

Transport and climate change

—

outlook to 2050

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T&E, the European Federation for Transport and Environment
Brussels, 27 March 2009

T&E membership

Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Italy, Macedonia, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovenia, Spain, Sweden, Switzerland, UK

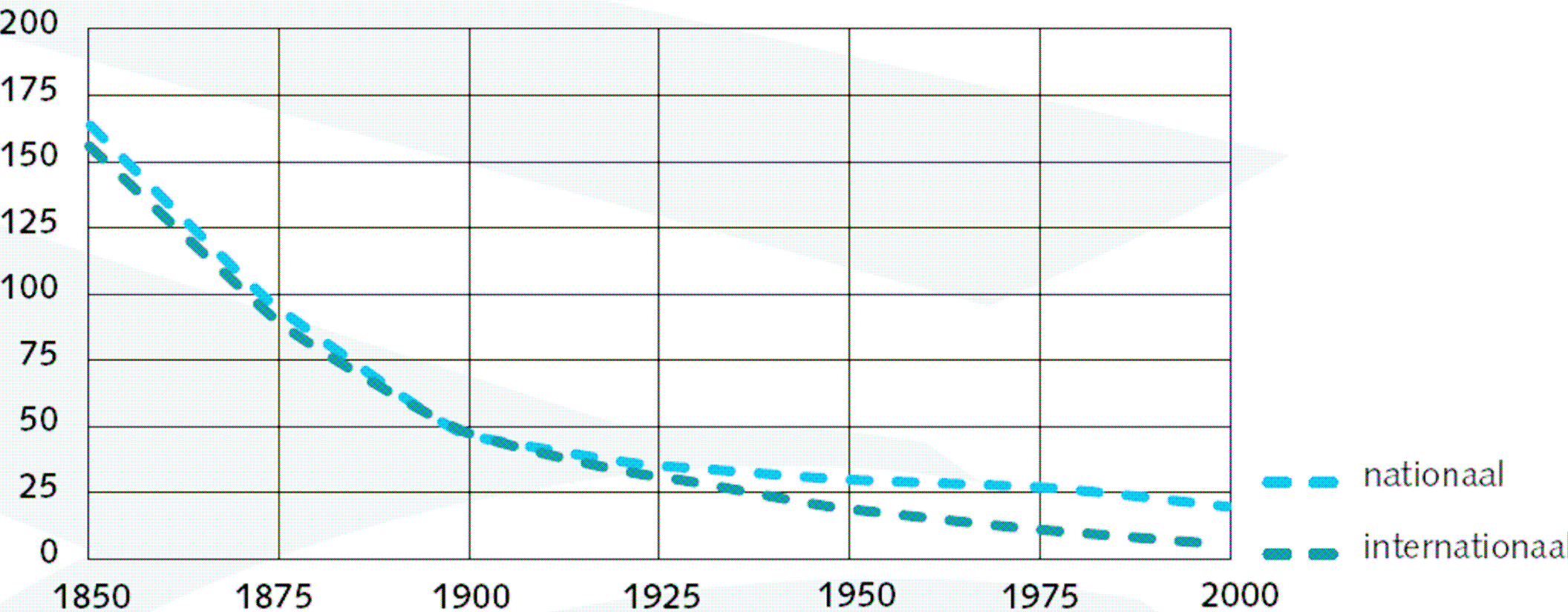
49 Members – 23 Countries



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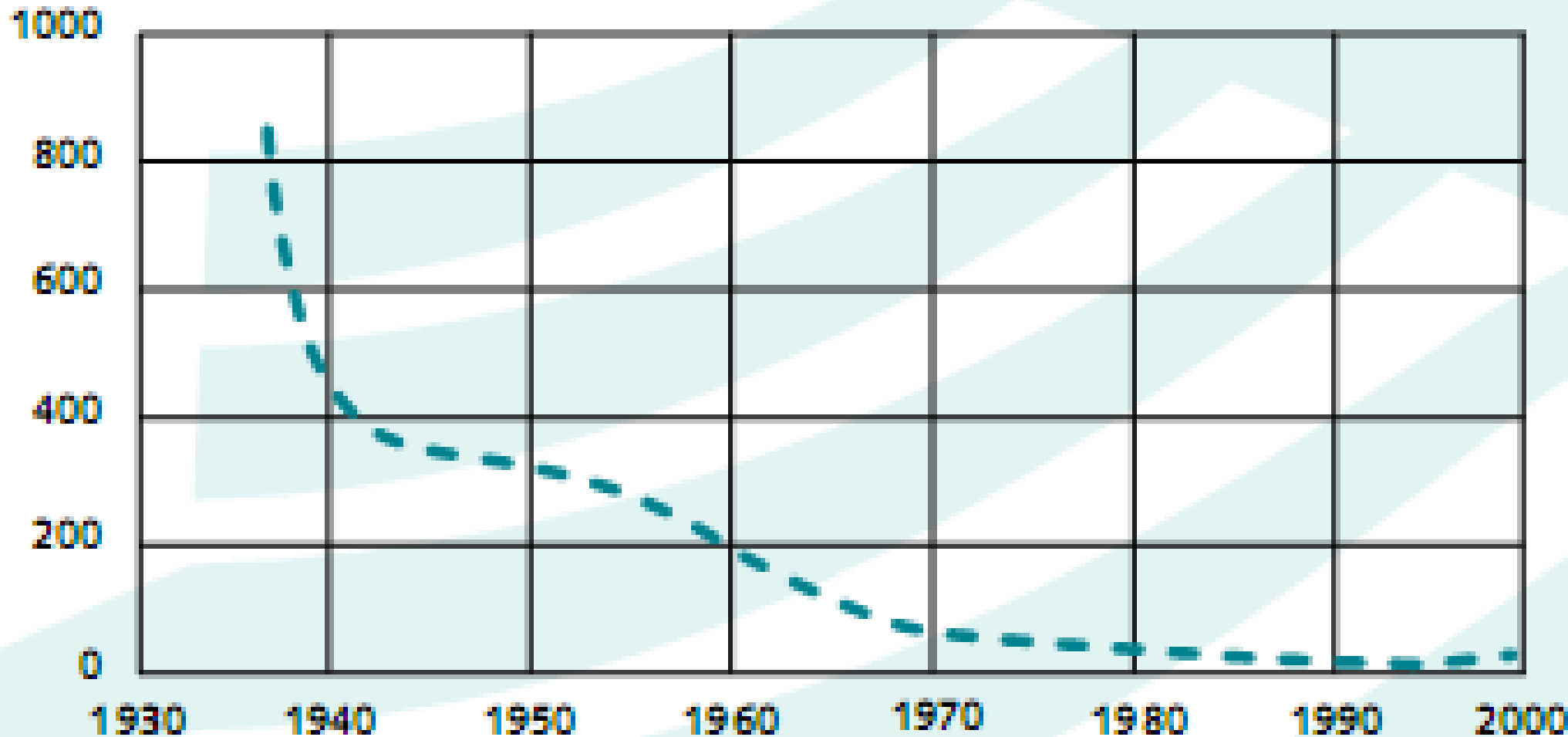
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Road transport has become MUCH cheaper

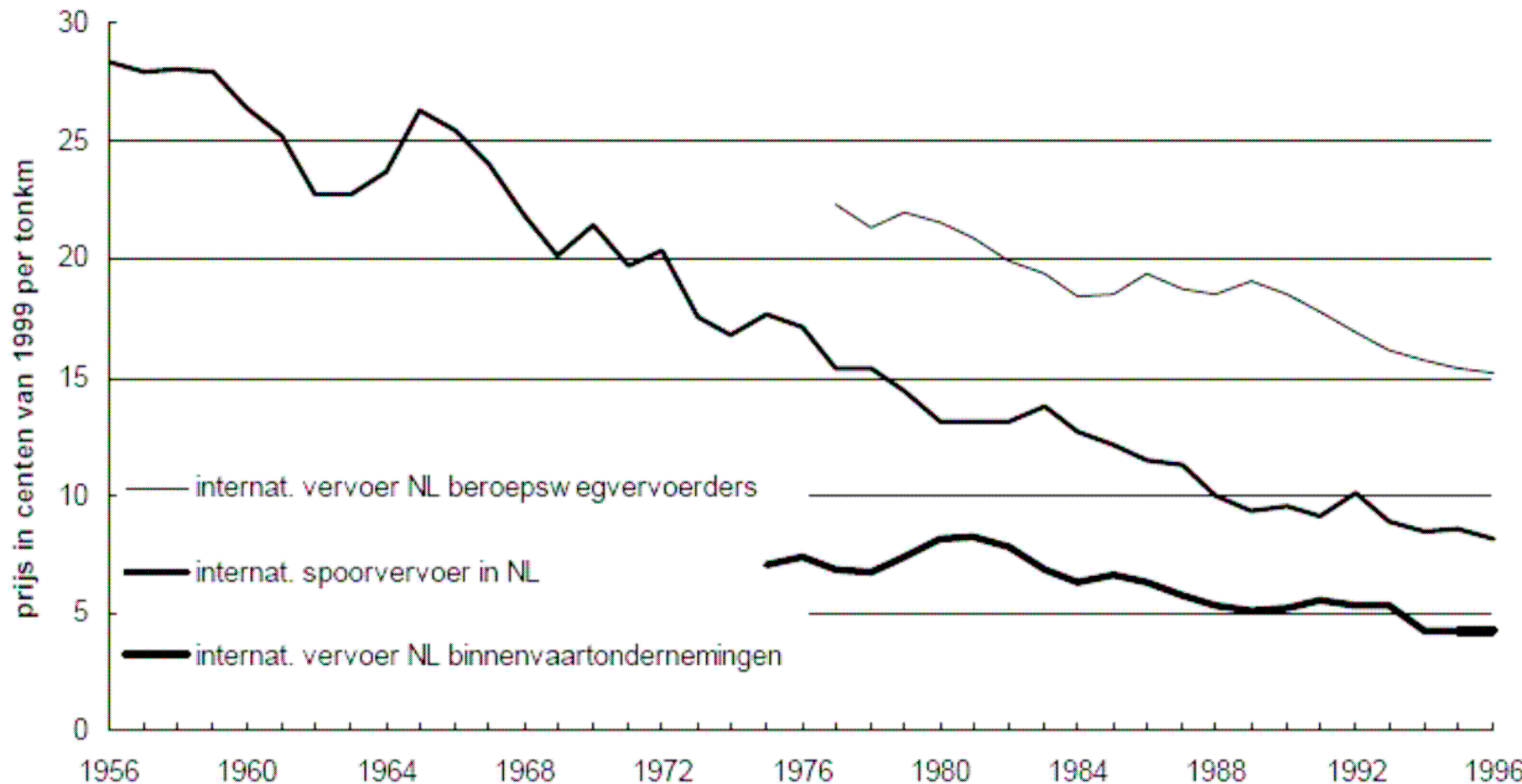


Costs national and international road freight transport, in €ct per tkm (1990 prices) Source: Dutch Transport Ministry, Perspectief op Mobiliteit, 2002

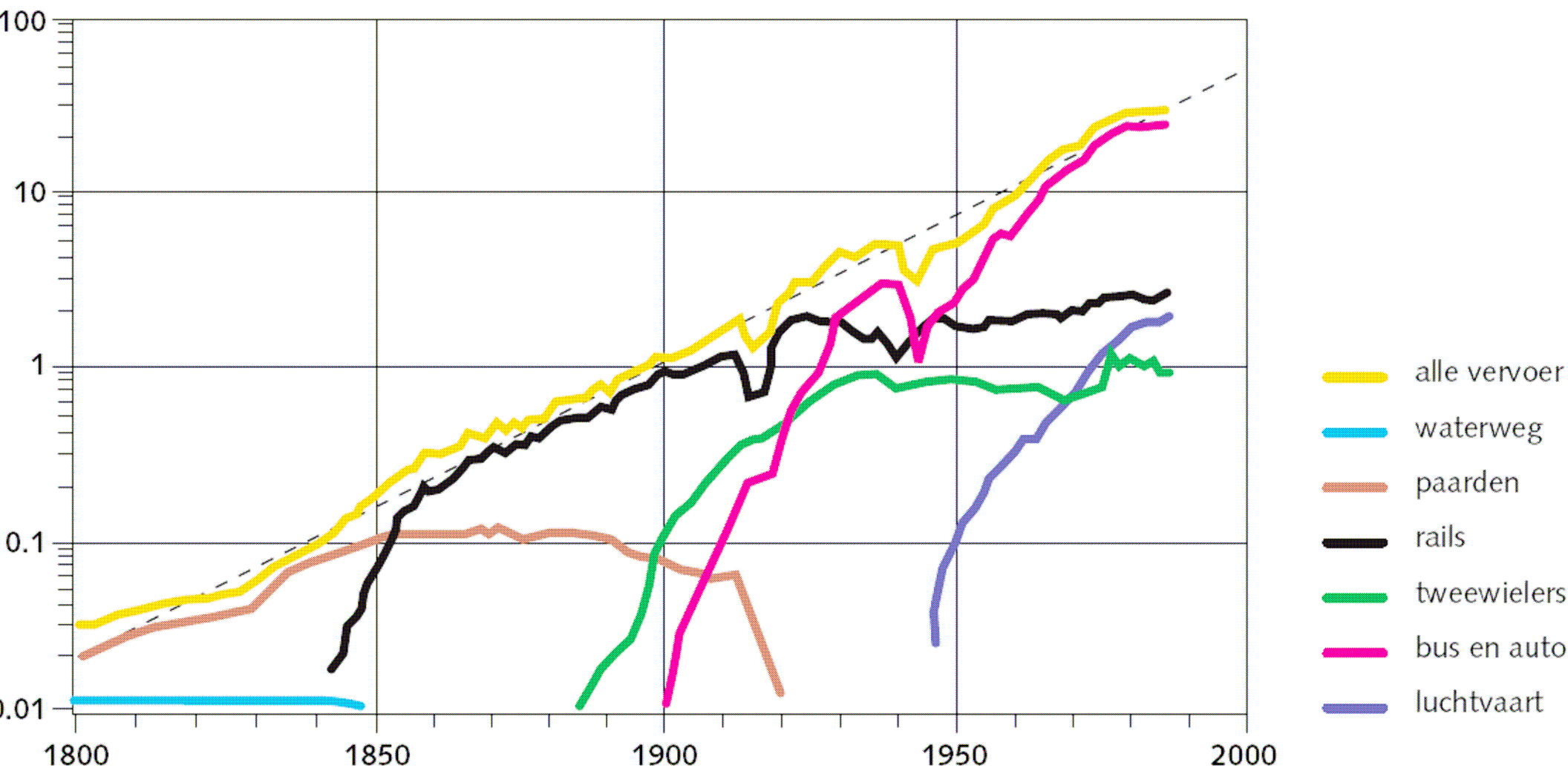
... and so has air freight



Same story in a somewhat shorter timeframe



Speed has increased dramatically



History, conclusion 1

Transport has become dramatically cheaper and faster

EU transport policy has been major factor

Tremendous volume growth should not exactly be a surprise

Transport volume is result of demand for AND supply of transport services



Car energy efficiency: 60 years of progress ?

1948: 7.5 litres/100km



2008: 7.5 litres/100km



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Aircraft efficiency: 50 years of progress ?

1958

Lockheed Constellation
7 MJ / ATK



2008

Boeing 737-800
8 MJ / ATK



History, conclusion 2

Energy efficiency improvement insignificant

If any progress has been made at mode level, intermodal developments has wiped it out

35% growth of CO₂ emissions 1990-2006
should not exactly be a surprise



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The way forward

'This is the greatest market failure the world has seen'

The EU's unique strength
is its power to regulate markets

The EU's example is followed
in almost all of Asia and in much of Latin America

We can't afford

not to use that power to the maximum

As long as heavy industry is in ETS, road transport should stay OUT

Heavy industry (carbon leakage) causes ETS to be too weak for transport

In cost effectiveness assessments, not only carbon *abatement* costs should be minimised, but also carbon *leakage* costs

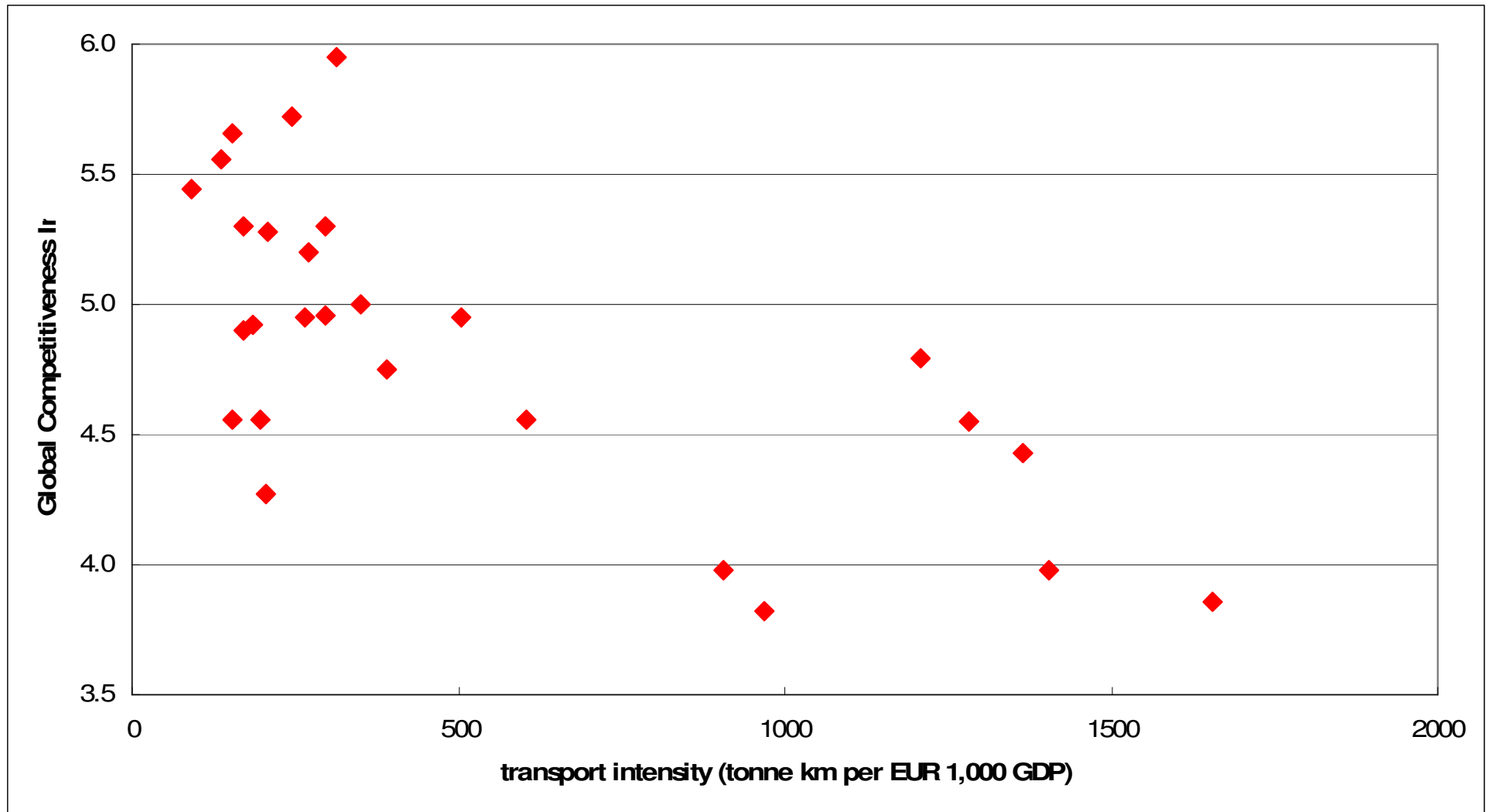
It transport is immune to leakage, acceptable abatement costs in transport are much higher



Instead, set two targets:

- **transport energy use**
- fuel decarbonisation

Competitive economies do more with less transport



This exacerbates, not alleviates, transport growth

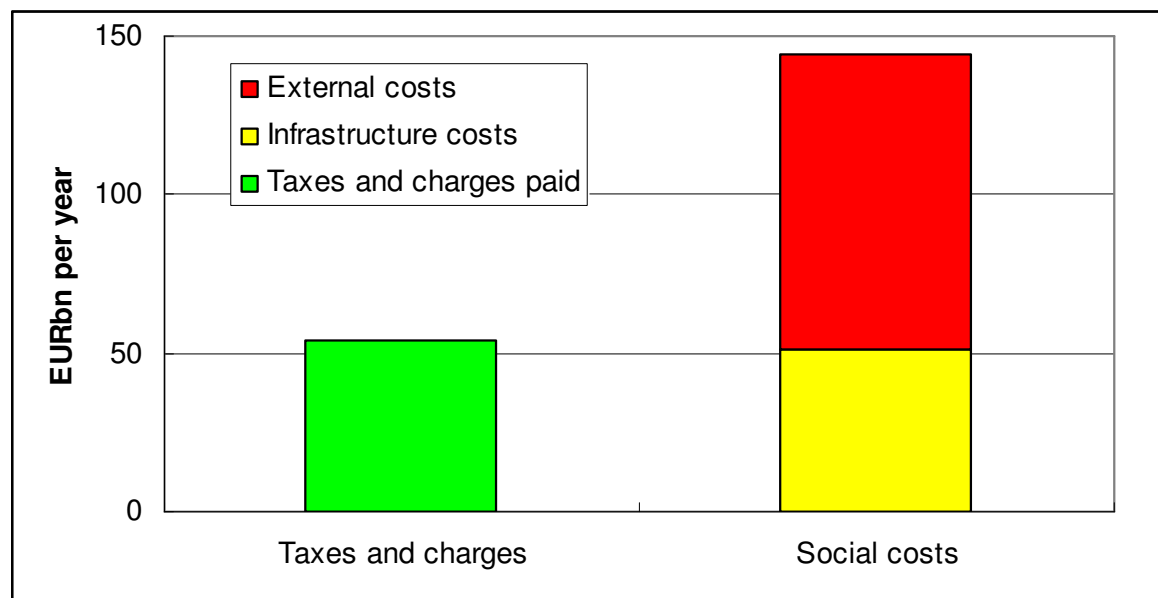


Pricing:

Tax what you burn, not what you earn

Trucks only pay
infrastructure costs – all
external costs yet unpaid

Next stage truck charging
'Eurovignette' law should
become binding



Aviation exemptions urgently need to be ended

EU should not put any additional restrictions in the way

Fuel prices work in reducing fuel consumption



Efficiency standards: we've only just started

Everyone expects EU to act – failure not an option

Trucks and aircraft: if EU does not speed up standard-setting, US EPA will lead the way

Ships: making IMO's index work useful by tying instruments to them

Addressing *speed* relevant in all modes: first vans

Efficiency standards: improving the framework

The EU should regulate vehicles on their energy efficiency, and fuels on their carbon intensity. Don't mix the two

Electric cars are not 'zero emission'. CO2 depends on power supply. The only thing we know about the electric cars is its tank-to-wheel energy use

Flexfuel cars do not emit less CO2, that depends on the fuel. The only thing we know is that they use as much energy as their conventional counterpart.



The EU does not regulate fridges on the assumption their owners will use green electricity

Bunkers and shipping

COP15 should give -30% / 2020 and -80% / 2050 emissions target and instruct ICAO and IMO in what way to act

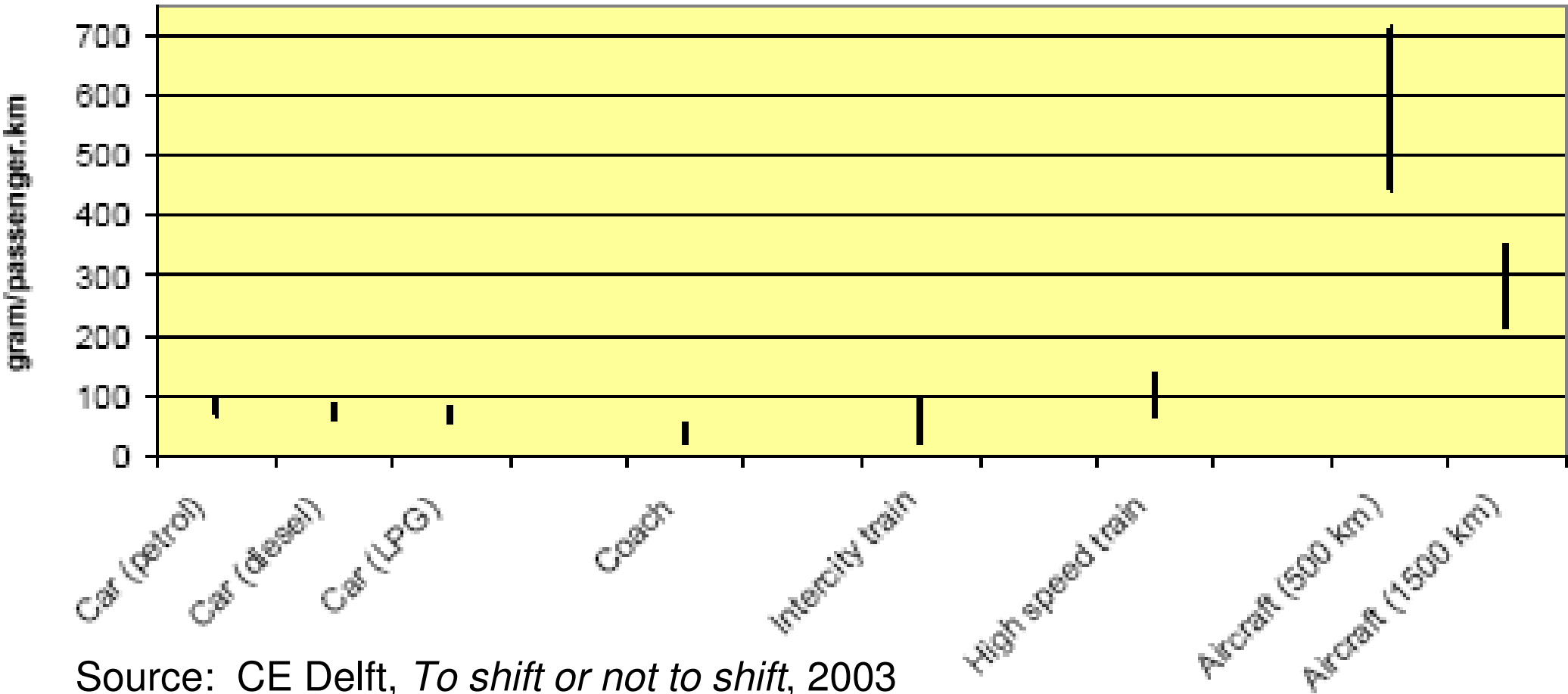
EU should act on shipping: ETS, standards, speed – great and cheap reduction potential



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Inter- and comodality



Source: CE Delft, *To shift or not to shift*, 2003



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Putting climate at the heart of EU spending

EU money acts as multiplier and as political justification at national level

Motorways and particularly airports can be paid for by users – questionable whether EU support needed

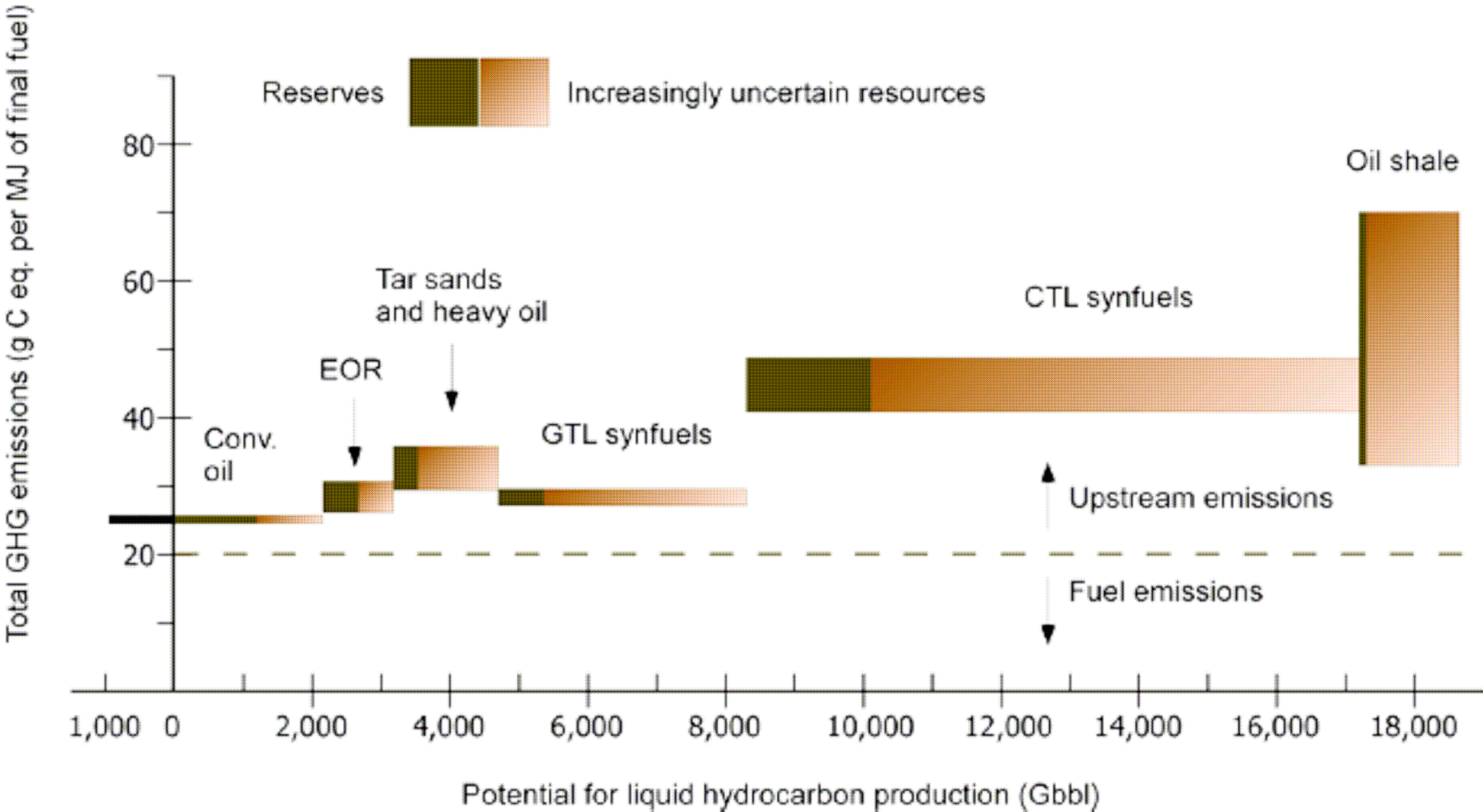
rail money often goes to projects with lowest environmental bang for the buck: high speed, heavy freight

At the same time big parts of CEE rail network crumbling down

- transport energy use
- **fuel decarbonisation**

We don't need biofuel quantity targets, we need a low carbon fuel standard – approach of the fuel quality directive

Because future oil will be a lot dirtier than today's



Liquids will be ever more problematic,
electricity increasingly looks like the way forward.

But what will the alternative be

Biofuels ?

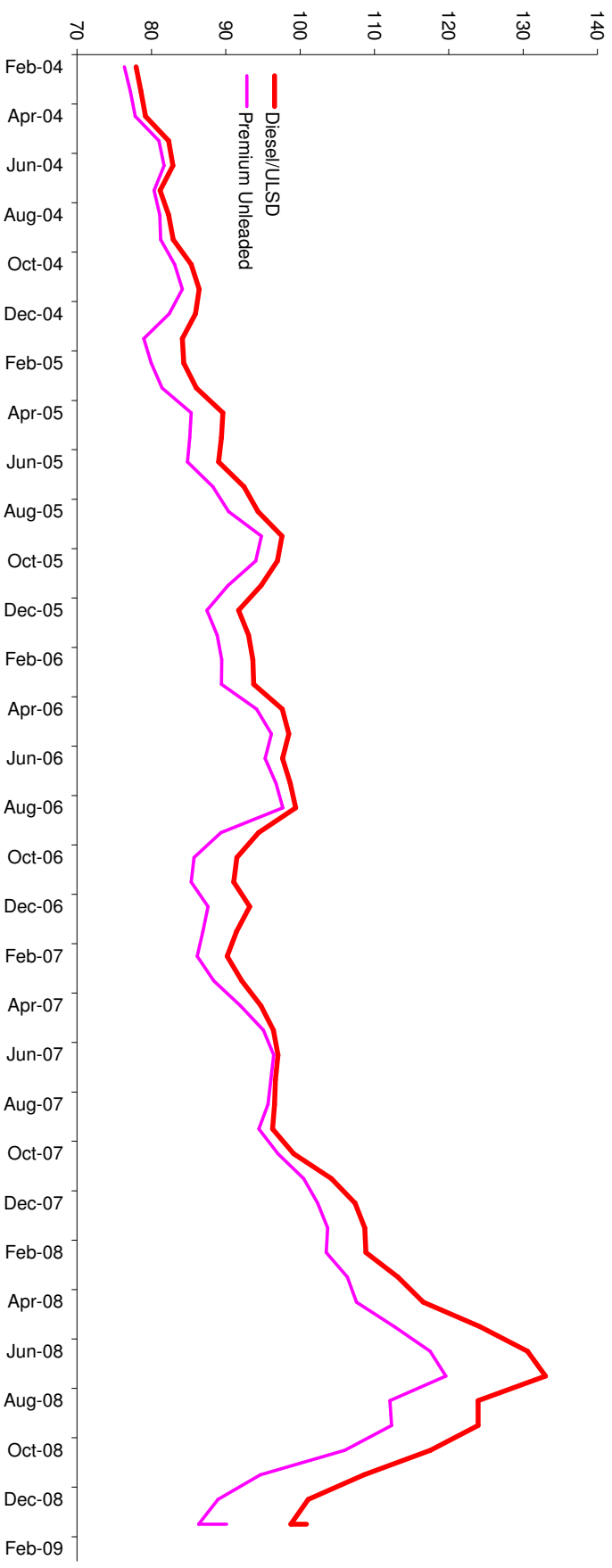
We are far from an honest assessment of their climate impacts

Large-scale sustainability 'challenging'

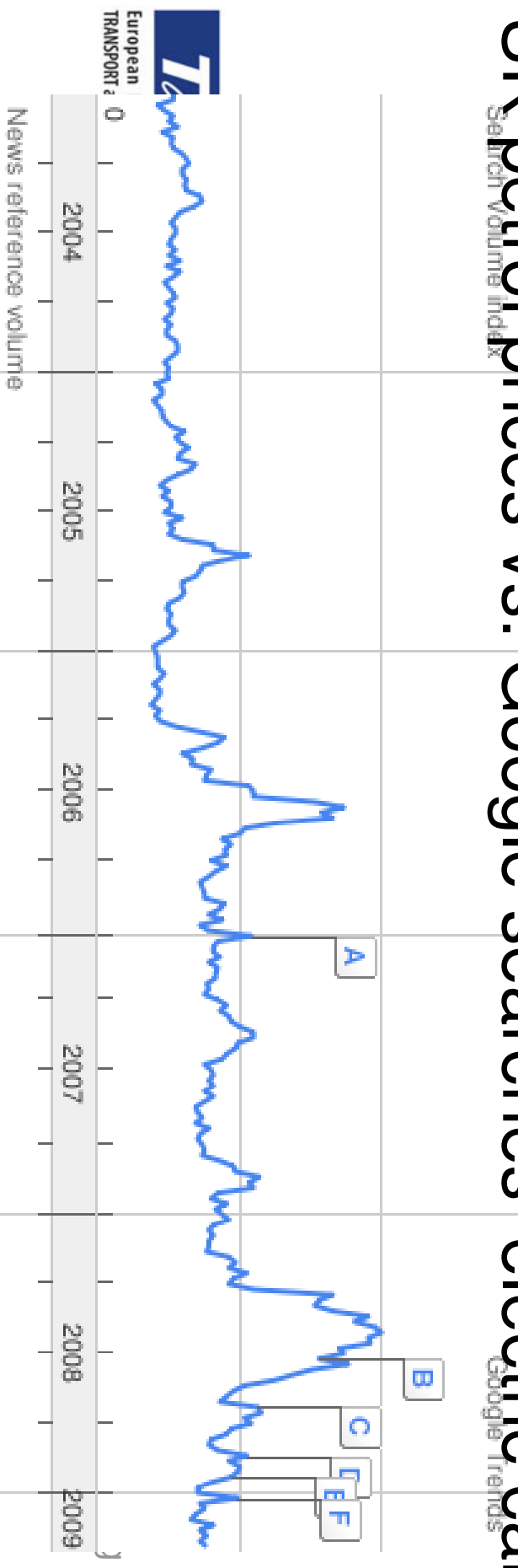
Hydrogen ? Chain efficiency poor; '*the car of the perpetual future*' (Economist)

Electrification then ? First and foremost, we have to realise that ...

... it takes an oil crisis to cause talk of electric cars



UK petrol prices vs. Google searches 'electric car'



Key messages

1. Special transport & climate strategy needed - with a wholly different level of ambition;
2. Should include separate targets for transport energy use and decarbonisation. Inclusion in ETS would be monumental mistake;
3. Should not exacerbate volume growth – instead it should address it;
4. Should act on massive energy efficiency potential – broaden and deepen standards and take speed in all modes into account;
5. Should pay special attention to aviation & shipping – ETS & SES patently insufficient;
6. Should put climate at heart transport spending;
7. Should consider electrification strategy that harvests potential and avoids downsides;

Thank you !!

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