

Why care about transport emissions?

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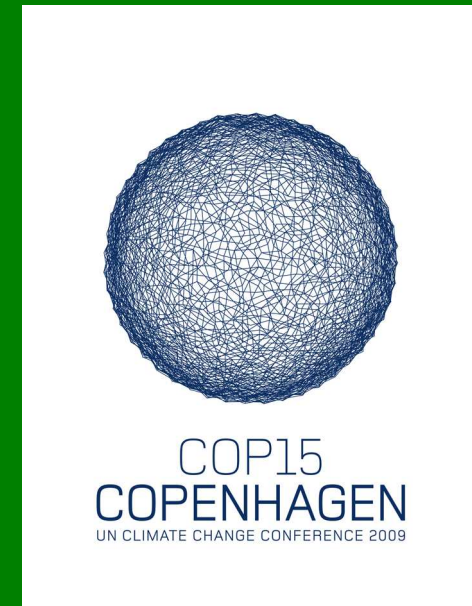
The European Environment Agency (EEA)

- An EU institution situated in Copenhagen since 1994
- Provides the information necessary to enable policy makers to provide efficient and scientific legislation
- 32 member states: EU-27, Turkey, Iceland, Norway, Liechtenstein and Switzerland
- The European Topic Centre on Sustainable consumption and production (ETC/SCP) works in close co-operation with the SCP group at the EEA

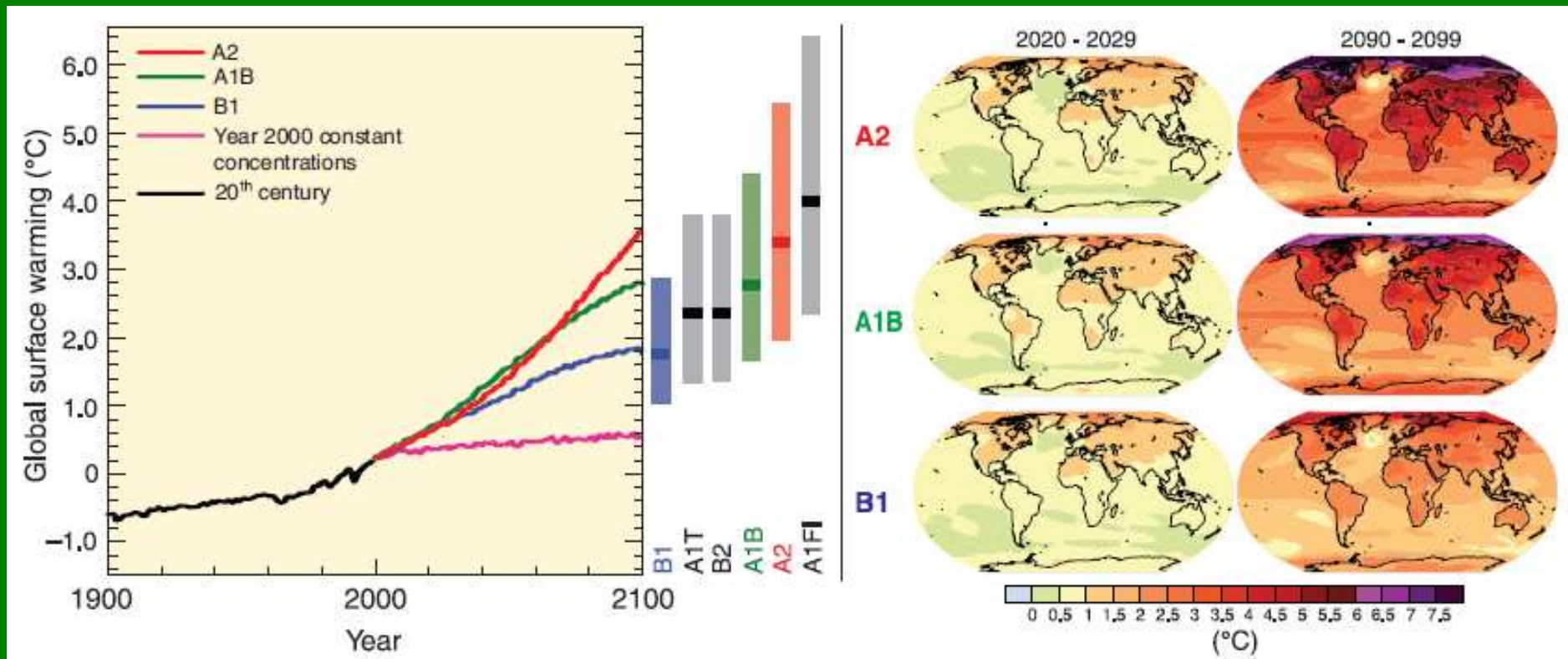


What's happening at the policy scene?

- No global deal in COPenhagen
-BUT agreement about:
- 2 degree target (which equals 80-95 % reductions in GHG emissions in the developed world)
 - All sectors will need to contribute
 - The developed world must take the lead
 - Transport is an important sector
 - Consumption perspective is becoming still more important

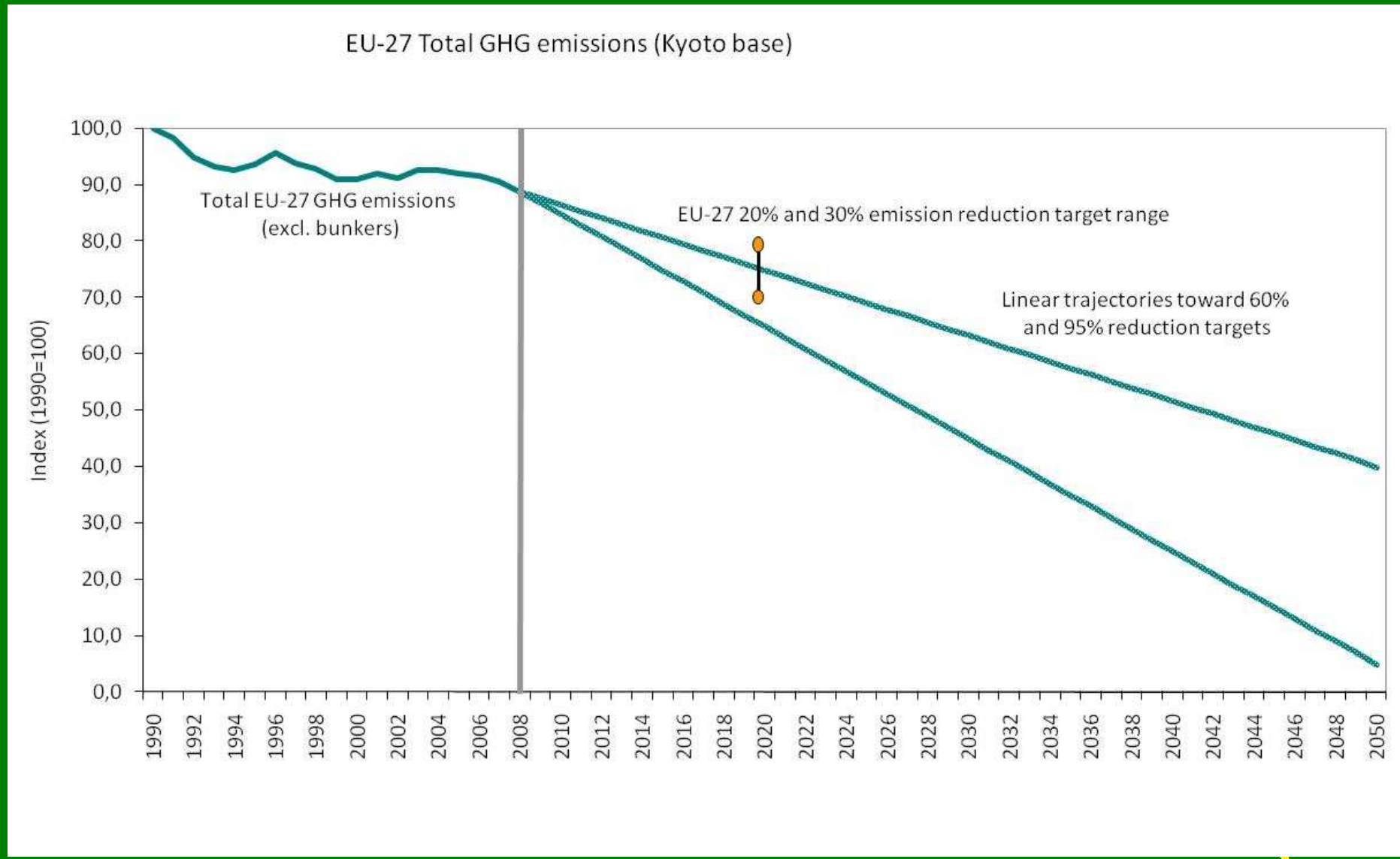


An ambitious global deal lies into the future - action is needed now

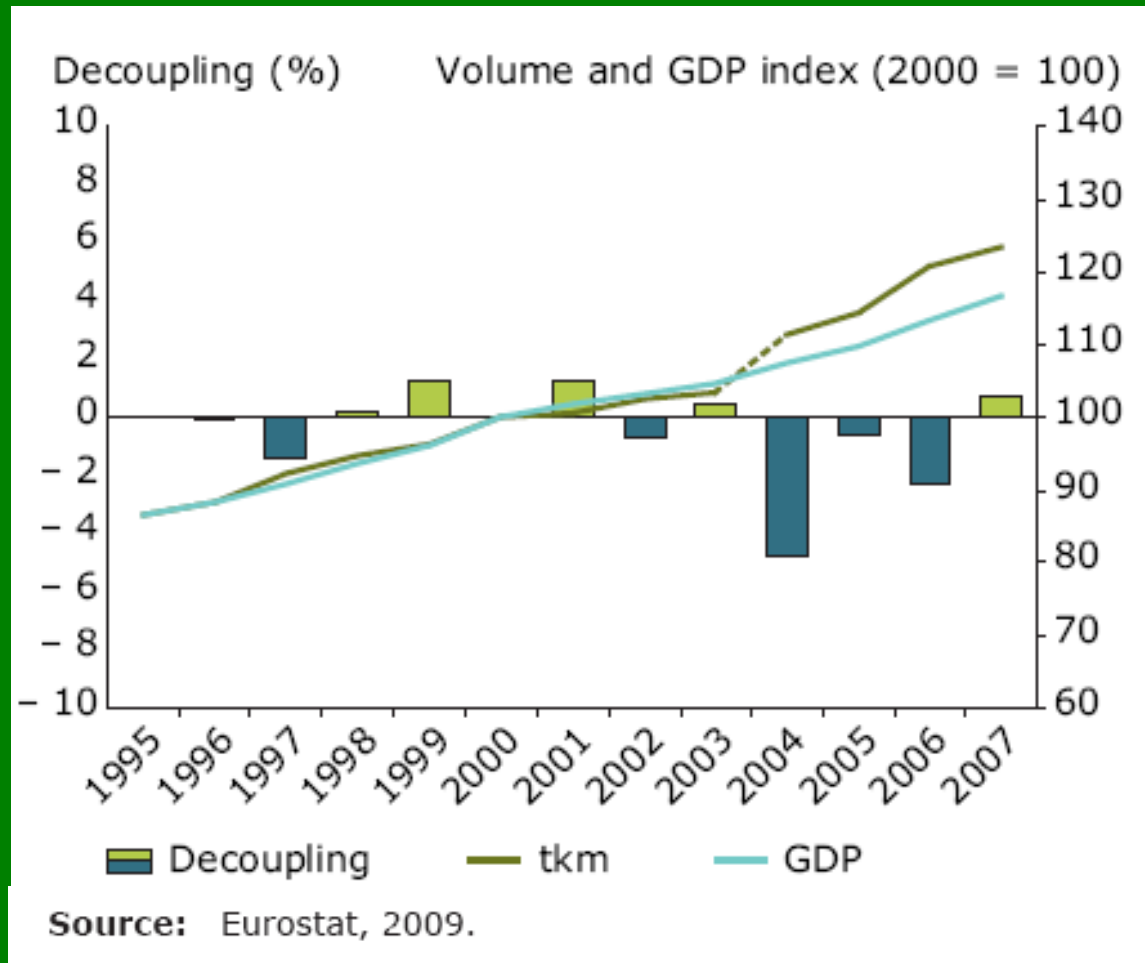


Source: IPCC – 4th assessment

A 20 % or even 30 % reduction target for GHG emissions compared to 1990 is not ambitious for EU



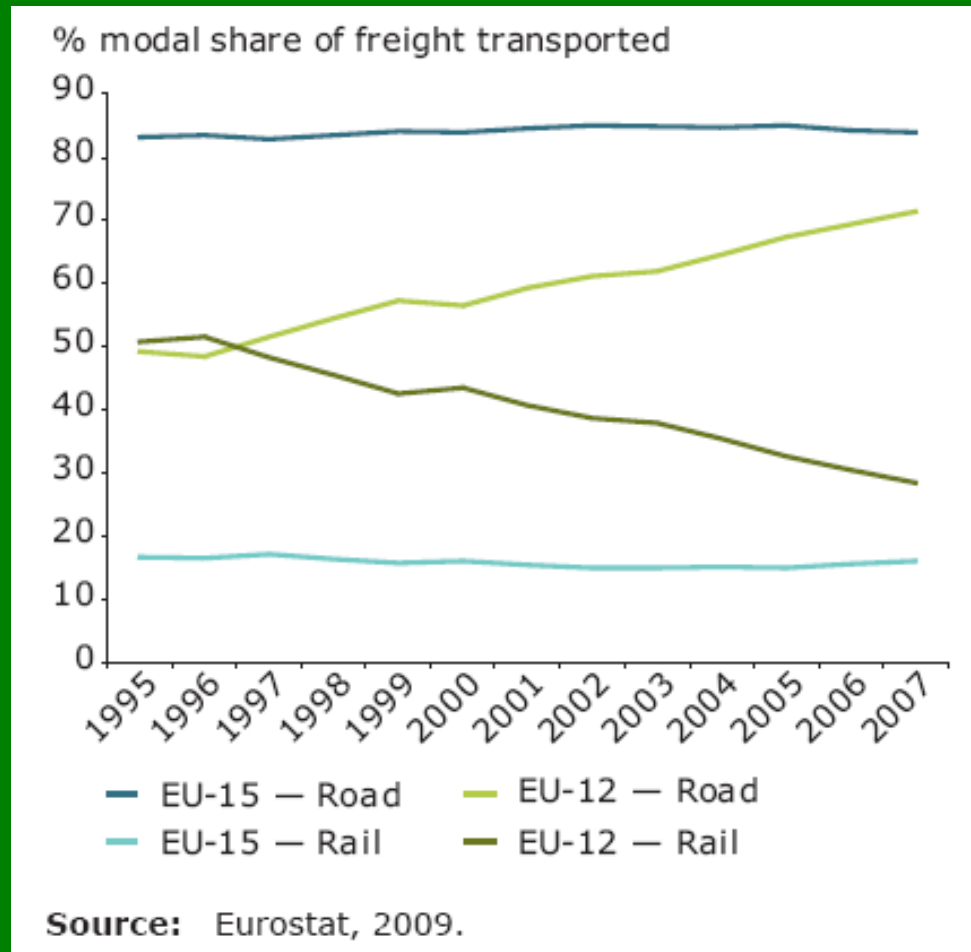
Why is the (freight) transport sector important?



- Freight transport volumes are growing faster than the economy
- No clear signs of decoupling of transport volume from economic growth



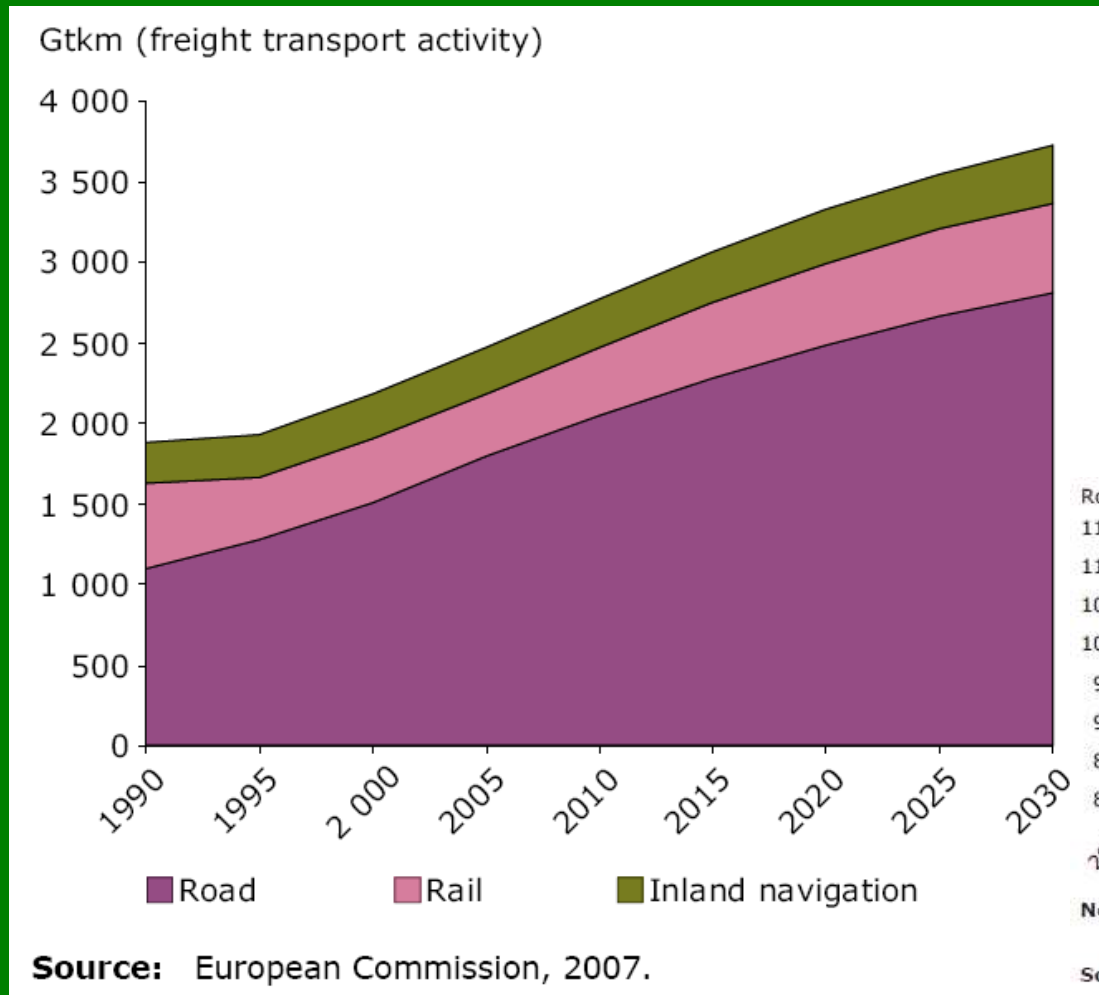
Road transport's market share increases strongly in EU-12



- The modal split between road and rail freight in the EU-15 stayed relatively constant
- In the EU-12 the share of freight moved by road increased from around 50 % to over 70 %

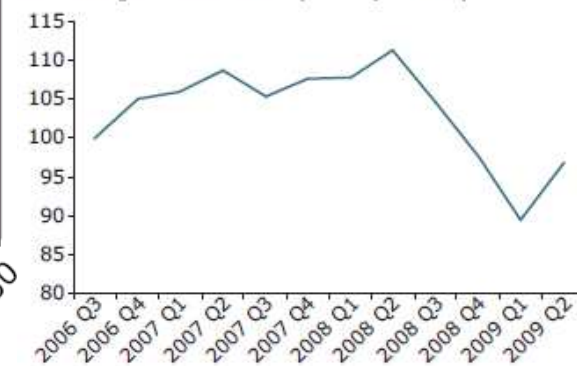


Freight transport is predicted to continue to grow



Demand is growing fastest for modes of transport that emit higher CO2 levels

Road freight volume index (2006 Q3 = 100)

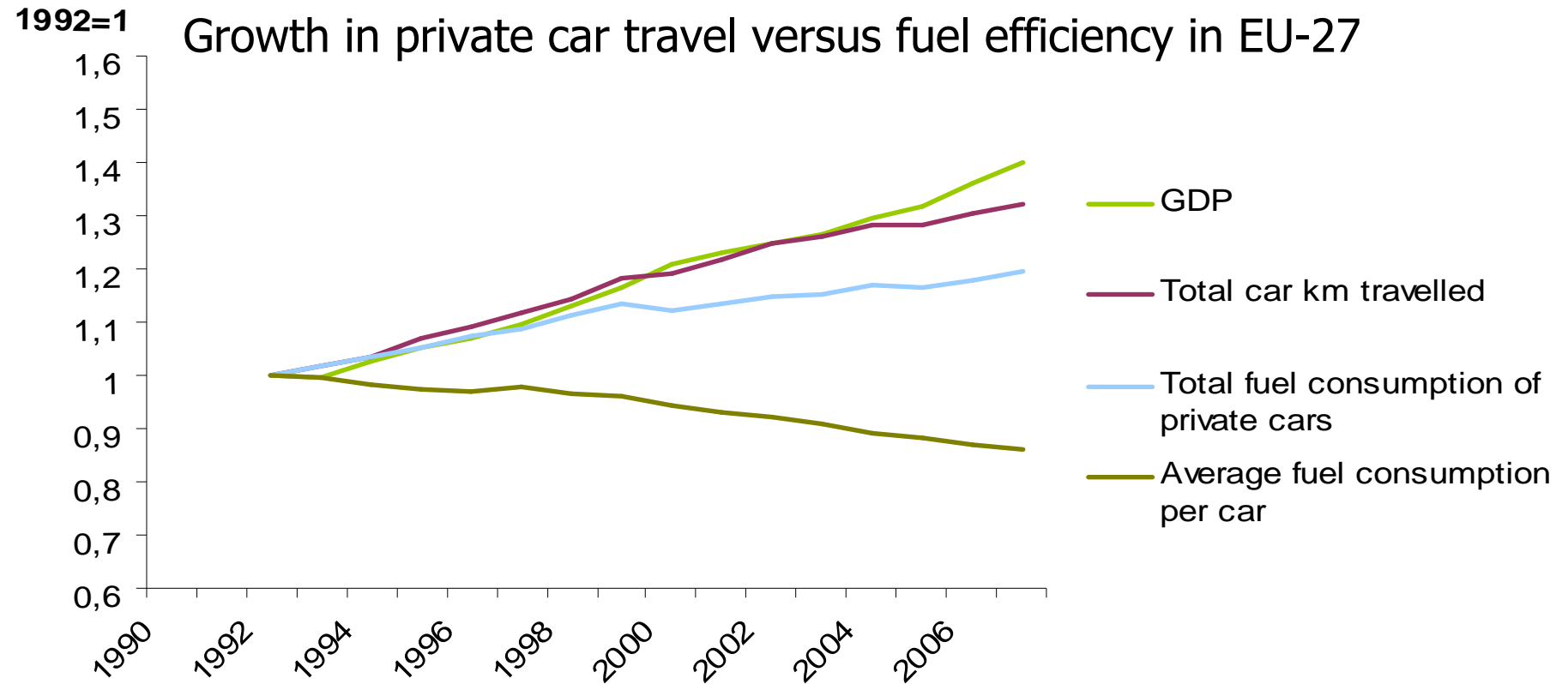


Note: Summary of quarterly road freight transport by type of operation and type of transport (mio tkm).

Source: Eurostat, 2009.



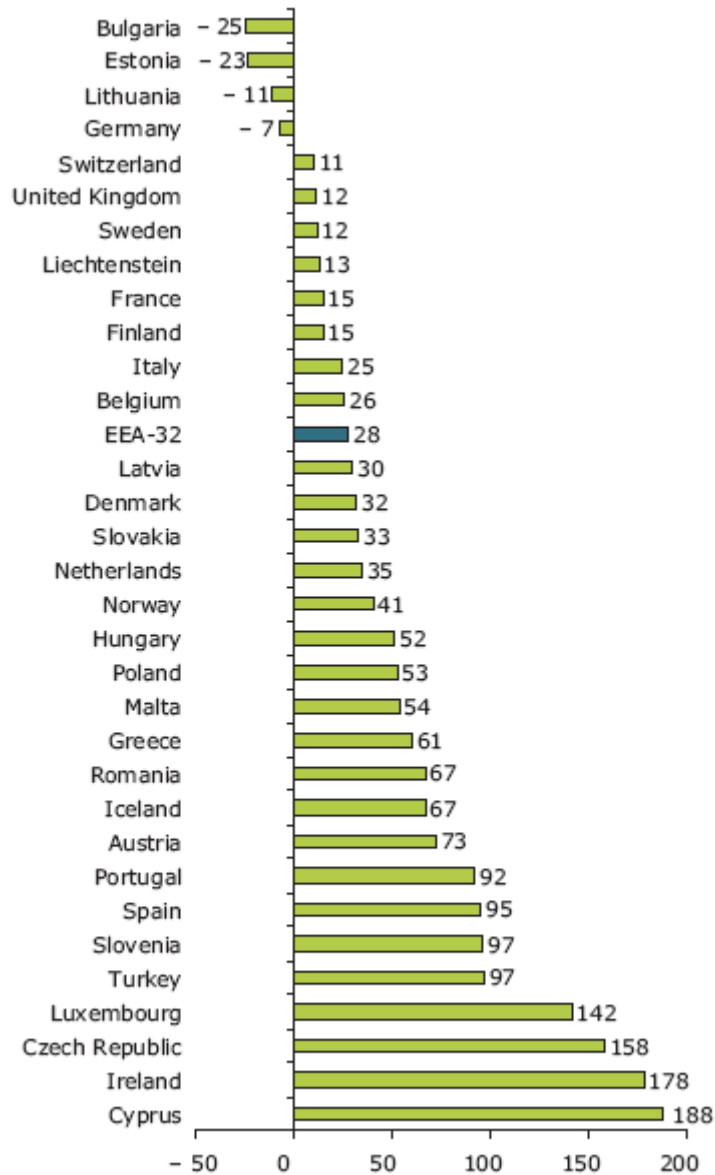
Transport demand growth outweighs efficiency gains



Source: Odyssee database

NB! For passenger transport.





Note: Excluding international aviation and maritime transport (according to Kyoto).

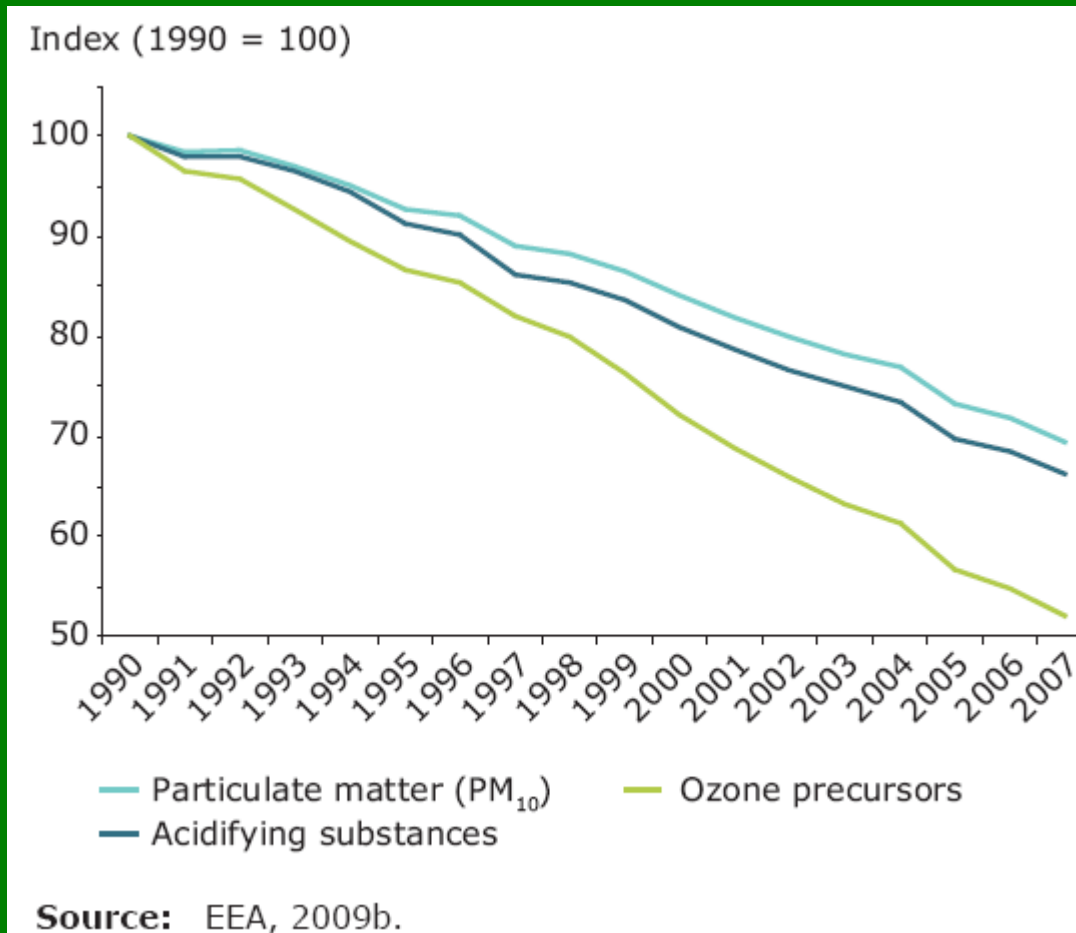
Source: European Topic Centre for Air and Climate Change, 2009.

Greenhouse gas emissions from transport continue to grow

- Average growth of 28 % for EEA-32 countries – while a reduction of 11 % achieved for non-transport sectors
- Bulgaria, Estonia, Lithuania and Germany were the only states that saw a decrease in transport GHG emission between 1990 and 2007
- Since the mid 1990s transport and emission growth in the new EU MSs have been greater than in the old EU MSs



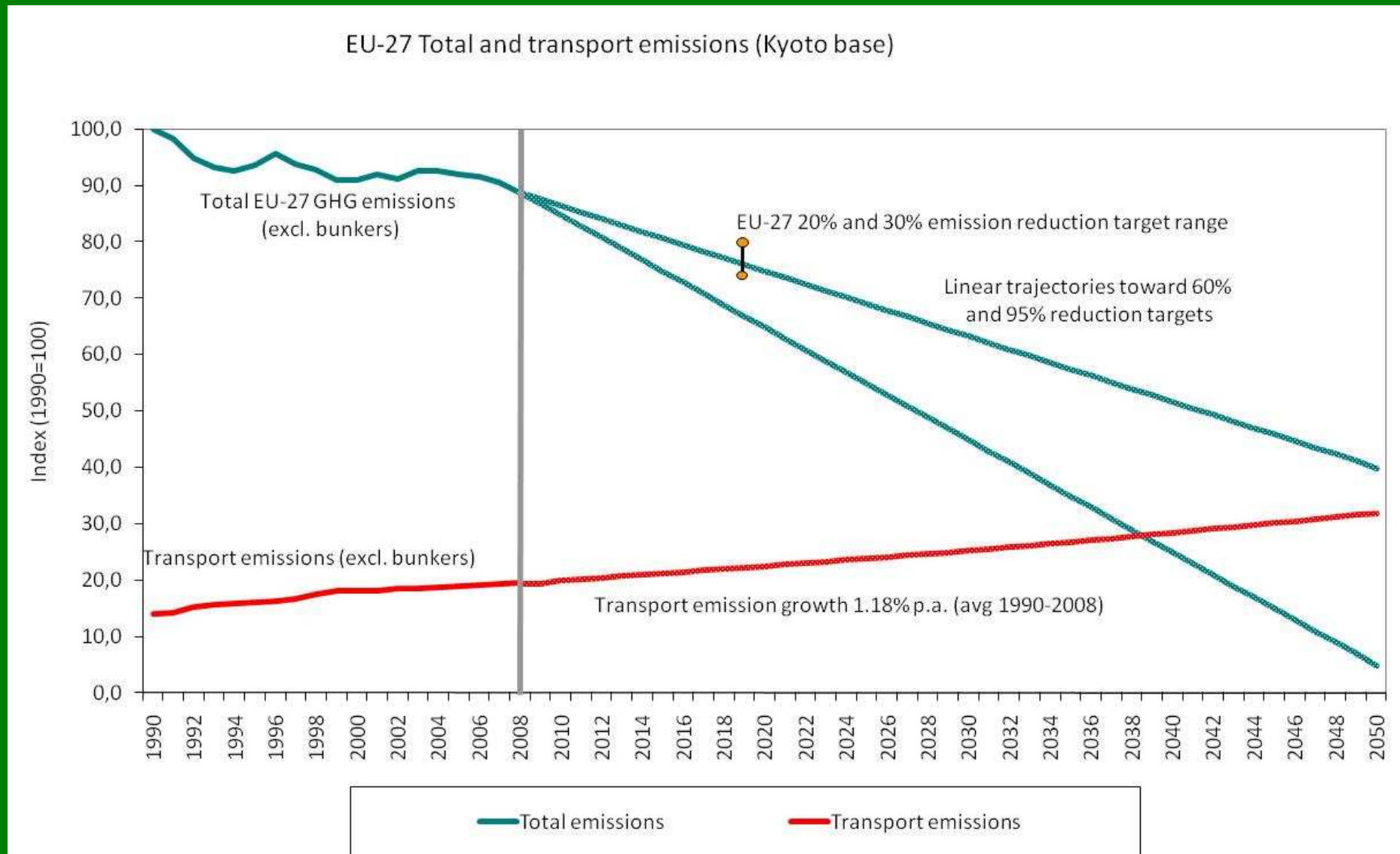
Emissions of local air pollutants from land-based transport have decreased significantly



- Significant reduction of transport-related emissions of particulate matter (30 %), acidifying substances (34 %) and ozone precursors (48 %)
- NB! Does not include sea and air transport



By 2050 emissions of GHGs from transport exceed target for total emissions if development continues



The need for emission models



You can't manage what you don't measure

Can provide an important basis for improvements



Several potential benefits of emission modelling of freight transport (1)

- Provide basis for optimisation of logistics chain and reduction of emissions for shippers and carriers through simulation of “what-if” scenarios
 - vehicle efficiency improvements
 - change of transport modes
 - change of fuel
 - change of carrier
 - increased consolidation,
 - container conversions
 - ...



Several potential benefits of emission modelling of freight transport (2)

- Allow businesses (shippers) to calculate "Scope 3" emissions and carbon footprints of products
- Can potentially allow consumers to choose products with low environmental impacts on a better informed basis than the potentially misleading concept of food miles



- May contribute to environmentally-based policy developments

Some key issues regarding emission modelling tools

- Need for standardised, robust model covering all transport modes
- Provides comparable figures
- Transparency regarding assumptions is key for credibility
 - Choice of emission factors
 - Default load factors
 - How (empty) return trips are dealt with
 -



Towards a commonly accepted method for calculating emissions from freight transport

- Welcome very much the initiative from UIC and the EcoTransIT consortium
- Important to involve all transport modes to ensure wide foundation
- Integration of emission models into logistic models in line with other parameters such as time, economy, etc. in the future?



Thank you for your attention



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