

The current rules and opportunities for road user charging

Nina Renshaw

The European Federation for Transport and Environment
Mobility Demand Management Forum Coordinator - Eusko Ikaskuntza
Bilbao, 4 December 2008

T&E membership

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

51 Members – 23 Countries

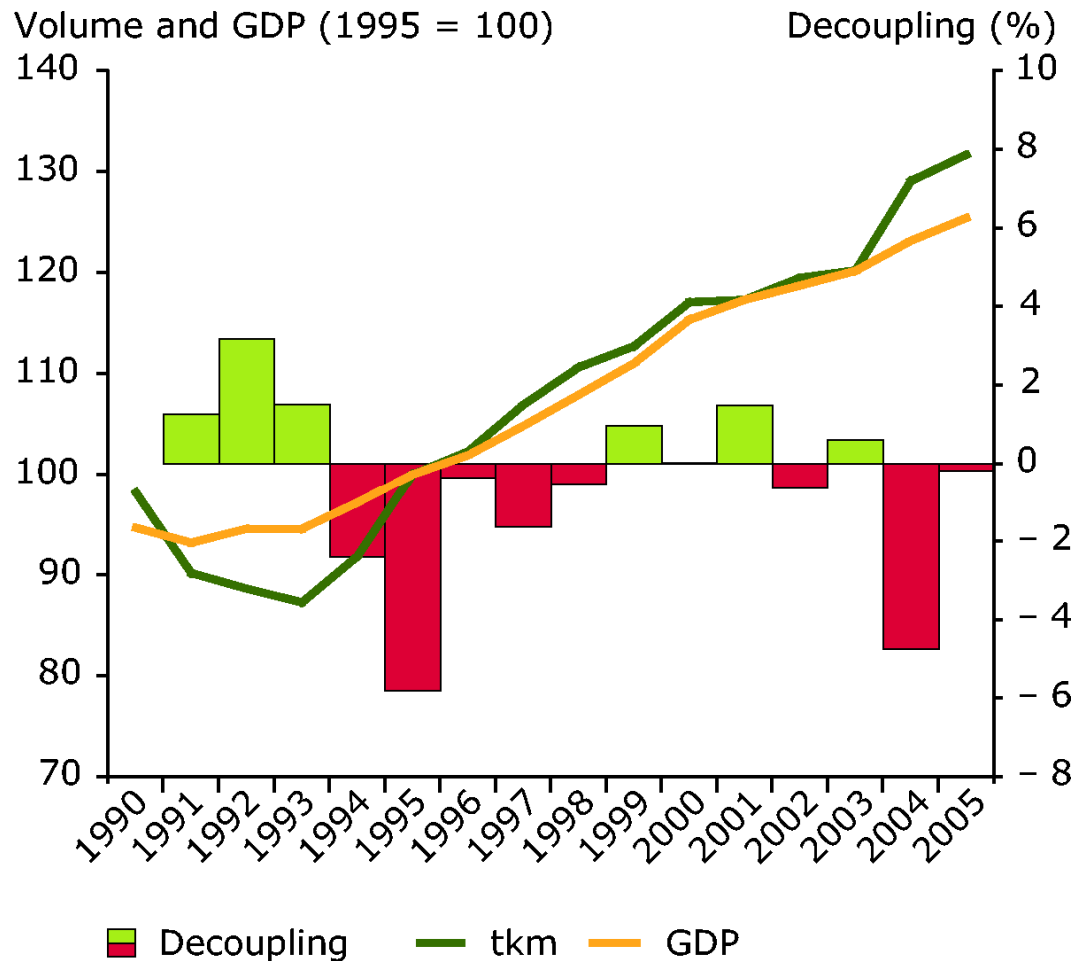


European Federation for
TRANSPORT and ENVIRONMENT



www.transportenvironment.org

Freight transport growth



Freight transport growth in Europe (1990-2003) + **43%**

Double the rate of passenger transport growth

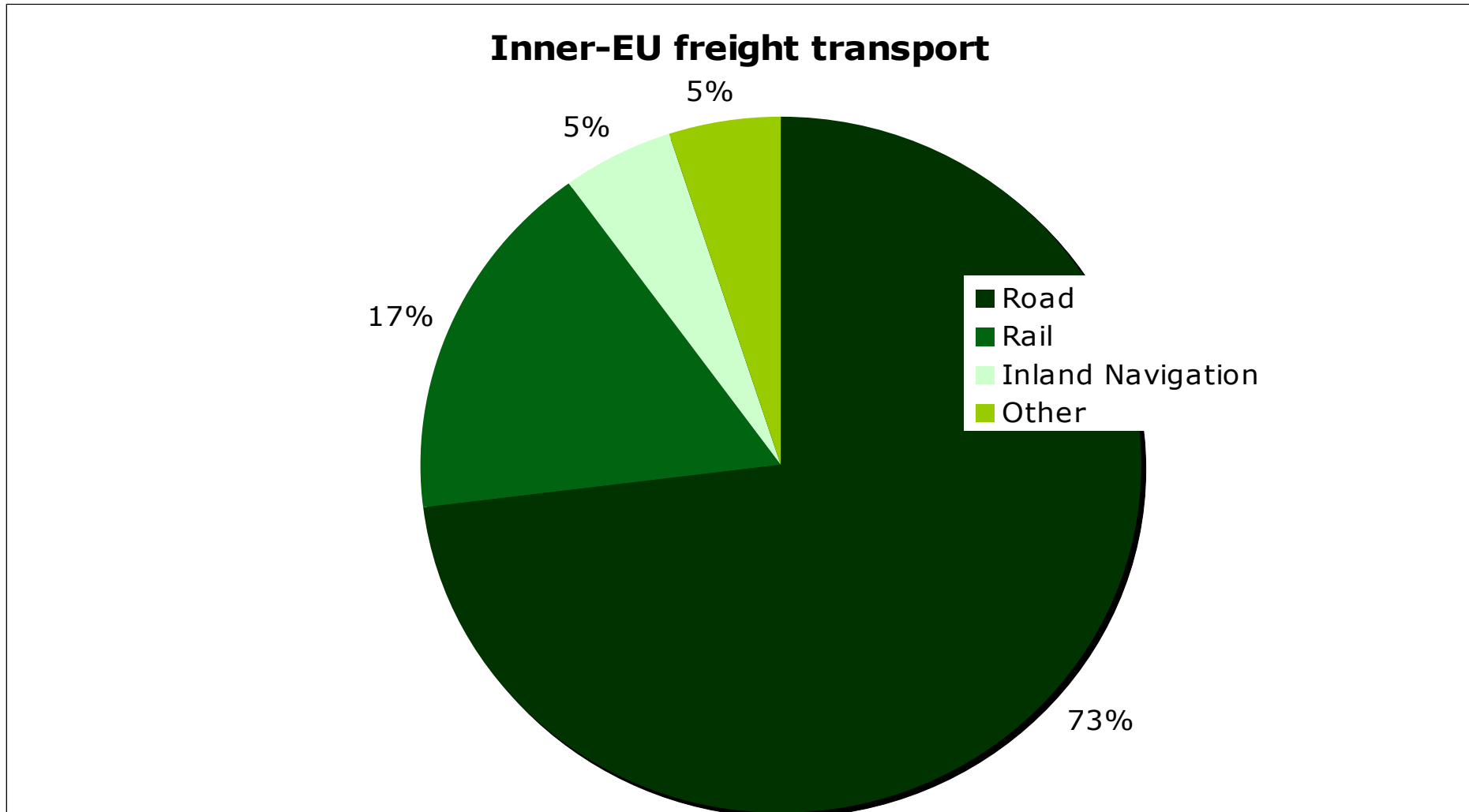
Outpacing 30% GDP growth

Projected growth road freight transport demand (2000-2020) + 52%



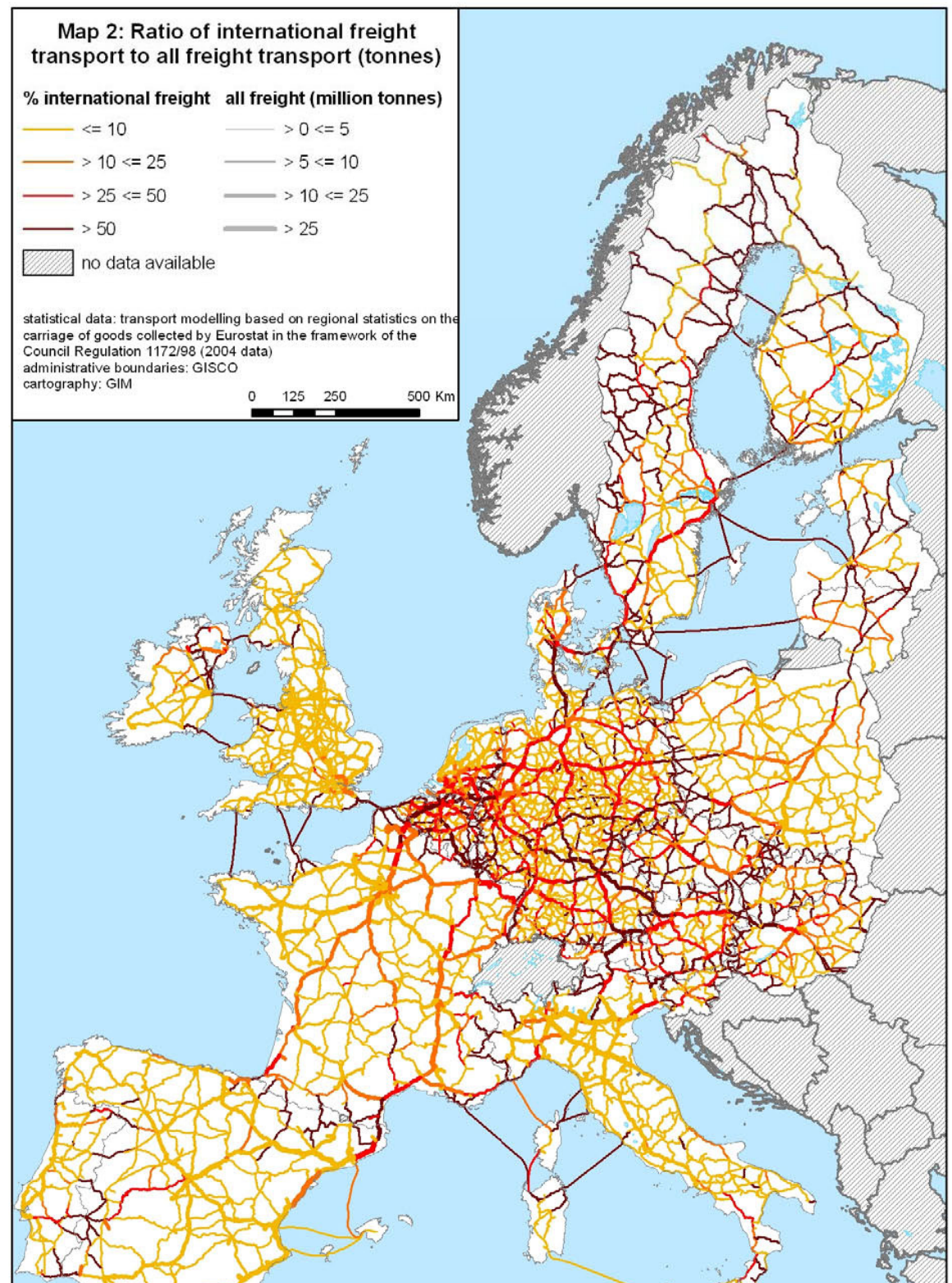
Source: EEA, 2008

Modal split



International transport regions

Proportion of international journeys



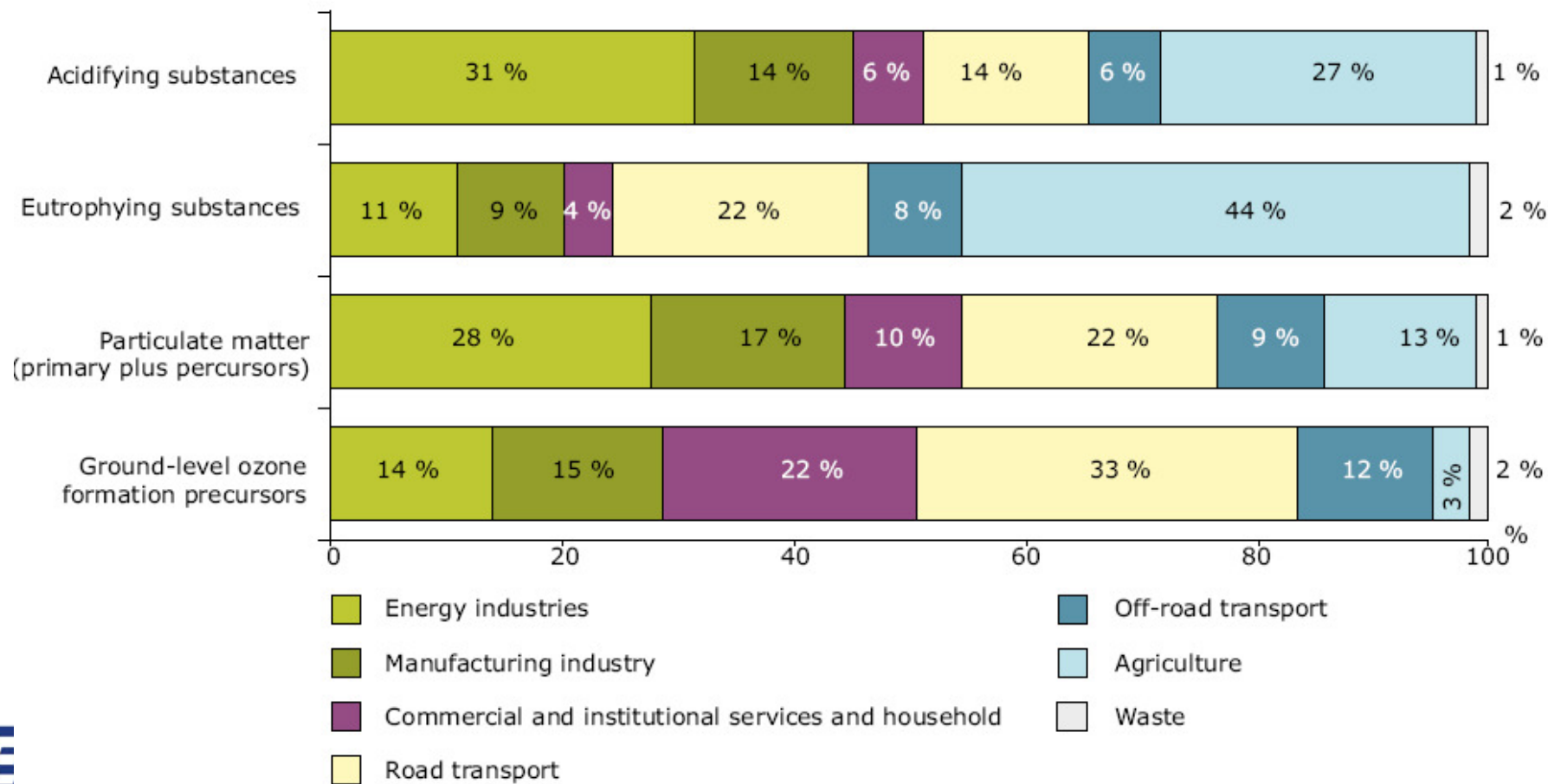
Source: Eurostat, Regional dimension of road freight transport statistics, 62/2007

Air pollution from transport

Air pollution responsible for 370,000 deaths in EU

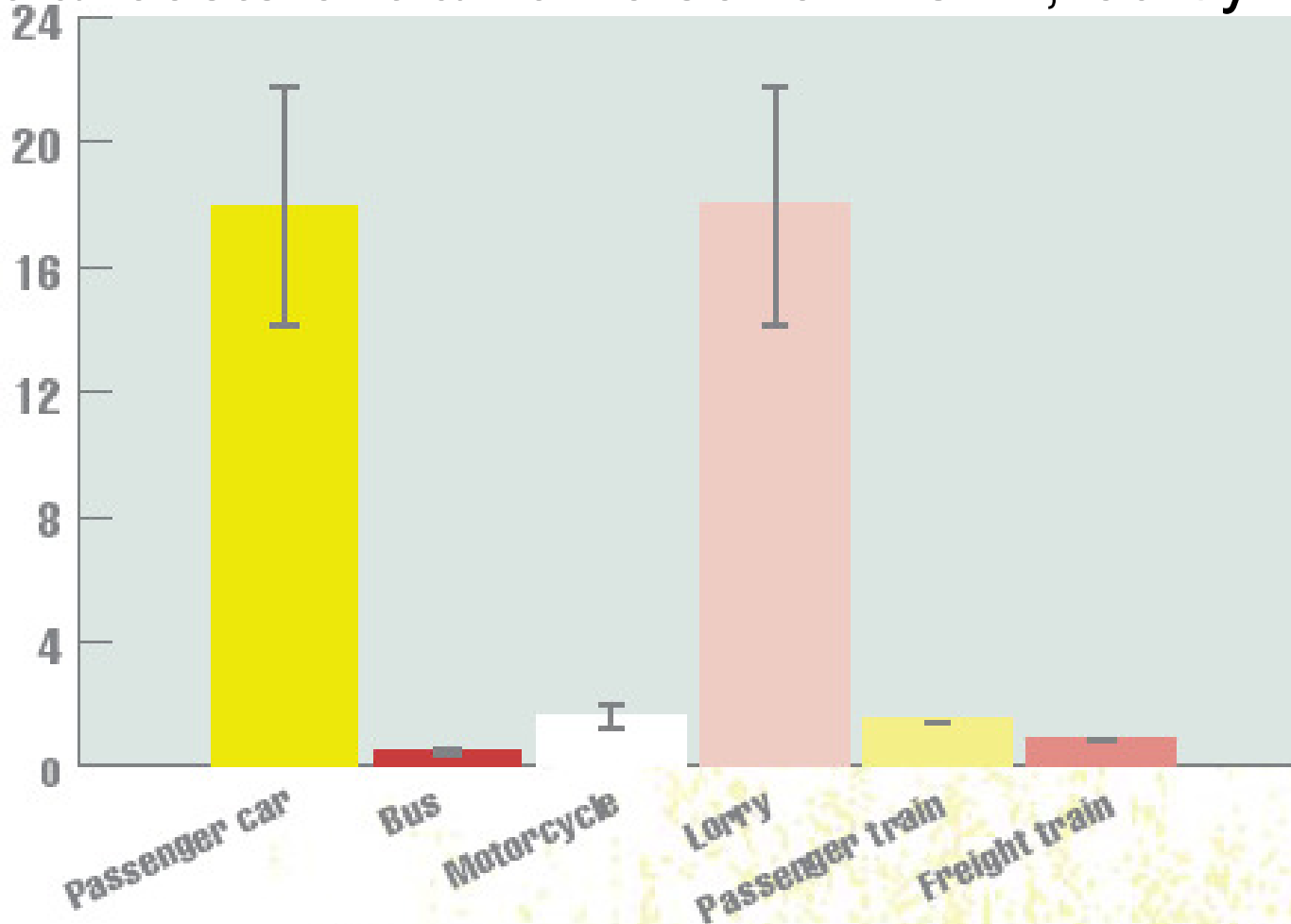
Share of road transport in air pollution 14 - 33%

Road transport AT LEAST 80,000 deaths



Transport Noise

Social costs of traffic noise for EU22, €bn/yr

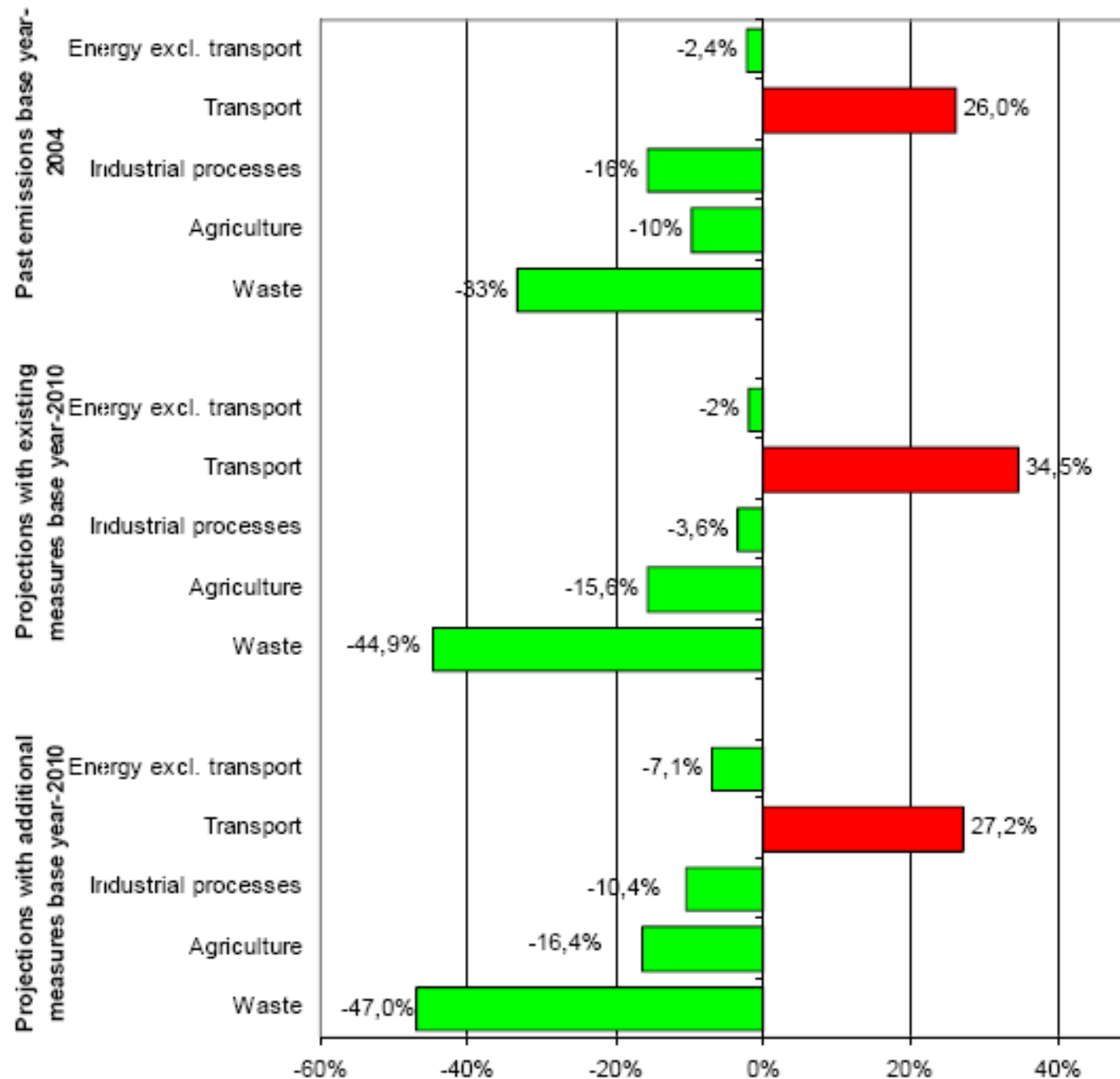


Transport and Climate

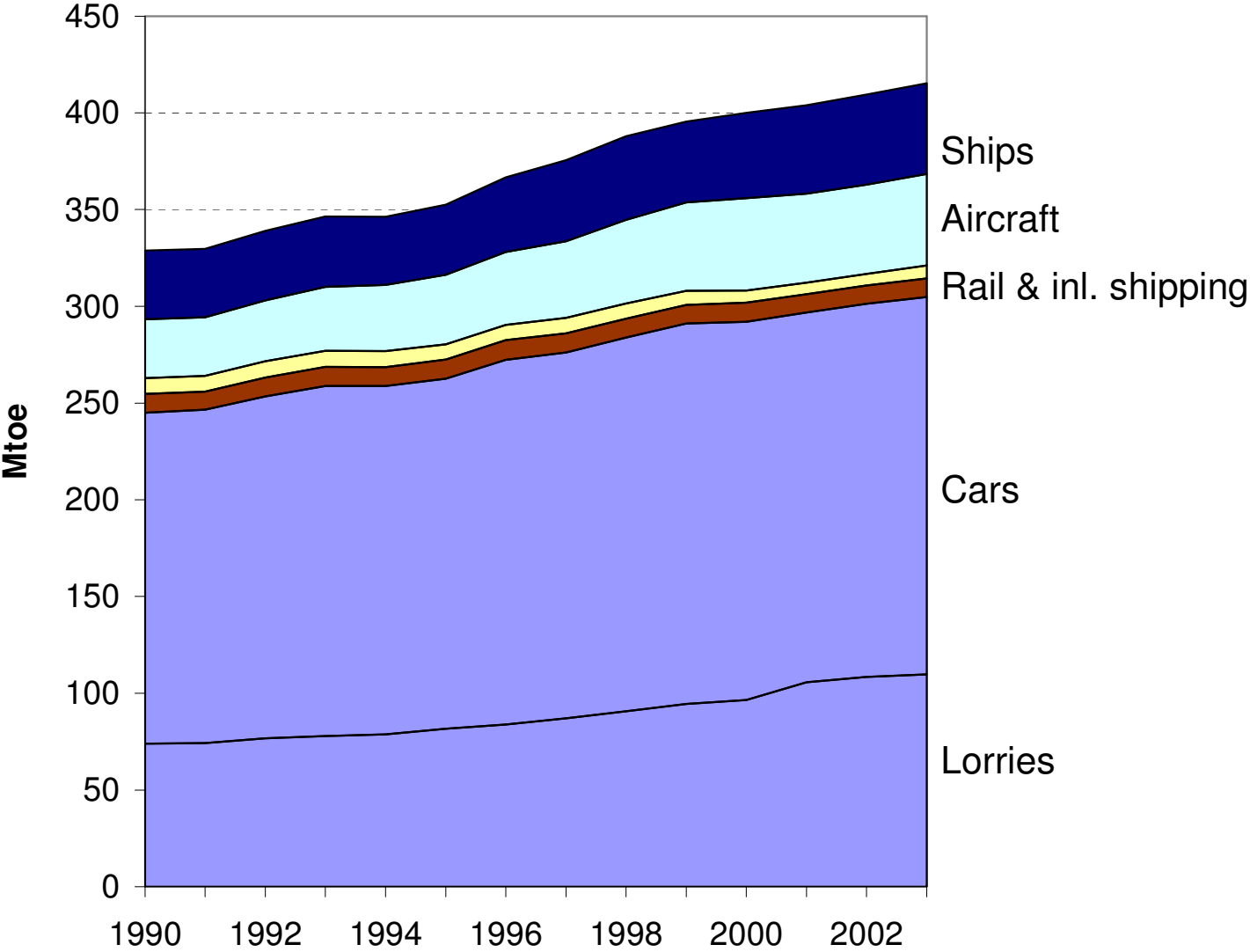
The only sector undermining European climate targets!



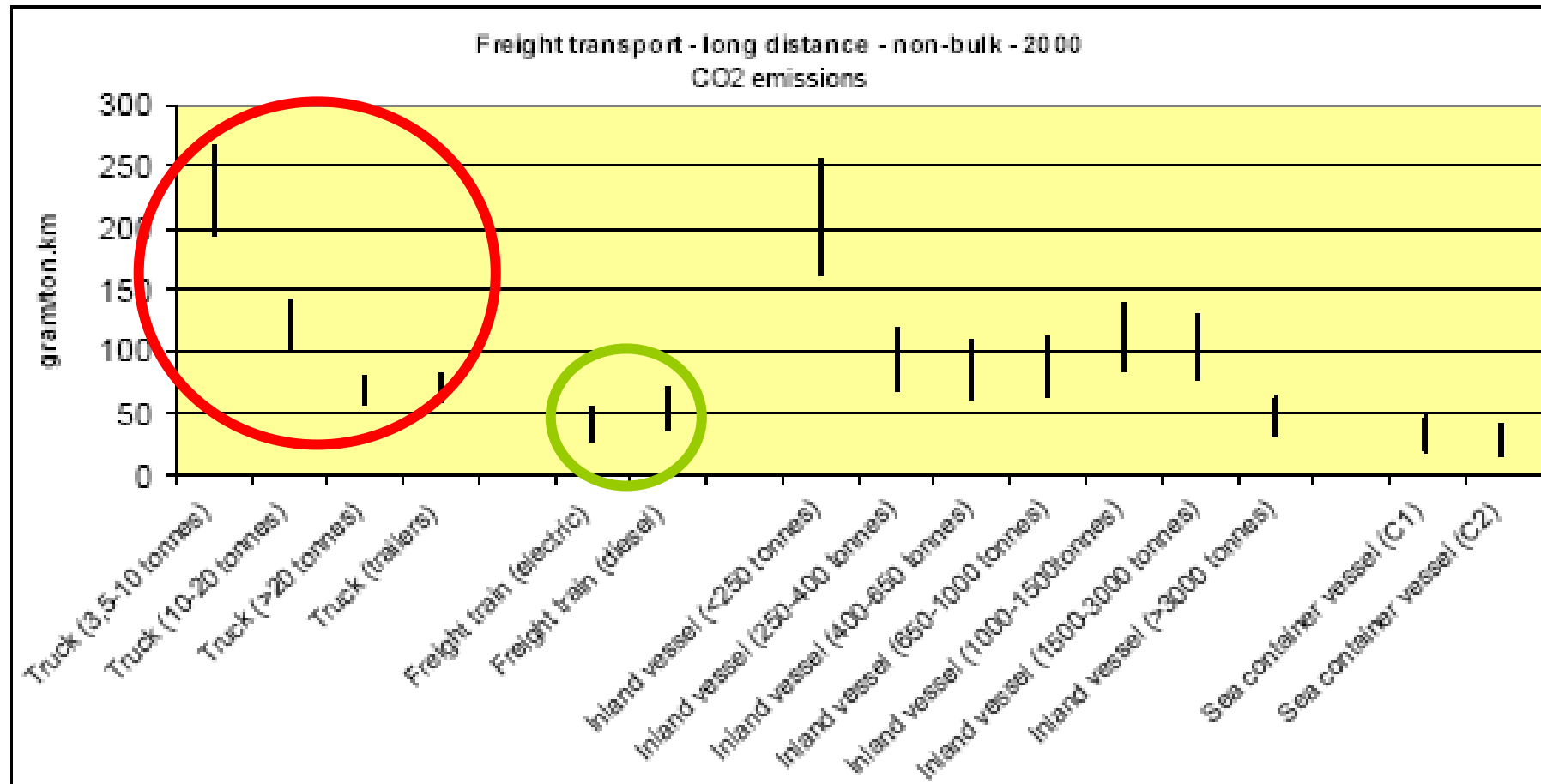
European Federation for TRANSPORT and ENVIRONMENT



Oil consumption in transport



Comparison climate performance by mode



Directive 2006/38/EC



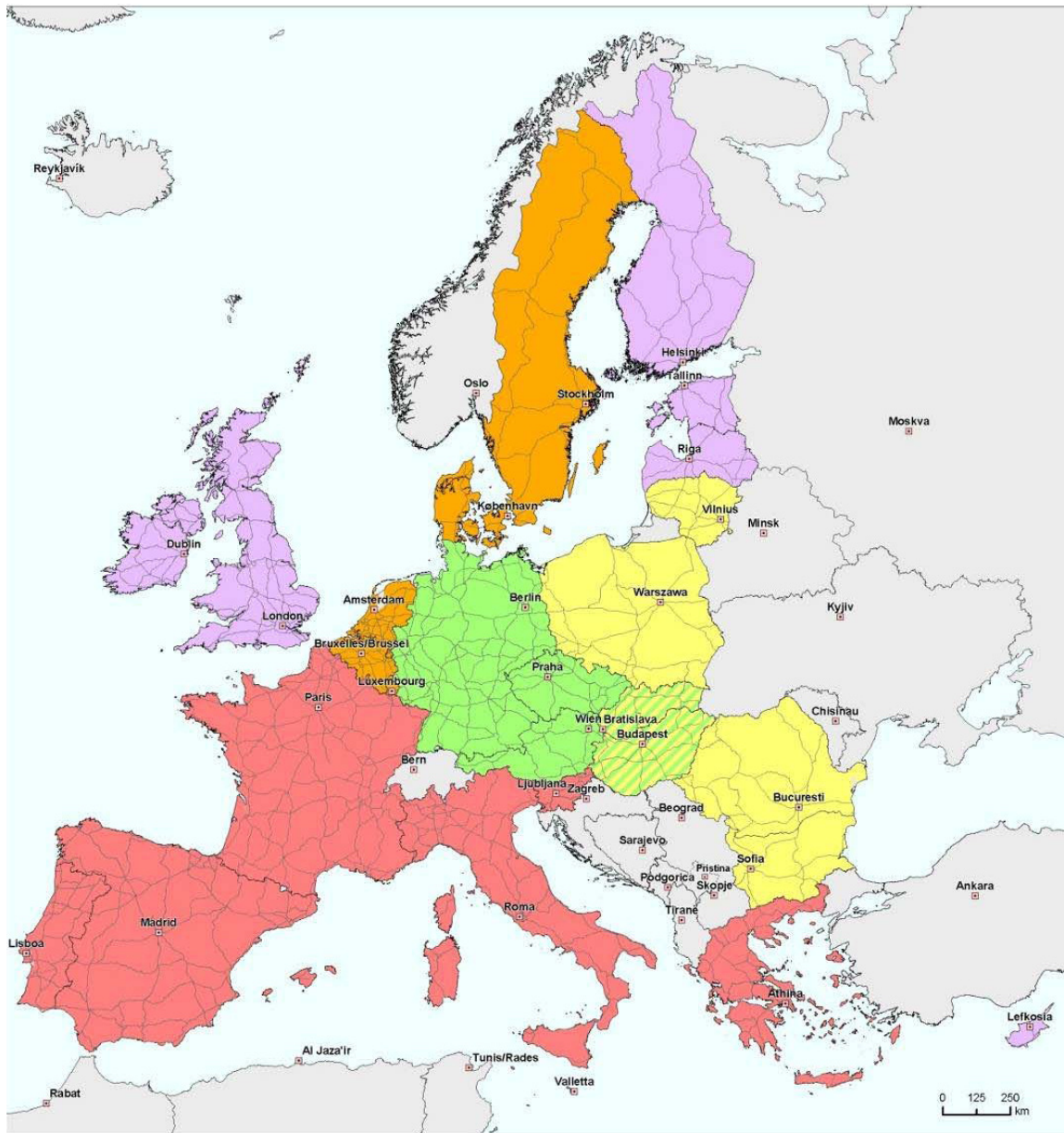
An enabling framework...

Allows - does not oblige - countries to levy charges or tolls on the entire road network

EU rules (from 1999) introduced a methodology linked to infrastructure costs, to limit to road charges levied by Member States.

Current rules allow both **time-based vignettes** and **distance-based tolls**.

Current charging schemes



- **Distance-based Charging** (Green): AT, DE, CZ
- **Time-based Eurovignette** (Orange): SE, DK; Benelux (HU and SK under preparation)
- **National Vignettes** (Yellow): RO, BG, PO, LT
- **Toll collection with physical barriers** (pink): GR, SI, IT, FR, SP, PT
- **No charges** (purple): UK, IE, FI, EE, LV
- nb. **Switzerland** – non-EU, own rules: distance-based charges with external cost internalisation on all national road network.

Experience of km-charging

Benefits found include: (CH, DE, AT, CZ)

- Better load factor, reduced empty driving
- Cleaner (newer) fleet composition
- Reduced emissions
- Revenues / Fast cost payback
- No effect on consumer prices

But... traffic diversion, modal shift moderate.

Swiss Heavy vehicle fee

Since 2001, all HGVs from 3.5t, all roads, fee variation by distance, weight, emissions class.

- Fee level calculated on basis of infrastructure and external costs, including congestion, climate, noise, accidents, air pollution, landscape fragmentation, health costs.
- 2/3 of revenues earmarked for national public transport fund (incl Alpine rail tunnels, noise reduction)
- 1/3 revenues to the Cantons (local authorities)



Swiss Heavy vehicle fee

Approved by public referenda

Impacts 2001-2005:

-Increased efficiency: + 16,4 % tkm / - 6,4 % vkm

-Reduced emissions:

- 10 % PM₁₀, - 16 % NO_x, - 4 % CO₂

-Modal split transalpine transport: 64% rail, 26% road

- Revenue: €900million (2006)

www.are.admin.ch



European Federation for
TRANSPORT and ENVIRONMENT

www.transportenvironment.org

System design – Rules and choices



Scope

No obligation to charge lorries, so options include...

Tolls, vignettes, user charges or no scheme.

Eurovignette rules do NOT apply:

- To vehicles under 3.5t
- Outside the Trans-European road network (m-ways)
- Urban areas, parallel roads

Eg. London, Stockholm, Milan free to design schemes.



Toll / user charge calculation

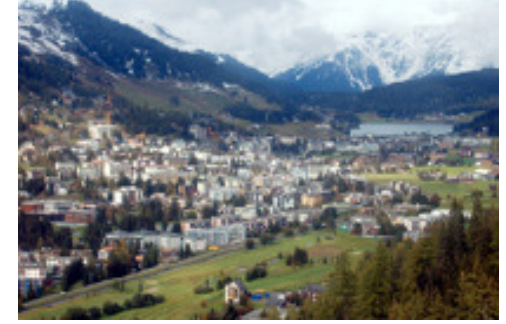
Tolls must be based on recovery of infrastructure costs only (including construction, operation, maintenance, development costs)

Weighted average fee (total revenues/total vehicle km) must not exceed costs on the tolled network.

Important exceptions: Regulatory charges and Mark-ups



Mark ups



Surcharge permitted in specific cases

- Mountainous areas & TEN-T corridors (higher infrastructure costs)
 - subject to acute congestion and / or
 - suffering significant environmental damage

Motivation: Revenues for TEN-t project in same corridor
15% mark-up in national sections / 25% cross-border
+ Protection of designated areas
+ Potential safety benefits

Possibly applicable: Pyrenees?

Regulatory charges

Important new opportunity since 2006!

Top-up charges may be permitted in addition to weighted average fee (TEN-r roads)

- To combat traffic congestion and
- Local environmental impacts

Suggested use in urban areas to tackle congestion, improve air quality (Bilbao, ports of Bilbao, Pasaia?)

Very flexible Article - Open interpretation

Can be added to mark-ups



European Federation for
TRANSPORT and ENVIRONMENT

Fee variation

Variation of fees *permitted* on basis of time of day, day of the week

- + Traffic management
- + Reduced congestion
- + Managing pollution / noise peaks

Variation of fees *obligatory* on 'Euro' emissions classes or PM/NOx emissions from 2010

- + Environmental incentives & awareness
- + Cleaner fleet renewal
- + Air quality objectives



Use of revenues and implementation

Use of revenues at **Member States' discretion**

Recommendation for use to benefit transport sector and optimise transport system

Use for non-transport purposes permitted

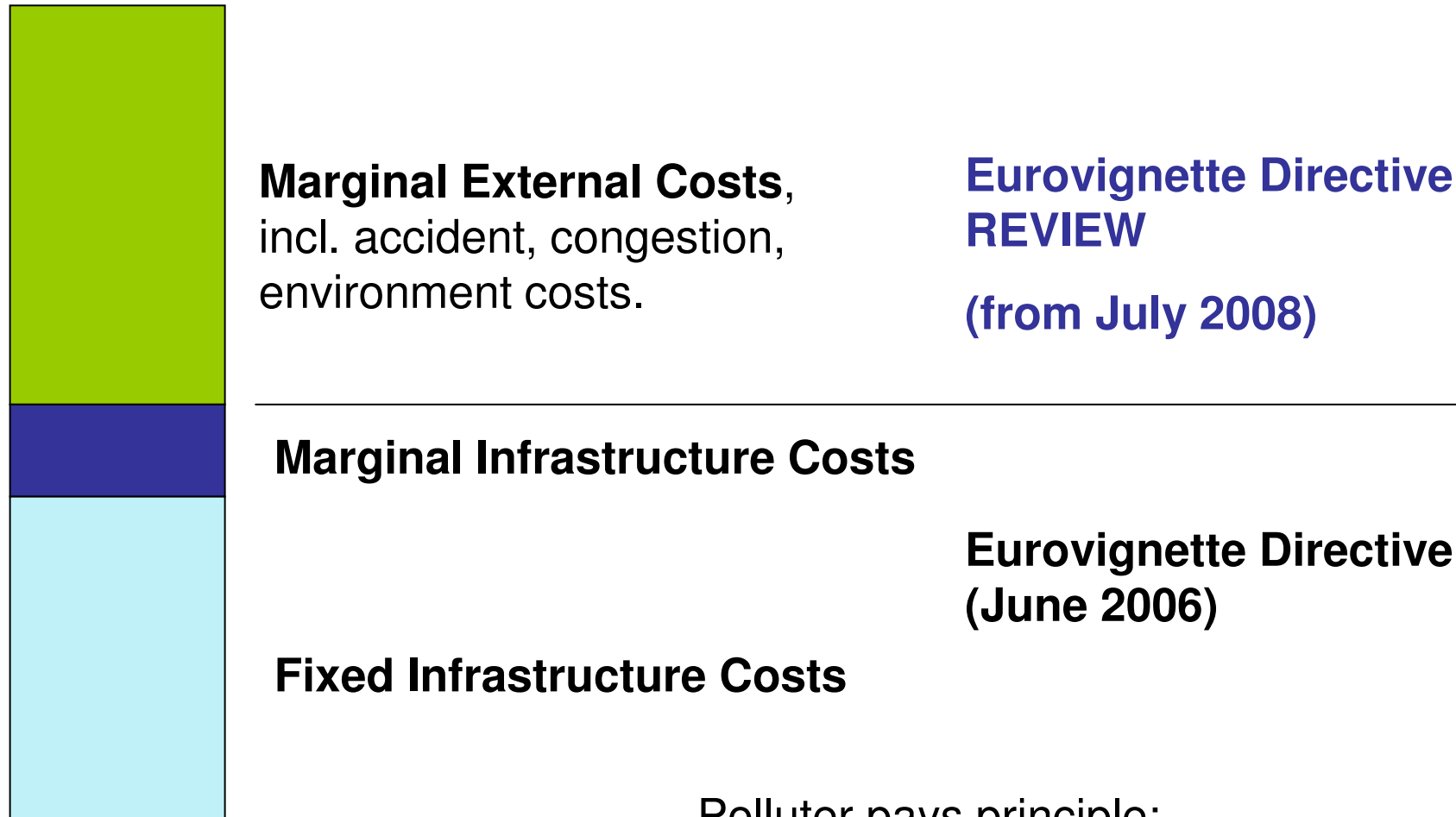
Member States obliged to ensure proper implementation, including effective, disuasive penalties.



European Federation for
TRANSPORT and ENVIRONMENT

www.transportenvironment.org

Major gap in current rules



Polluter pays principle:

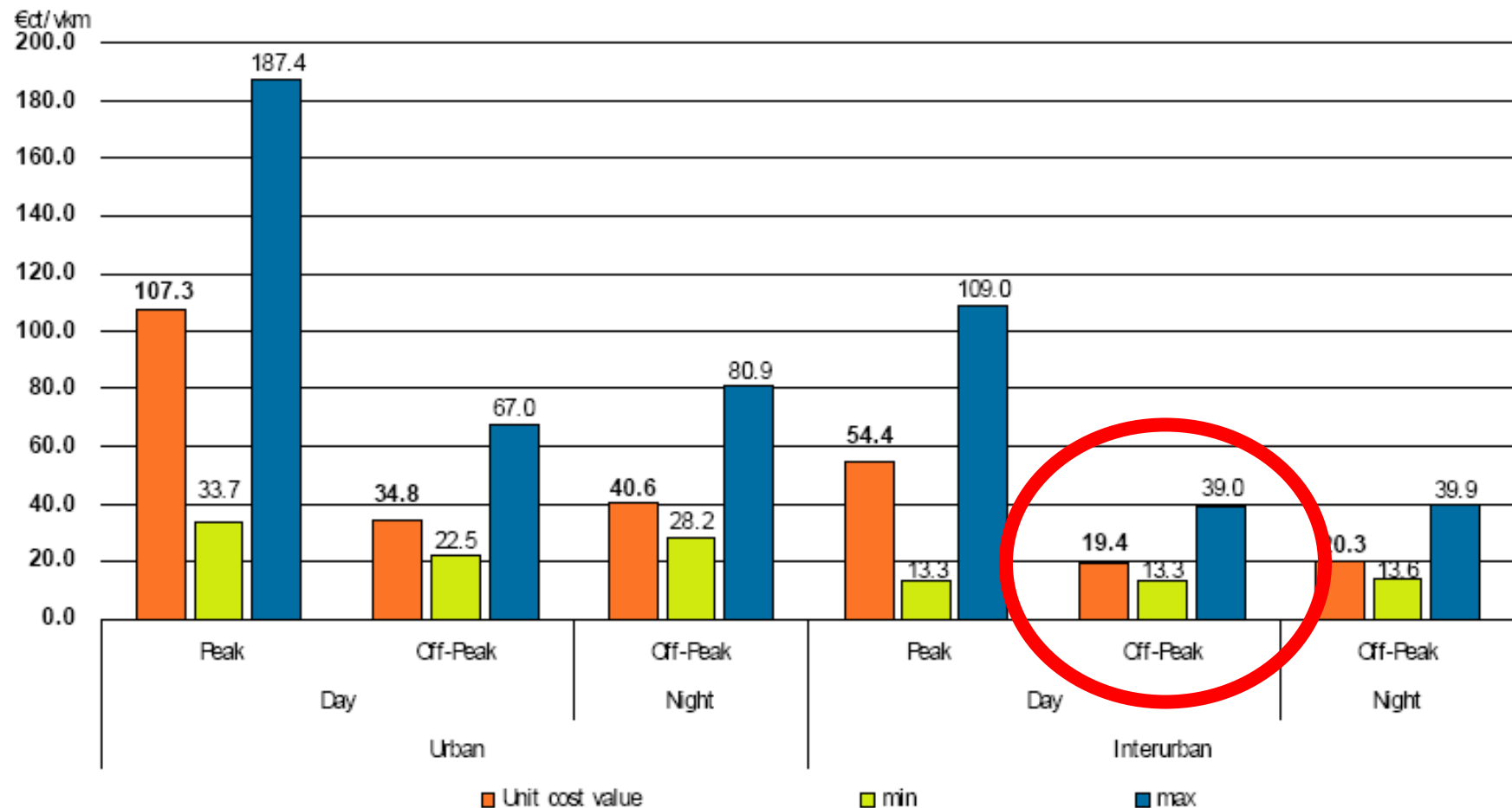
“environmental damage should as a priority be rectified at source and that the polluter should pay.” (EU Treaty)



European Federation for
TRANSPORT and ENVIRONMENT

Typical external costs HGV

€0.2 per km, off-peak, interurban



Summing up



Key benefits of road charging

- **Economic**

- Improved efficiency and innovation in road freight sector
- Reduced congestion
- Revenues (double dividend)

- **Social**

- Who suffers from noisy and polluted roads? Who are the victims of climate change?
- Reduced pressure on oil prices

- **Environmental**

- Improved air quality, less noise, reduced GHG emissions, cleaner fleet, local differentiation.

Possibilities for action!

Outside Eurovignette rules:

Urban areas, light vehicles, non TEN roads –
Regions/cities can charge as they want for local objectives – Solution for Barcelona?

Within current Eurovignette rules: Recovering infrastructure costs plus further opportunities...

Mark-ups for the Pyrenees (to fund Pyrenean link)?
Regulatory charges for congested and polluted/sensitive areas - Port? Natural areas? Mountains?



European Federation for
TRANSPORT and ENVIRONMENT

www.transportenvironment.org

Towards smart charging

An opportunity to – finally - allow Member States to internalise of external costs in road tolls ('Eurovignette')

Scientists/economists have done their job:
IMPACT Handbook on external costs

Thank you

For more information on the current Directive:
,A Price Worth Paying' T&E 2007
- also available in Spanish

www.eurovineta.es

nina.renshaw@transportenvironment.org