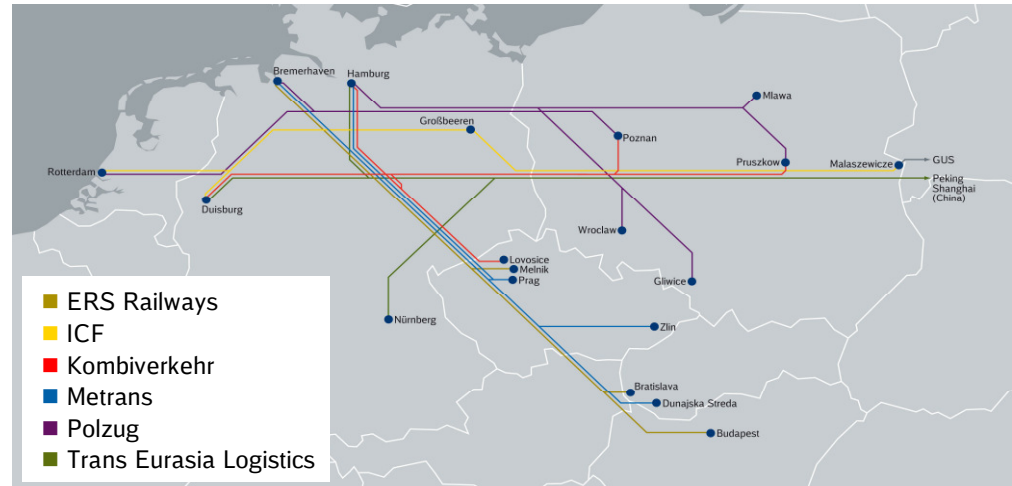
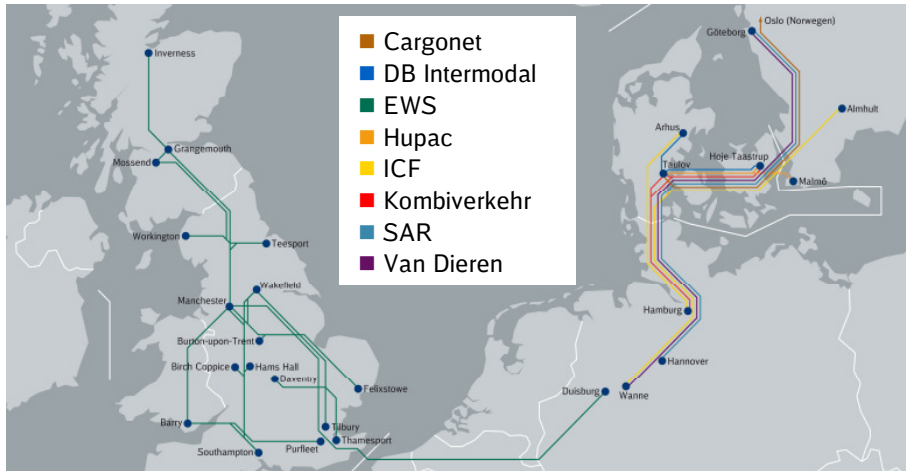


„Green” flagship projects for implementation of Green Logistics defined

Rail Network Germany



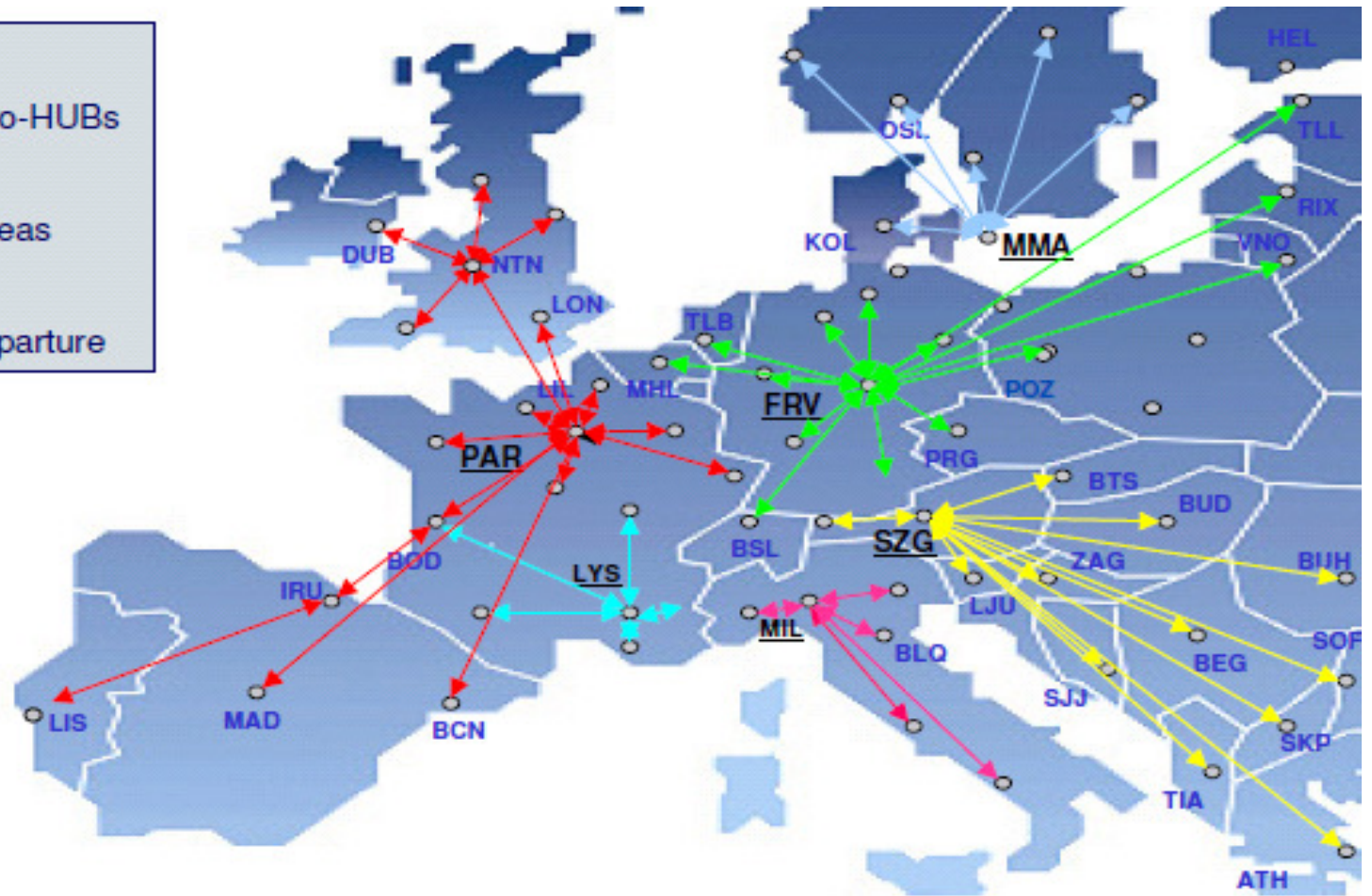
Rail Network Europe



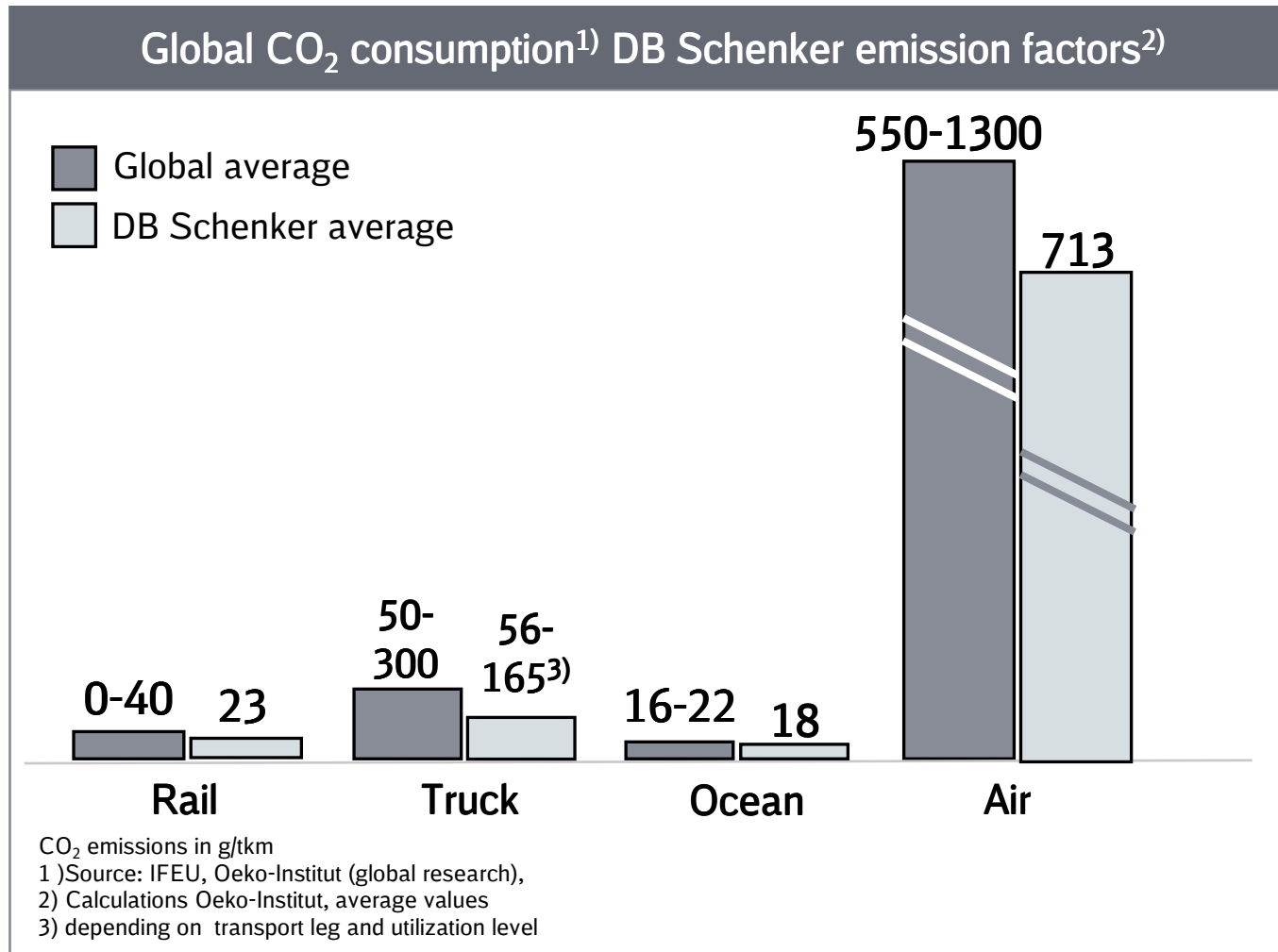
European Road Hub System

Requirements:

- Daily connections between Euro-HUBs and Regional-HUBs
- Daily connections to defined areas (own region / countries)
- Agreed scheduler arrival => departure



DB Schenker's own average statistical emission factors already lower than global average



- Method Rail: total fuel consumption related to total transport service in tkm
- Method Truck: Analysis of 1.5 million shipment data re. each single leg, truck size, Euro norm and load factor (incl. empty trips)
- Method Ocean: All shipments per annum, vessel sizes on main tradelanes incl. load factor + distance correction factor
- Air Method: All shipments per annum, average aircraft type (hybridized) per trade incl. load factor + distance correction factor

The flagship Green Road project launches a whole package of measures to reduce CO₂ emissions from road transportation



Green Road

- Reduction of specific CO₂ emissions of DB Schenker land transport through various energy efficiency measurements
- DB Schenker's land transport in Sweden and Norway aim to cut their CO₂ emissions by 50% by 2020
- Aim to roll out measures throughout Europe, e.g. eco-driving

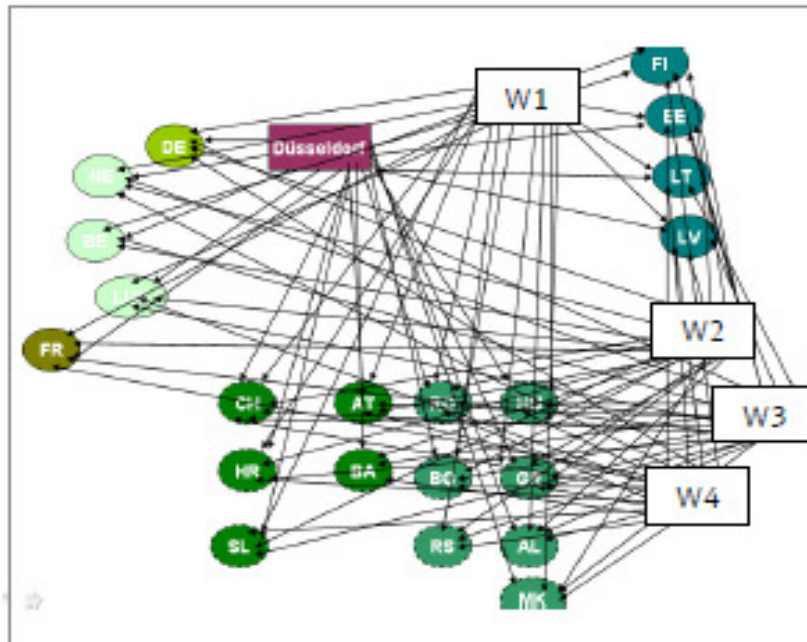


Specific CO₂ reduction measures

1. Fuel-efficient driving
2. High capacity utilization due to network effect
3. New modern vehicles
4. Improved fuels
5. Modal shift to rail
6. Environmental certification and controlling
7. More combined transports

Example: Green Consulting for customer (transport restructuring)

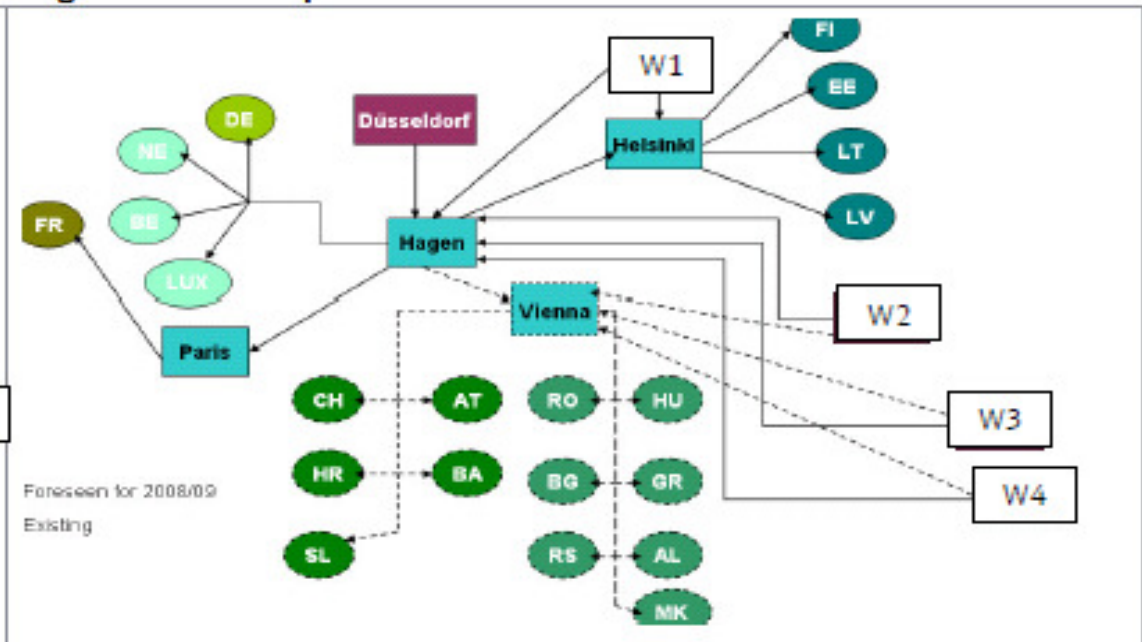
Previous Structure



Previous set up:

Customers' cargo from the different factories in Europe was sent directly to the different customers in Europe

Merge in transit concept

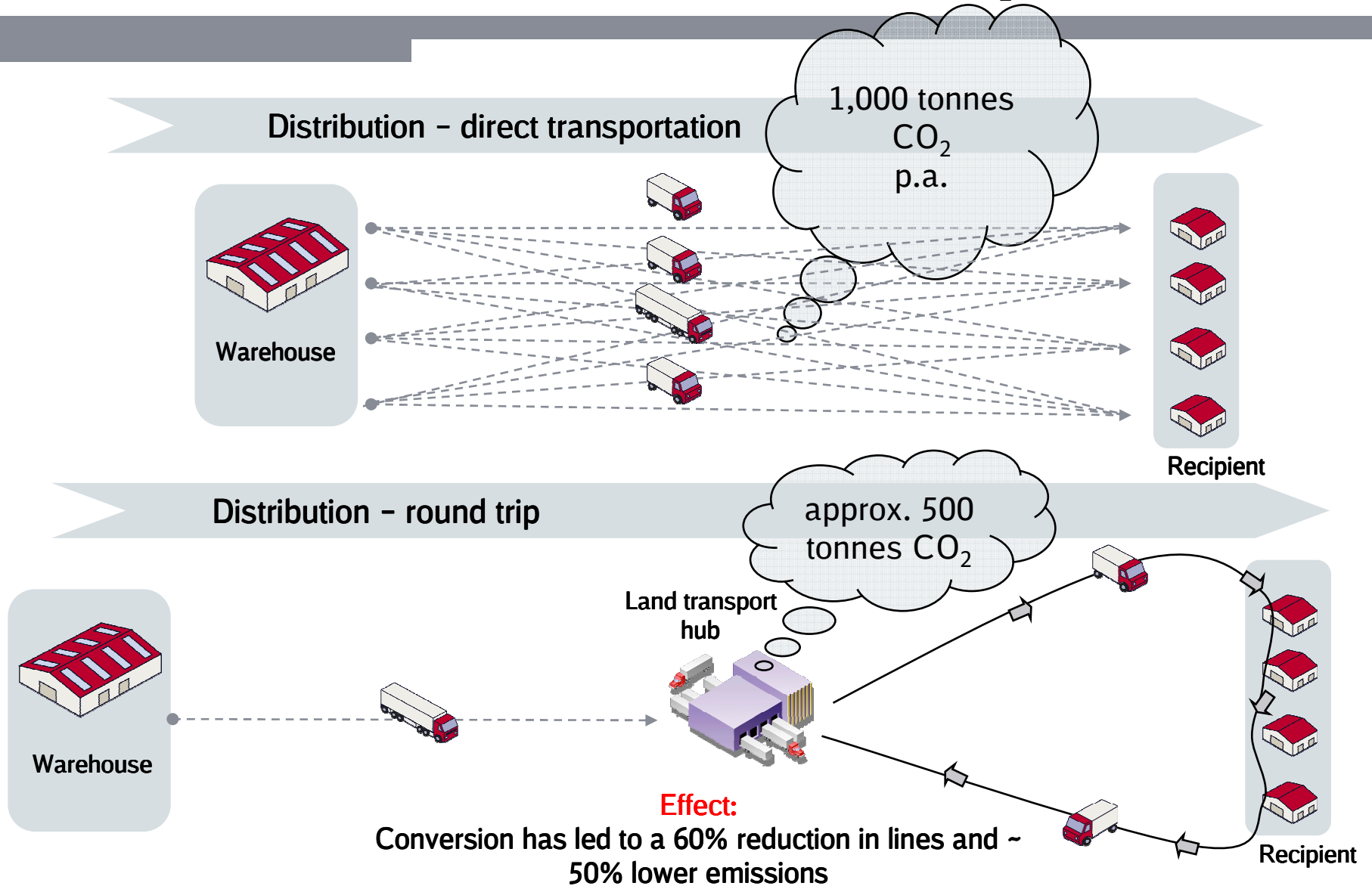


New set up:

Customers' cargo from the different factories in Europe is merged in transit and delivered to the destinations as combined shipments. Monetary and environmental benefits for customer



Example from land transport: continuous optimization of the transportation chain has cut costs and CO₂ emissions



Target of Green Terminals is the implementation of economically-friendly measurements for stationary equipment



- Reduction and optimization of CO₂-emissions in existing DB Schenker terminals and terminals under construction
- Implementation of environment-friendly measurements in **existing terminals** only viable in a **limited extent** (e.g. reconstruction of power supply via photovoltaic)
- ▶ Integration of sustainable measurements right from the start of **new-build terminals** worthwhile



CO₂-reduction may be realized by:

- Photovoltaic
- Geothermal energy
- Wind power plants
- Innovative lighting systems
- Architecture and Layout
- Optimization of logistics systems
- Innovative material handling



For rebuilding the DB Schenker megahub in Melbourne economy and ecology were connected



Facts:

- Location airport Melbourne
- Terminal with 11.000 m³ Logistics- and 2500 m³ Office space
- Contemplation of former 4 offices and 230 employees
- Every day: 300 truck runs, 2.000 t airfreight and 150 ocean freight-container
- Opening July 2009

Implementierte Umweltmaßnahmen

- Supply of water- and sanitary stations with a 450.000 l rain water tank
- Solar power for hot water
- Solar power for energy supply
- Change of 80% of all forklifts on electronic mode
- Reduction of waste by 60% through own recycling programs
- Terminal's geographic location reduces energy usage of air-conditioning by 40%

Building complies with Green Star standard, a national not-mandatory standard, which evaluates environmental-friendliness of buildings

Analysis of terminal environmental data

Country	Env. Item	Reduction/Improvement	Reduction/Improvement			
		Achieved in 2008 (%)	Target for 2009 (%)	cost relevant	image relevant	environment impact*
	Oil					
	Gas					
	Electricity					
	Water					
	Paper					
	Recycling					
	Others					
	Heating Energy					

With EcoTransIT, customers can analyze the environmental effects of a transport per transport mode

Example EcoTransIT-calculation:
1000 t from Rotterdam to Madrid



Rail transport saves
125 t CO2 compared
to road



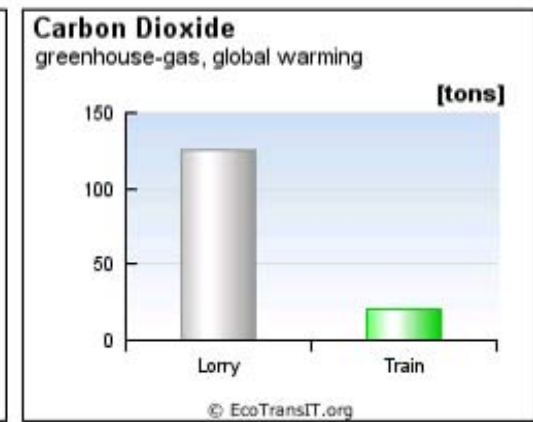
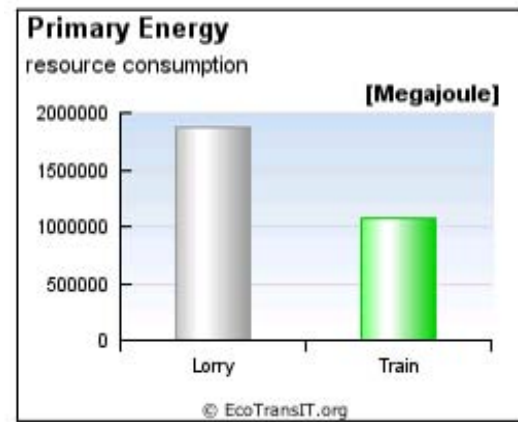
Origin: → City [nl-3046] Rotterdam De Zweth
 Please select from the list or go back and fill in a location nearby.

Destination: → Station [es-28032] MADRID
 Please select from the list or go back and fill in a location nearby.

Cargo weight: Tons: 1000 Type: average goods

Transport Modes:

- Lorry
- Train
- Inland ship
- Sea ship
- Air plane
- Combined transport / Individually designed route



New DB Eco Program supports DB's projects and engagement towards sustainability

„Who transports a lot also has a big responsibility towards the environment. If we don't do anything for the environment, the costs of environmental damage will clearly exceed the costs of current economical crisis.“

