



INTERNATIONAL UNION  
FOR ROAD-RAIL  
COMBINED TRANSPORT

Logistikkonferenz

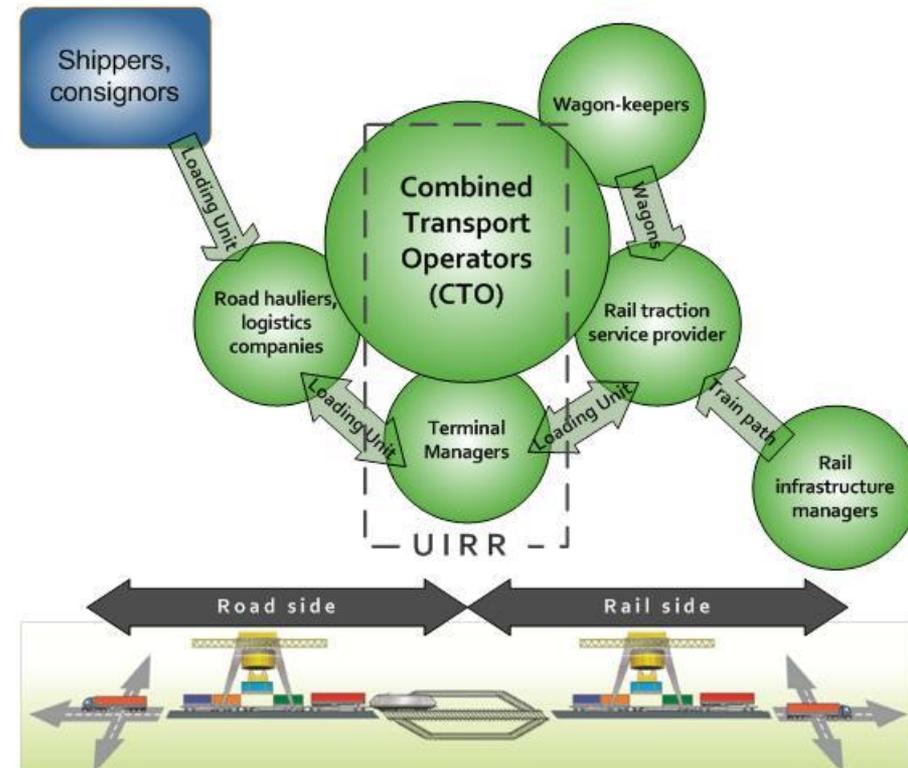
# COMBINED TRANSPORT THREATS AND OPPORTUNITIES



Peter PLEWA  
CEO, Polzug



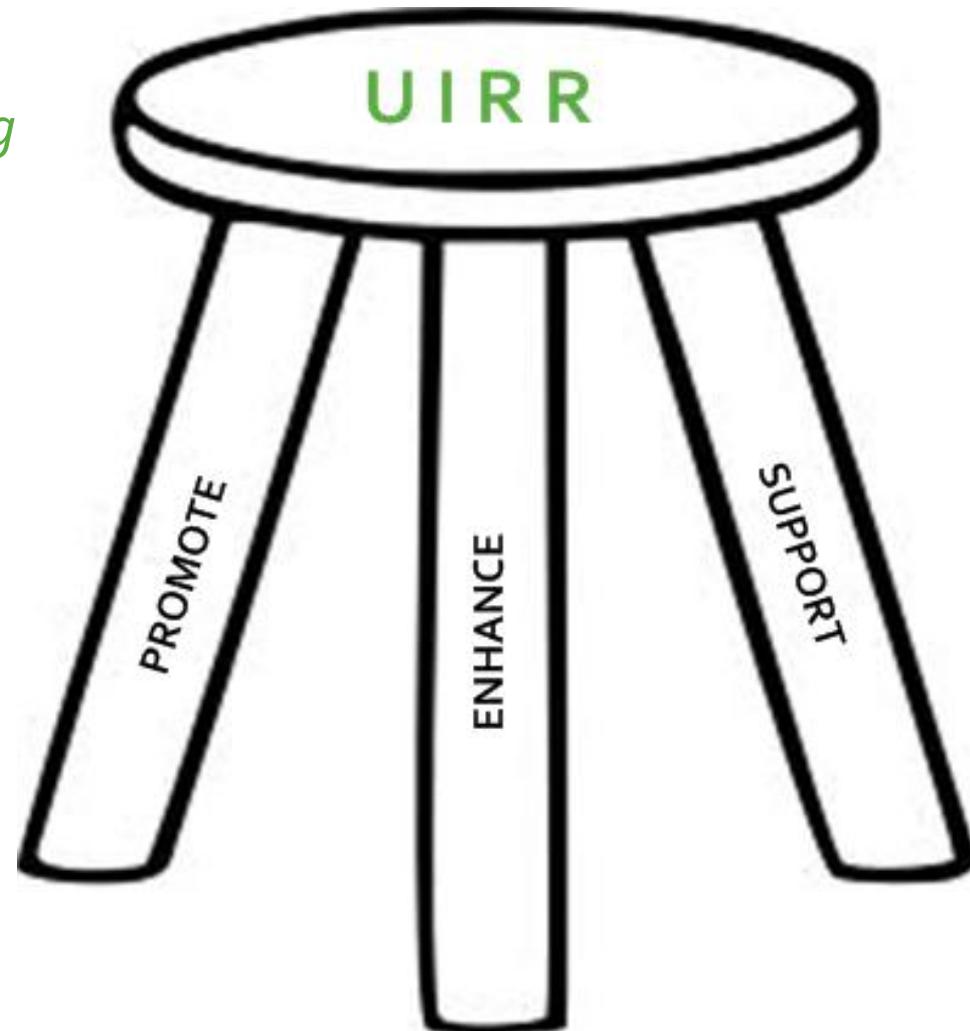
- **Members:** Combined Transport Operators and Terminal Managers, who enable the efficient insertion of rail into transport-chains
- **Logistics companies, road hauliers:** customers as well as shareholders of UIRR Members
- **Performance:** UIRR Members handled about 50% of European Combined Transport in 2014
- **Interest:** fair regulatory conditions in transport to enable *competition on the basis of technical merit and competence/management excellence*
- **UIRR:** founded in 1970  
- seat in Brussels since 1988



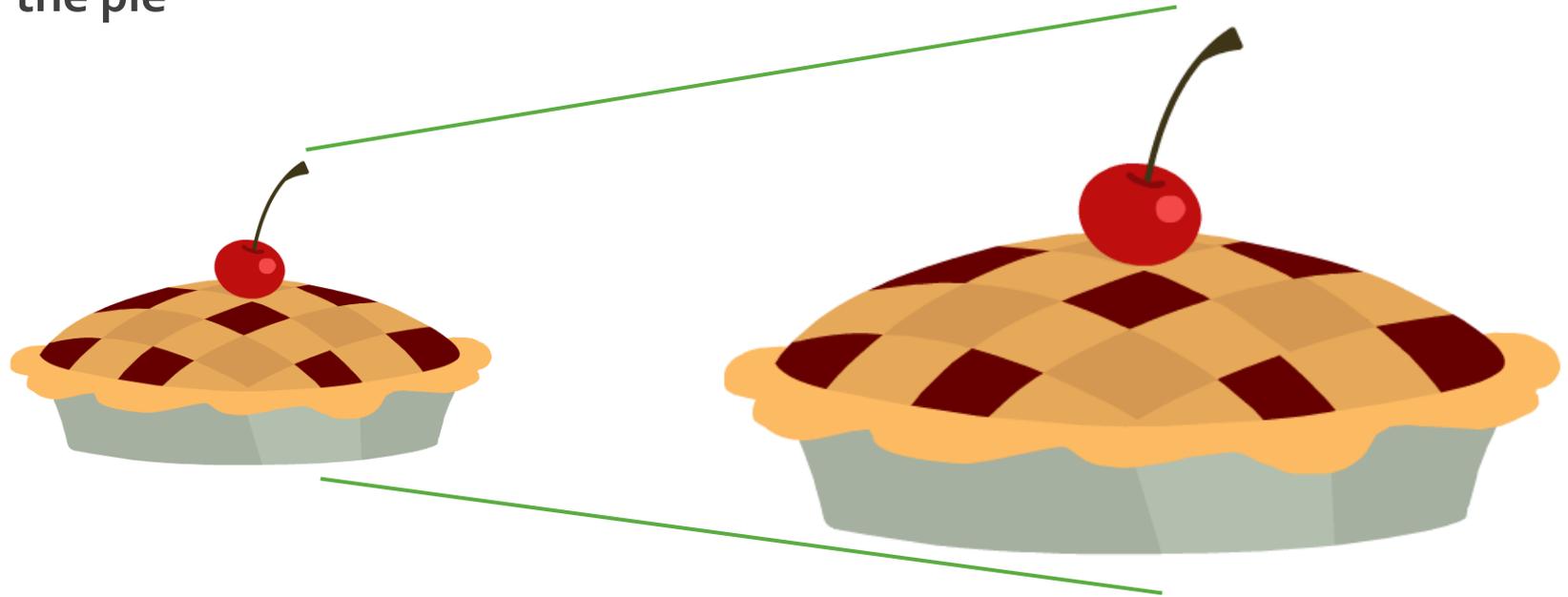


*UIRR is an **industry association** which*

- **PROMOTES** the public understanding and appreciation of Road-Rail Combined Transport,*
- **ENHANCES** its development and the proliferation of industry best practice,*
- **SUPPORTS** the daily operation of European Combined Transport with a series of services*



## Grow the pie



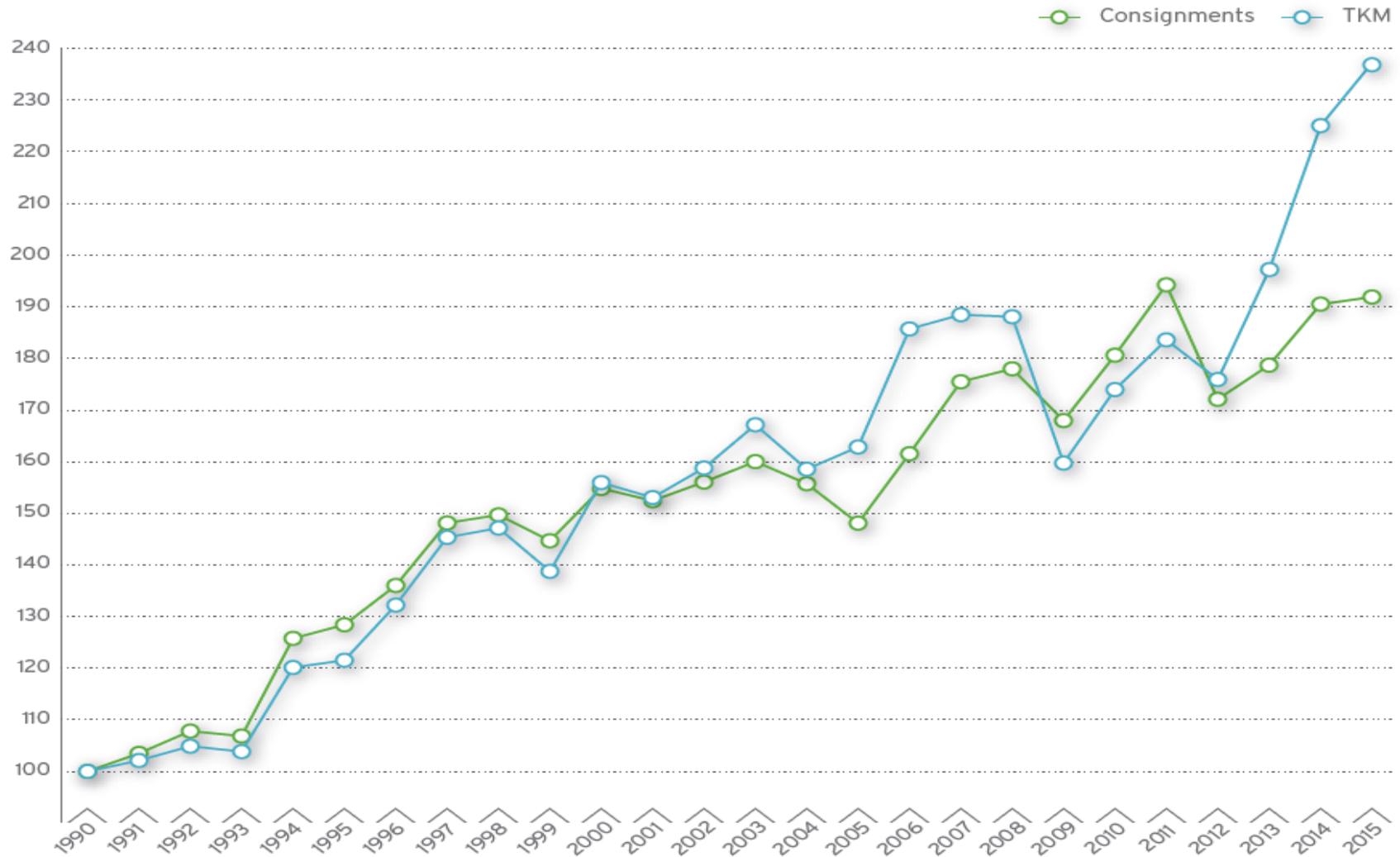
through **fair competition** on the basis of

- 1) **technical merit**, as an enabler of economic prosperity
- 2) the **competence** (professionalism) of those who organise CT

catalysed by UIRR as the **industry association** of the sector



(REFERENCE YEAR: 1990 = 100)



## *The Beauty... (?)*



## *and The Beast*



Intermodal/Combined Transport in Europe



*Containerisation: the pre-requisite to unlock the benefits Combined Transport*

*HIGH VALUE*

*OVERSIZED*

*DANGEROUS GOODS*



End loading  
fully enclosed

Ventilated

Side loading,  
fully enclosed

Refrigerated

Open top

Liquid bulk

Open top  
hard top

Flat bulk



*PERISHABLES*

*LIQUIDS*

*BULK*

*PALLETS*



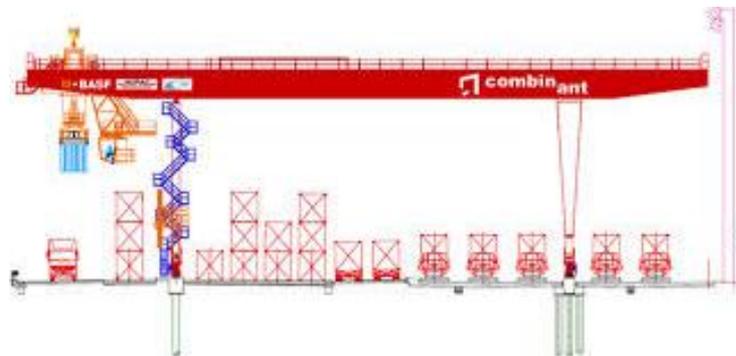
## UNIMODAL FREIGHT TRANSPORT

Misses out on advantages:

- energy efficiency,
- labour productivity,
- superior safety and security,
- climate resilience, and
- outstanding environmental performance.

## INTERMODAL / COMBINED TRANSPORT

*Efficiently inserts economically and ecologically sustainable modes of transport into long(er) distance transport-chains to maximise the benefits for every stakeholder.*



# Primary energy need and CO<sub>2</sub> performance of modes

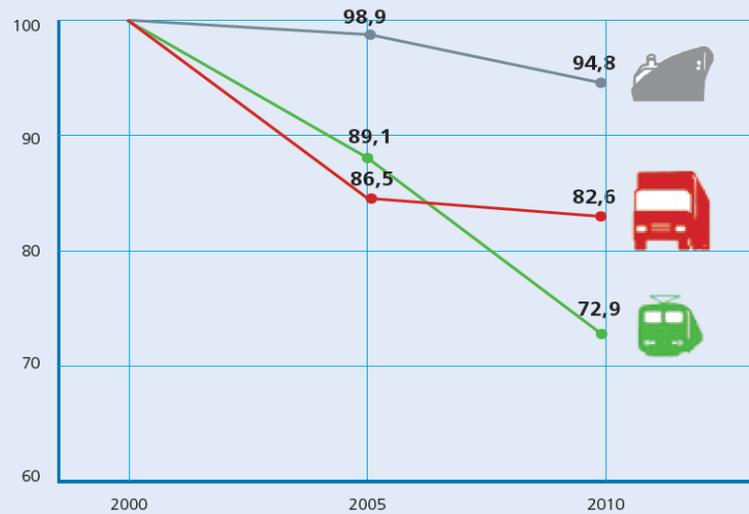


Spezifischer Energieverbrauch in kWh/tkm; Bahn, Lkw, Schiff; Bezugsjahr 2010



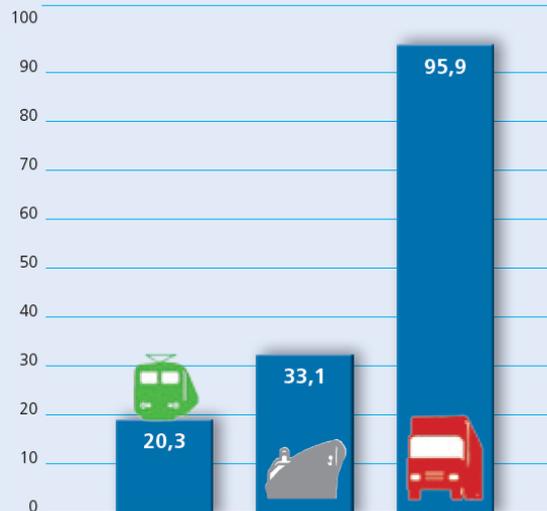
ifeu 2011, Datenbank Umwelt & Verkehr

Spezifischer Energieverbrauch seit 2000; in Prozent; Bahn, Lkw, Schiff



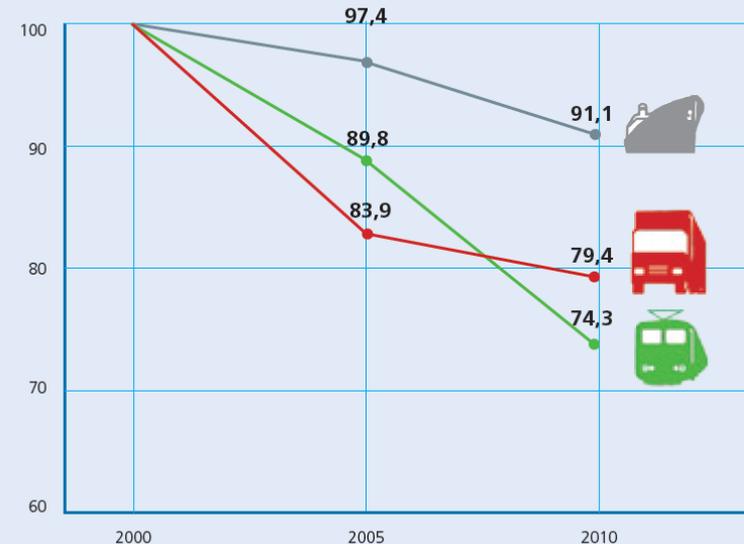
ifeu 2011, Datenbank Umwelt & Verkehr

Spezifische CO<sub>2</sub>-Emissionen in g/tkm; Bahn, Lkw, Schiff; Bezugsjahr 2010



ifeu 2011, Datenbank Umwelt & Verkehr

Spezifische CO<sub>2</sub>-Emissionen seit 2000; in Prozent; Bahn, Lkw, Schiff



ifeu 2011, Datenbank Umwelt & Verkehr

Safety category	Road	Rail
Fatalities in 2009 <sup>1</sup>	35 000	34
Accident occurrences: (i) road <sup>1</sup> and (ii) rail <sup>2</sup>	1 200 000	1152
Accident occurrences: (i) HGVs, (ii) freight trains	31 per 100M vkm <sup>2</sup>	1,05 per 100M vkm <sup>3</sup>
Accident externality cost of (i) HGVs on motorways, and (ii) trains	€68 667 per 100M tkm <sup>4</sup>	€238 per 100M tkm <sup>5</sup>

Road haulage is 30-times as accident prone as rail

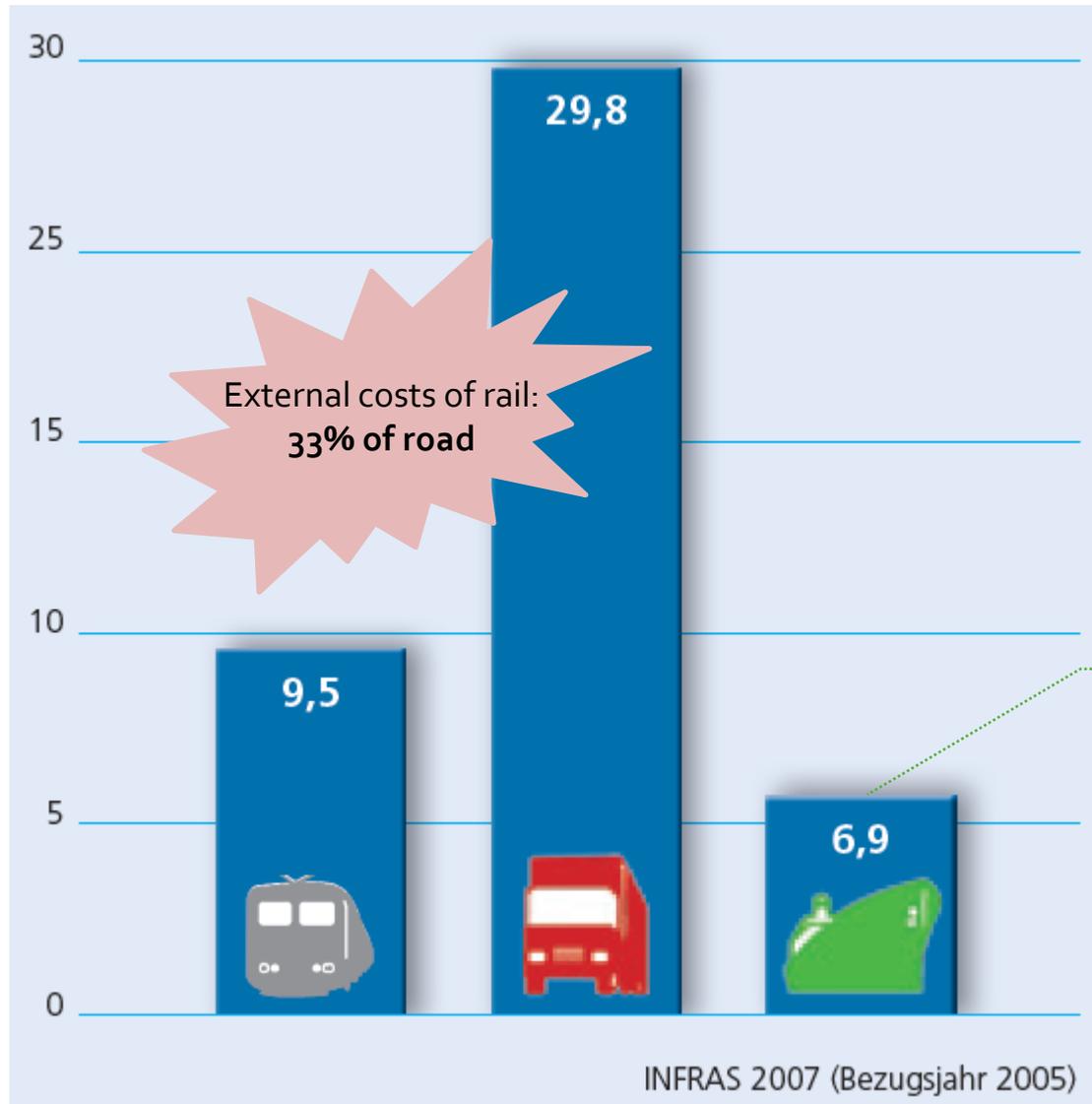
<sup>1</sup> Source: EC EU transport in figures [2011]

<sup>2</sup> Source: Alan C McKinnon at 2<sup>nd</sup> IRU/EU Road Transport Conference: "31 per 100M vkm" [2012]

<sup>3</sup> Source: ERA 2011 Rail Safety report figure (tkm) converted to (HGV) vkm @ 30t/vehicle rate [2011]

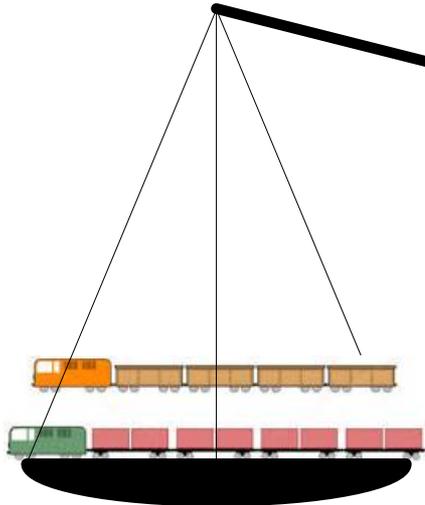
<sup>4</sup> Source: CE Delft IMPACT Study (internalisation handbook) converted into tkm @ 30t/vehicle rate [2008]

<sup>5</sup> Source: CE Delft IMPACT Study (internalisation handbook) converted into tkm @ 800t/train rate [2008]





*"...the reduction of greenhouse gas emissions by the transport sector contributes to the achievement of the overall EU target in this area. This should be part of our overall effort to reinforce the sustainability of our growth model."*



## "Subsidies" to rail freight:

### (i) Track access charges:

- based on distance travelled on the entire network

### (ii) Internalised externalities:

- renewable energy surcharge
- infrastructure scarcity surcharge
- railway noise



## Subsidies to trucks:

### (i) Inadequate road tolls

- No tolling: 6 Member States
- Time-based: 12 Member States
- Distance-based: 10 Member States charging a limited network only.

### (ii) Non-internalised externalities

- air- and noise-pollution, accidents, congestion, land-rent, oil-dependency
- Limited internalisation of CO<sub>2</sub> emissions and climate-change

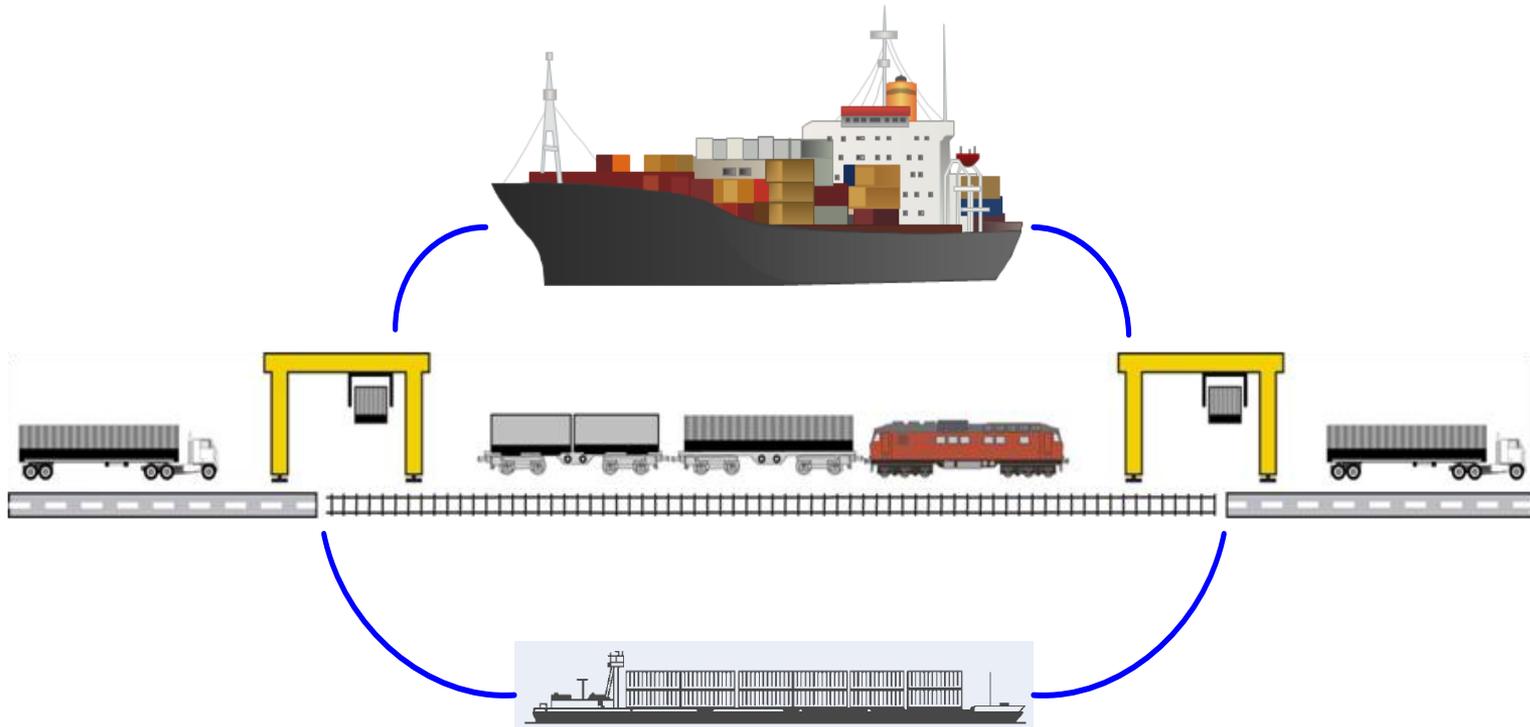
*Two principles should be equally upheld:*

*- user-pays*

*- polluter-pays*

*The de-politicisation of transport - no more budget transfers - would be needed to make transport truly market based and competitive in a fair manner.*

*Shift 30% of long(er) distance road tonne-kilometres realised over distances of 300km or more by 2030 from trucks to sustainable modes of transport - (electric) rail, inland navigation and shortsea shipping - which ratio should increase to 50% by 2050\**



*\* on the basis of 2010*

A study in the UK (McKinnon and Piecyk, 2010) based on a Delphi survey of 100 logistics specialists suggested that mode shift could potentially decrease roads share of the freight market by 14% (from 64% tkm to 50%) by 2050. A study by den Boer et al. (2011) deals with the shift from road to rail of freight transport in the EU to 2020. One conclusion is that there is a potential to increase the market share for rail from 18 to 31–36% and reduce GHG emissions by 19% where road and rail compete. This is roughly consistent with the modal shift target as exemplified above. Although such studies are always associated with considerable uncertainties, they seem to indicate that the goal is achievable, even if challenging.

*Source: TRANSFORuM Project Report on Long Distance Freight, June 2015*

**LONG-DISTANCE FREIGHT ROADMAP**

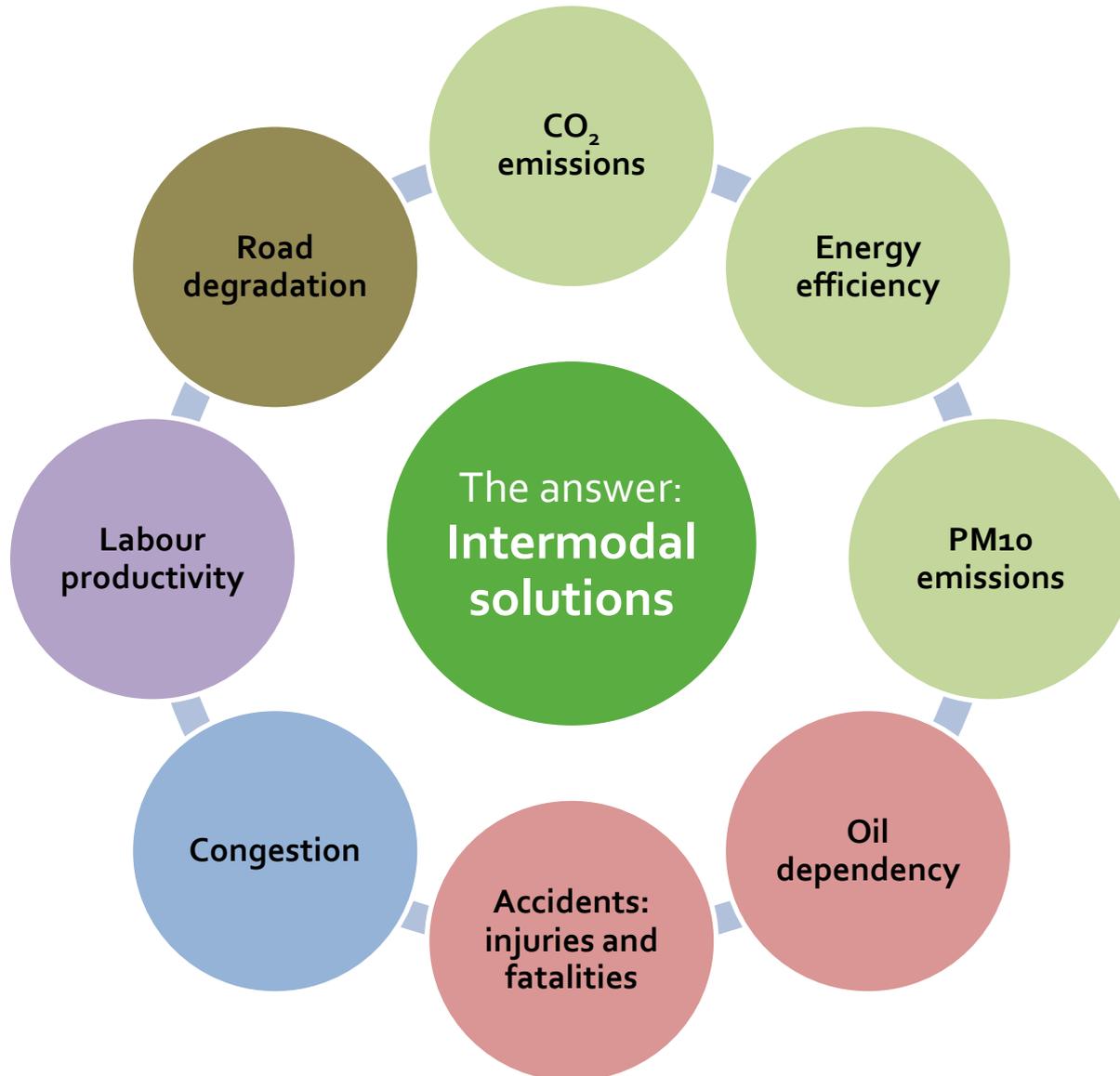
**TRANSFORUM TRANSPORT 2050**

This project is co-funded by the European Union

SEVENTH FRAMEWORK PROGRAMME

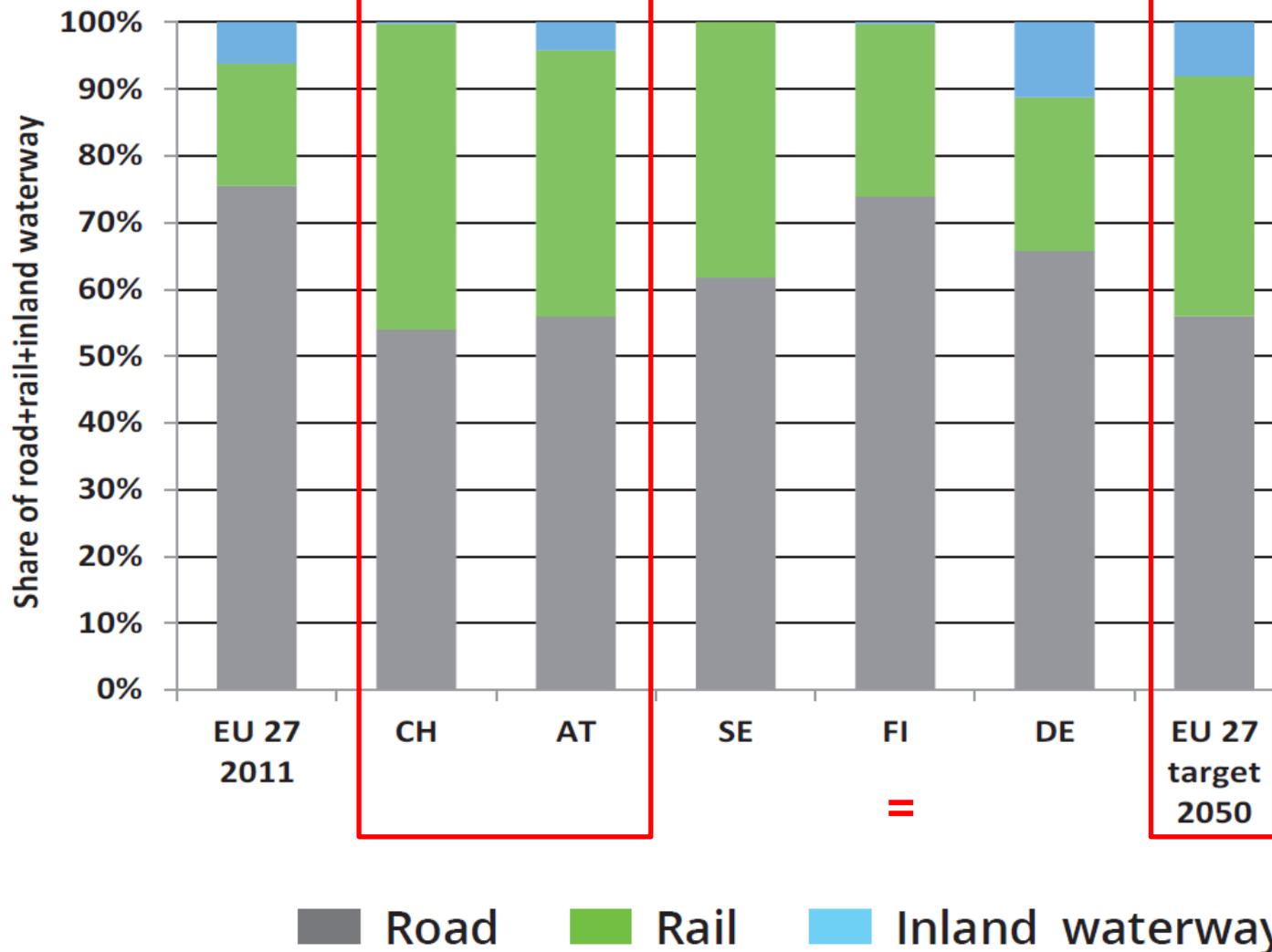
ROADMAP towards goal 3 of the White Paper on Transport:  
»30% of road freight over 300 km should shift to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050, facilitated by efficient and green freight corridors. To meet this goal will also require appropriate infrastructure to be developed.«

The research leading to these results has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° MOVIE/FP7/021565/TRANSFORUM.





## Modal split in Europe



Source: TRANSFORuM Project Report on Long Distance Freight, June 2015



INTERNATIONAL UNION  
FOR ROAD-RAIL  
COMBINED TRANSPORT

# THANK YOU

## For your attention

