European railways support 'user pays' and 'polluter pays'

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" **Each transport mode should cover its marginal costs**, both for infrastructure wear and tear ('user pays') and for external costs, e.g. for air pollution and noise pollution ('polluter pays') … Applying those two principles EU-wide will help address the current charging discrepancy between transport modes.
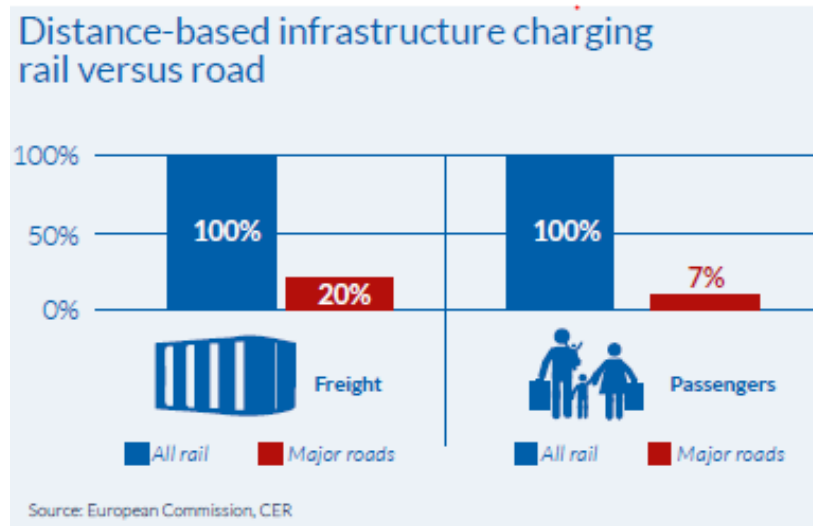
European Parliament

Item 18 of resolution of 14 December 2017 on a European Strategy for Low-Emission Mobility

Getting the price right for efficient transport (1)

- Efficient transport requires charging *direct or 'marginal' cost* of infrastructure use:
  - For rail, this rule already exists in EU law (SERA directive art. 31.3)
  - For other modes, no such rule currently exists
  - Road charging: 'Eurovignette' revision is welcome, but should add direct-cost coverage as a rule
- Direct-cost charging achieves 'user pays' (as pointed out in EP resolution)

Getting the price right for efficient transport (2)

- Direct-cost charging is *distance-based* – but we don't always have this in the EU:

Distance-based infrastructure charging rail versus road

|	Freight		Passengers	
	All rail	Major roads	All rail	Major roads
	100%	20%	100%	7%

Source: European Commission, CER

- So let's go for distance-based charging for infrastructure use in *all* modes
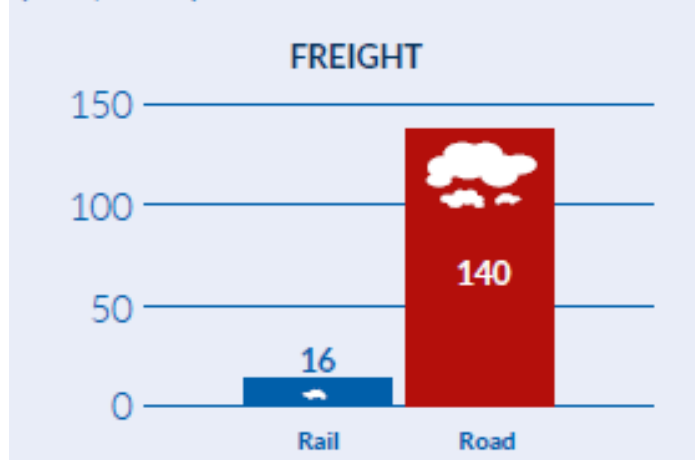
Getting the price right for sustainable transport (1)

- Sustainable transport requires a fair chance for clean modes to compete
- Rail is a relatively clean mode of transport, with especially low climate externalities:

Specific CO_2 emissions, g per passenger-km (EEA, 2017)

PASSENGER

Rail	28
Road	102
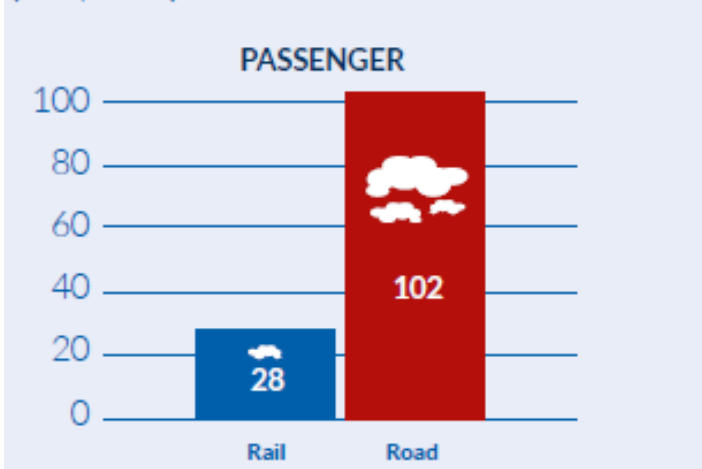
Specific CO_2 emissions, g per tonne-km (EEA, 2017)

FREIGHT

|	
Rail	16
Road	140

Getting the price right for sustainable transport (2)

- Approach 1: *internalise externalities* by charging for CO_2 etc. ('polluter pays')

- Approach 2: limit infrastructure charging for clean modes

  2a) by compensating them for unpaid externalities of competing modes (see SERA directive art. 34)

  2b) by limiting recovery of infrastructure *fixed* costs (consistent with 'user pays', which requires recovery of *direct* costs)

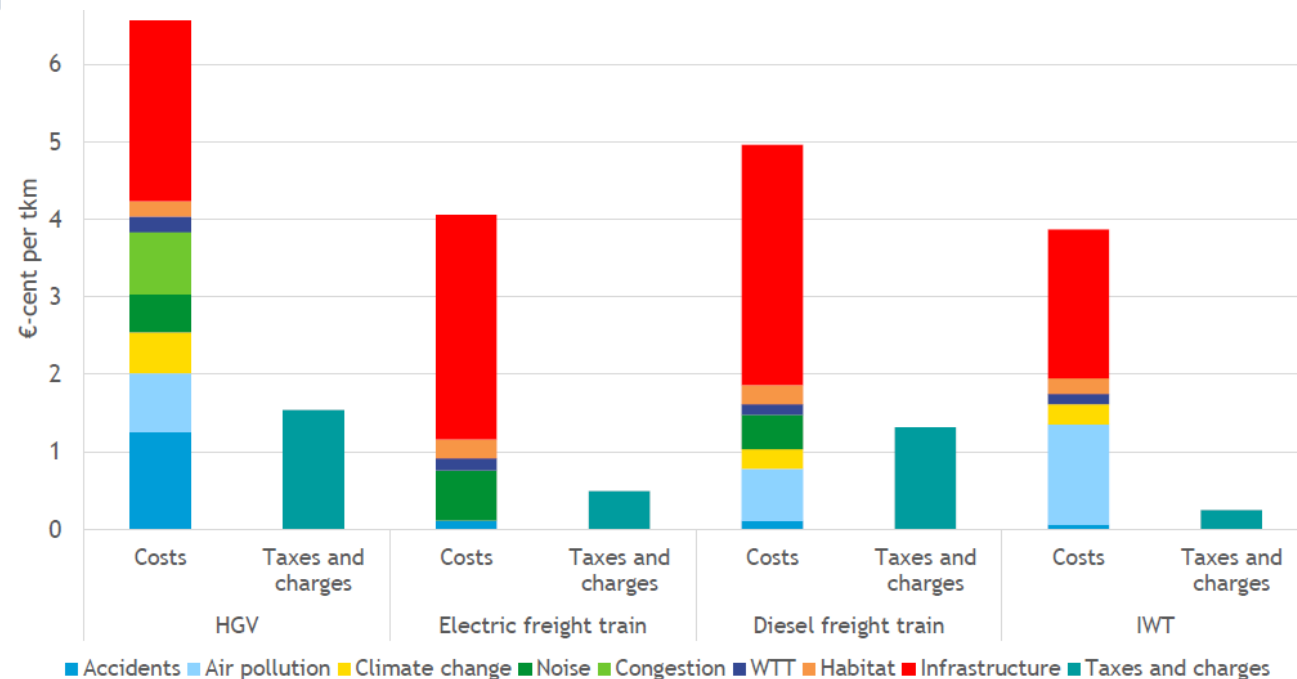- Go for approaches 1 and 2b asap, but during the transition also apply 2a

CE Delft study for DG MOVE: total costs per passengerkm

- Political meddling keeps rail infra costs high, e.g. in rural areas with few passengers and few daily trains

- Average costs of rail as transport system <u>backbone</u> are much lower. Just look at rail freight!
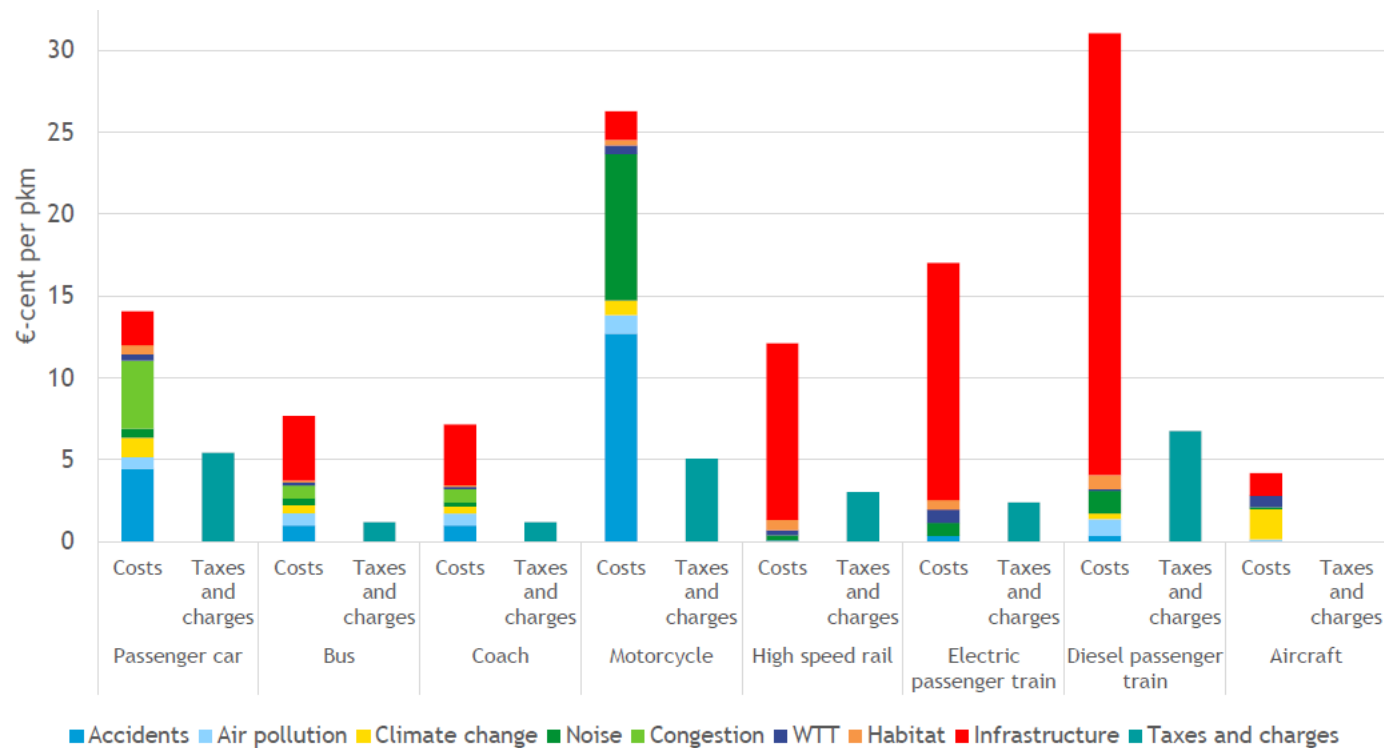
Study: total costs per tonne-km

- Freight markets are highly competitive and much less affected by political meddling than passenger railways

- Rail freight's cost coverage gap is just ~3.5 €-cent/tkm – on par with IWT, but well below road's ~5 €-cent/tkm. (Thus, applying SERA directive art. 34 makes sense!)

Legend: Accidents, Air pollution, Climate change, Noise, Congestion, WTT, Habitat, Infrastructure, Taxes and charges

Study: variable costs = proxy for marginal costs

- Rail is a leader in minimising the gap in marginal costs. These matter most – both to the EP and to economists.
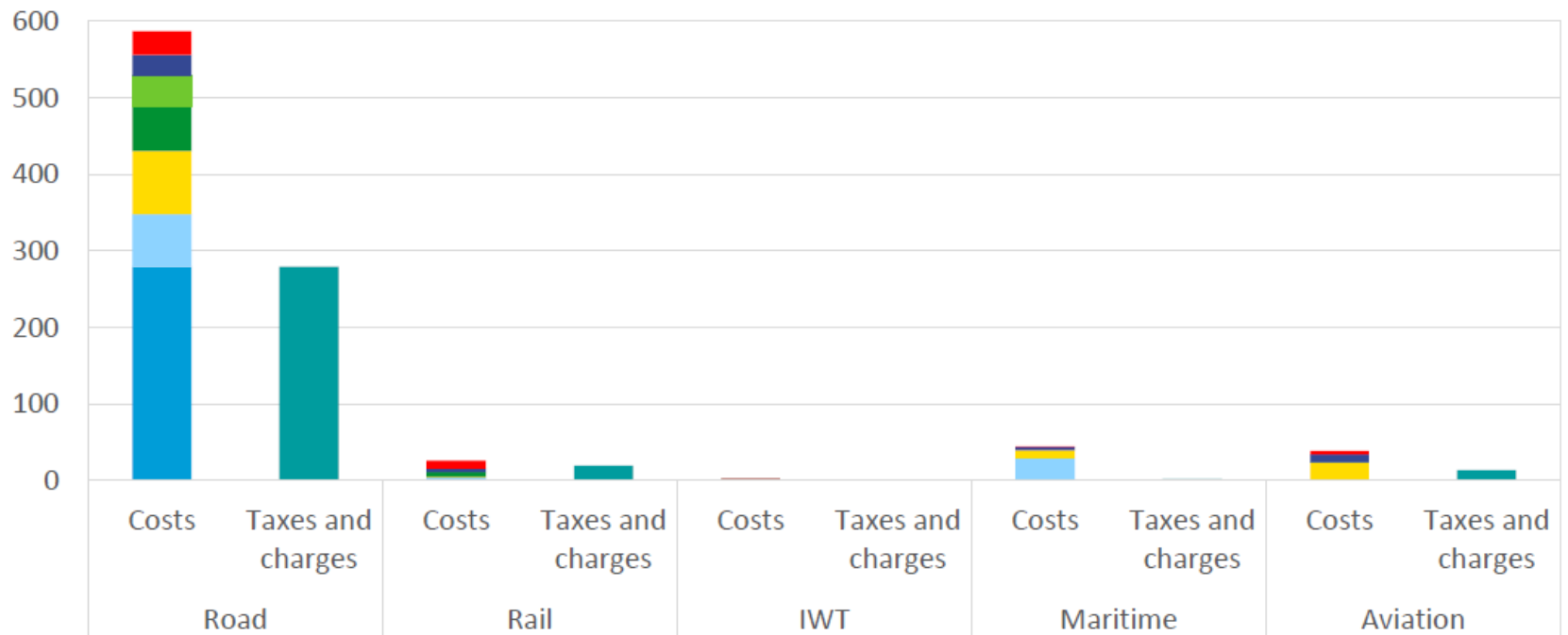
Implementing 'user pays' in a socially just manner

- Passengers:
  - Coaches cause wear and tear, similar to trucks
  - Tolling (like charging passenger trains for track use), perhaps €0.20 per 100 passenger-km (DE estimate), would not look unbearable
- Freight:
  - HDV tolling impact on consumer prices 'negligible' (around 0.5%) acc. to 2016 study by Fraunhofer
  - Any particular hardship could be addressed with part of tolling revenue

Conclusions

- European railways support 'user pays' and 'polluter pays' – for fair competition between transport modes

- User pays: look at marginal costs

- Preliminary results suggest rail is a leader in covering them

- Implementing 'user pays' also on roads can be done in a socially just manner

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