



Cluster for Logistics
Luxembourg
a.s.b.l.

ADDING VALUE IS THE KEY

Logistics Business forum 2012 > 1

Co-modality: Now and Tomorrow



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Modal shift evolution

➤ **Intermodal?**

➤ using multiple modes of transportation (rail, ship, and truck), without any handling of the freight itself when changing modes

➤ **Multimodal?**

➤ a transport operation that is carried out using different modes of transport and organised by a single operator

➤ **Co-modal?**

➤ use of different modes separately and in combination in the aim to obtain an optimal and sustainable utilisation of resources

➤ European Transport Vision¹ :

- 30% of road freight over 300 km should shift to other modes such as **rail** or **waterborne** transport by 2030, and more than 50% by 2050
- More efficient transportation (**co-modality**)
- A reduction of at least **60%** of Green House Gas (GHGs) by 2050
- Development of **green corridors**

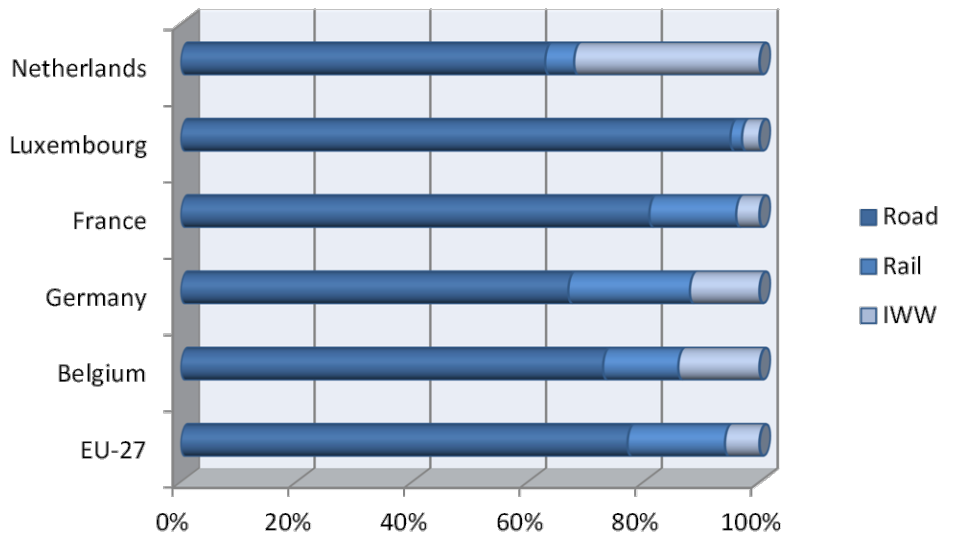
➤ Economic

- “I don’t mind to be green but **what’s in for me?**”
- ... And how much will it **cost?**
- Globalisation moves on and traffic growth
- How to deal with **oil price fluctuation?** What will be my **business model?**

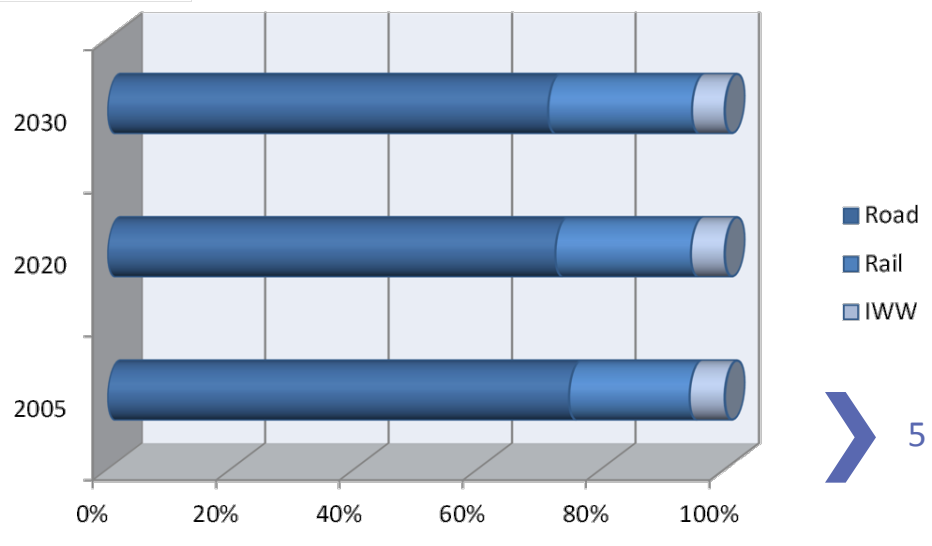
➤ Environmental

- Taxes and norms/standards **constraints**
- **Quotas**

Modal split of inland freight

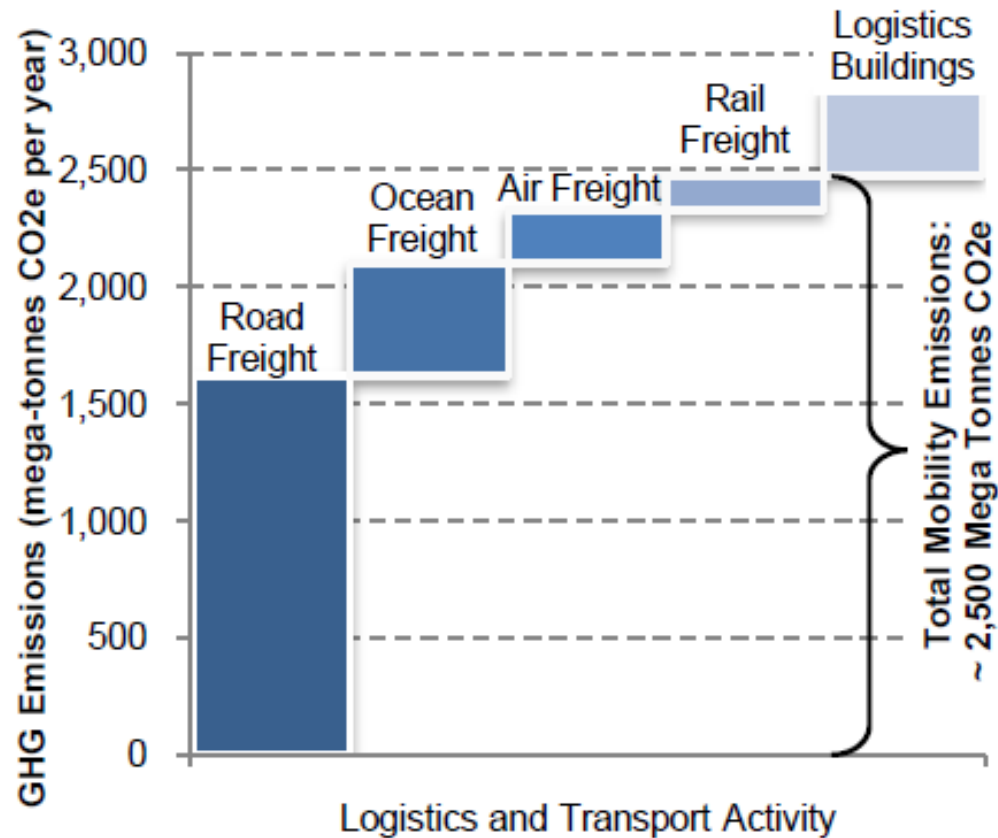


Eurostat, % freight Tkm in 2009



Traffic Forecast EU-27 (% freight Tkm), TENConnect (DG-TREN), 2009

Environmental impact



World Economic Forum, Supply Chain Decarbonisation, 2009

- Human activity: GHG 50 million Tons CO₂ e/year
- Logistics and transport sector: 5.5%

Challenges

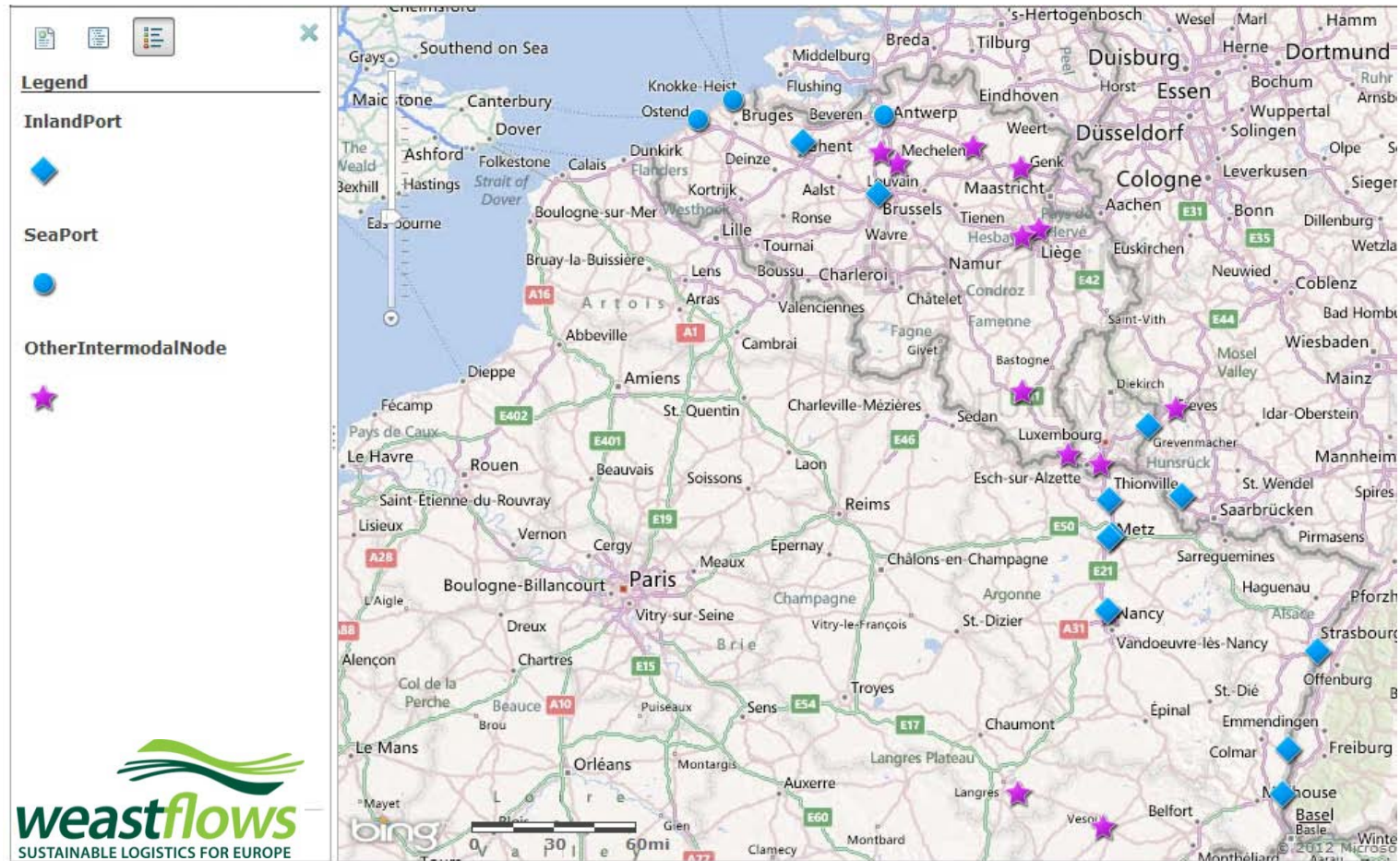
- **How to match new business models considering constraints?**
- Infrastructure: energy, networks, interconnections...
- Transportation equipment: handling systems, loading units...
- IT systems: trace & tracking, interoperability, collaborative platforms...
- Legal framework: labour conventions, administrative bottleneck, harmonisation...

Infrastructure - Road



Weastflows Project, GIS system, 2012

Infrastructure - Nodes



Weastflows Project, GIS system, 2012

Transportation equipment



Freight wagon with a swingable pocket
(Kockums Industrier, SE)

Automated and parallel transshipment process
(CargoBeamer, DE)



Transportation equipment



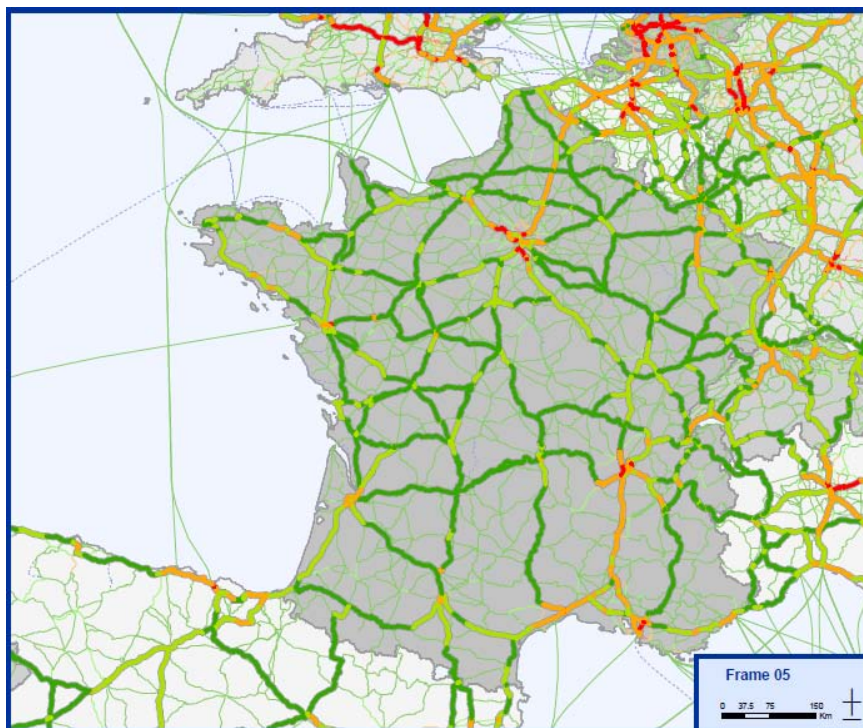
**Low-floor articulated railway
Wagon (Modalohr, FR)**

Crane system

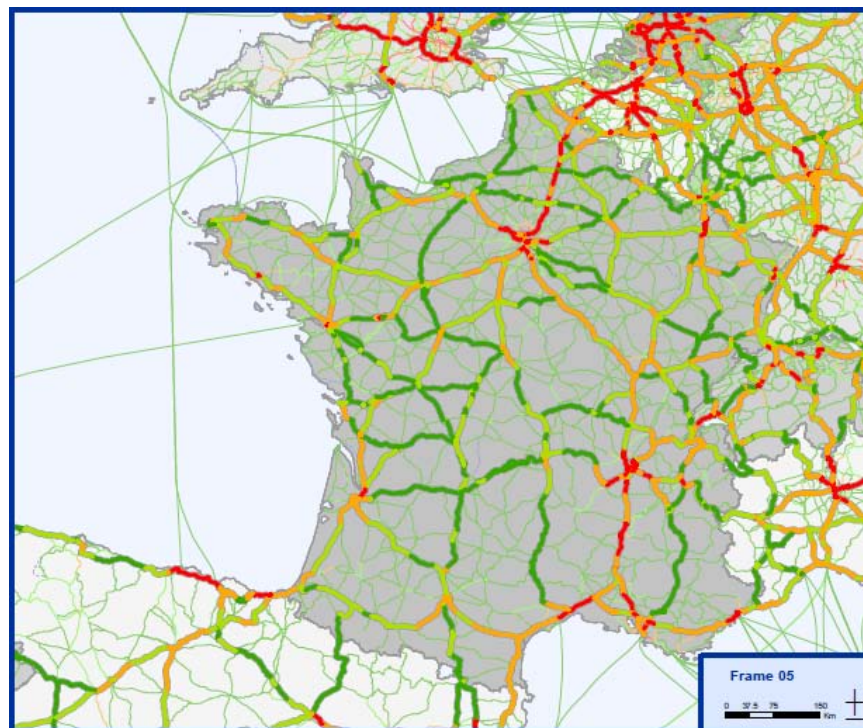


Road traffic load forecast

Baseline-2005



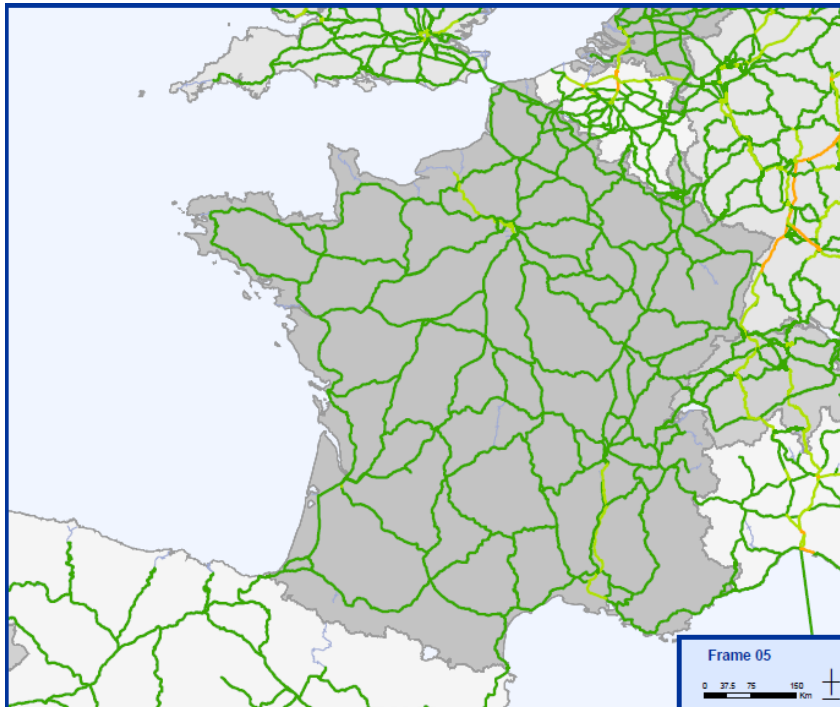
2030



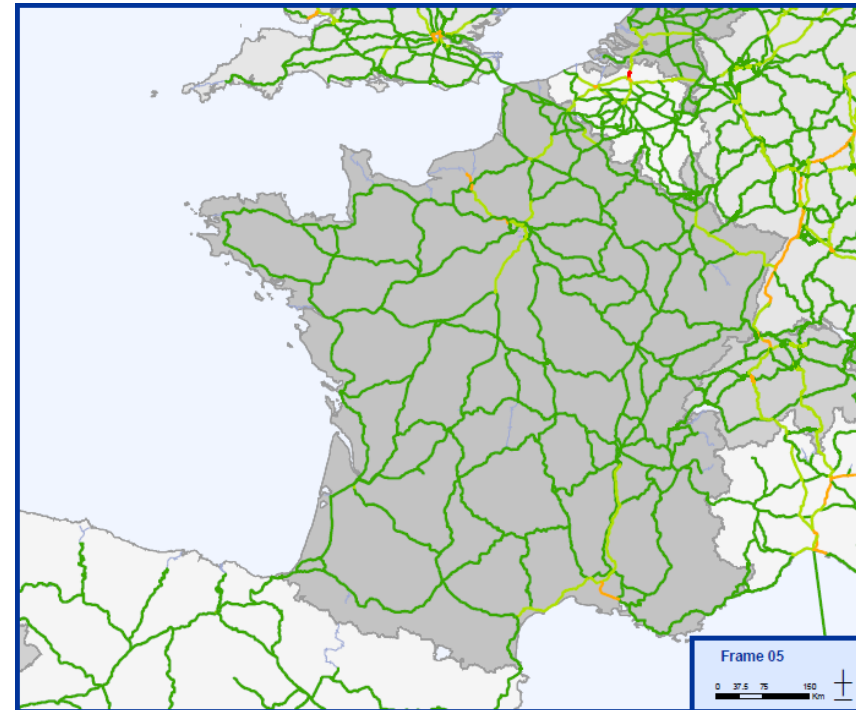
TENConnect (DG-TREN), 2009

Rail traffic load forecast

Baseline-2005



2030



TENConnect (DG-TREN), 2009

Conclusion

- **Co-modality is not a cure-all, it has to be tough according to the situation: distance, tonnage, % loading, routes...**
- **Improve efficiency of each transportation mode within the Supply Chain (e.g. 24% of trucks in the EU are running empty¹)**
- **A better integration of each transportation mode to reach sustainability and efficiency**
- **EuroHub Sud towards a Freight Village**
- **Political commitment to support private stakeholders**
- **EU's Marco Polo funding programme**

¹Eurostat, % Empty running in road freight transport in EU, 2010

Weastflows (West and East freight flows) – an INTERREG IVB North West Europe (NWE) project funded by the European Regional Development Fund (ERDF) – aims to improve and enhance freight logistics across a West-East axis in the NWE region.



Infrastructure

Sustainable multi-modal logistics

ICT and telematics

Sharing knowledge



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