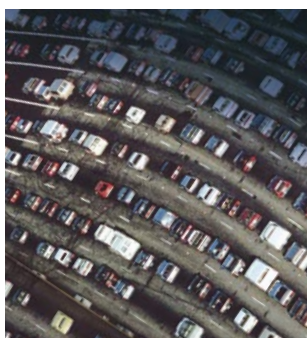


# CER FACT SHEET

SEPTEMBER 2008

## EXTERNAL COSTS OF TRANSPORT AND THE EUROVIGNETTE REVISION



### Clear need for action:

- **The current Eurovignette Directive makes road transport the only mode for which the internalisation of external costs is not allowed, whereas Directive 2001/14 allows it for rail!**<sup>1</sup>
- **Road along with maritime transport are the only two modes not participating in the Emissions Trading System (ETS). Airlines will be covered as of 2011-2012, while railways (with 80% of total traffic by electric traction) participate already today through the inclusion of the electricity generating sector in the ETS.**

### 1. WHAT ARE “EXTERNAL COSTS”?

- External costs are the costs of the negative effects of transport that are not paid by the transport users themselves (e.g. pollution).
- They are **real costs to society** (e.g. on payers of health bills and insurance premiums, on tax payers, on companies losing productivity).
- The question is: who should pay for them?

1. Article 7 clearly states that: *“the infrastructure charge may be modified to take into account the cost of the environmental effects caused by the operation of the train”.*

Table 1 – Main Categories of External Costs and WHO REALLY PAYS for them today?

CATEGORIES of COSTS	Who really pays for them?	
	Transport users	Non-transport users
<b>Climate change (CO2 emissions)</b> <ul style="list-style-type: none"> <li>• catastrophes</li> <li>• reduced crops</li> </ul>	Users don't pay	<ul style="list-style-type: none"> <li>• Insurers (Insurance payers)</li> <li>• Public authorities (Tax payers)</li> <li>• Individuals</li> <li>• Future generations</li> </ul>
<b>Air pollution:</b> <ul style="list-style-type: none"> <li>• human health</li> <li>• animal health</li> </ul>	Users don't pay	<ul style="list-style-type: none"> <li>• Health insurers (Insurance payers)</li> <li>• Public authorities (Tax payers)</li> <li>• Individuals</li> </ul>
<b>Accidents:</b> <ul style="list-style-type: none"> <li>• human injuries</li> <li>• material damages</li> </ul>	Partly, through insurances	<ul style="list-style-type: none"> <li>• Insurers (Insurance payers)</li> <li>• Public authorities (Tax payers)</li> <li>• Individuals</li> </ul>
<b>Congestion</b> <ul style="list-style-type: none"> <li>• human stress</li> <li>• productivity loss</li> </ul>	Partly, through productivity losses	<ul style="list-style-type: none"> <li>• Companies</li> <li>• Individuals</li> <li>• Health insurers (Insurance payers)</li> </ul>
<b>Noise</b> <ul style="list-style-type: none"> <li>• human stress</li> </ul>	Users don't pay	<ul style="list-style-type: none"> <li>• Individuals</li> <li>• Health insurers (Insurance payers)</li> </ul>

## 2. IS IT POSSIBLE TO MEASURE EXTERNAL COSTS?

The IMPACT study Handbook published by the European Commission states: “... *there is consensus at scientific level that external costs of transport can be measured by best practice approaches and that general figures are ready for policy use*”, adding further that additional decisions need to be made by policy makers<sup>2</sup>.

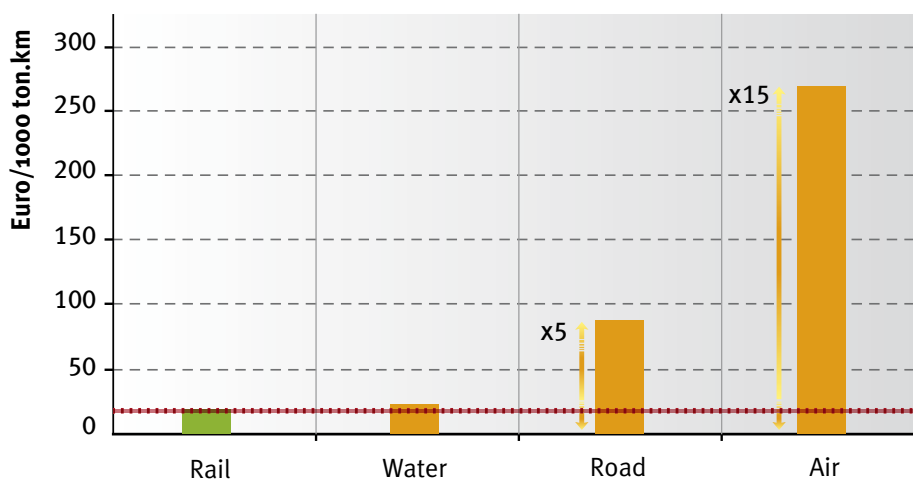
2. CE Delft (2007), Handbook on estimation of external costs in the transport sector, p.13 [http://ec.europa.eu/transport/costs/index\\_en.htm](http://ec.europa.eu/transport/costs/index_en.htm)

- **For example**, the cost of climate change can be evaluated through estimating the damage caused by changes in climate arising from higher greenhouse gas emissions.

## 3. THE MAGNITUDE OF EXTERNAL COSTS OF FREIGHT TRANSPORT

All studies of external costs of transport show the large impact of road transport on the environment. Figure 1 presents the main results of the INFRAS/IWW 2004 study in terms of average external costs for various freight modes of transport in EU 17. Compared with rail freight transport (the least polluting mode), road freight causes around **5 times more** external costs per ton-kilometer!

Figure 1: Average external costs for freight modes in 2000 (without congestion)



Source: INFRA/IWW (2004)

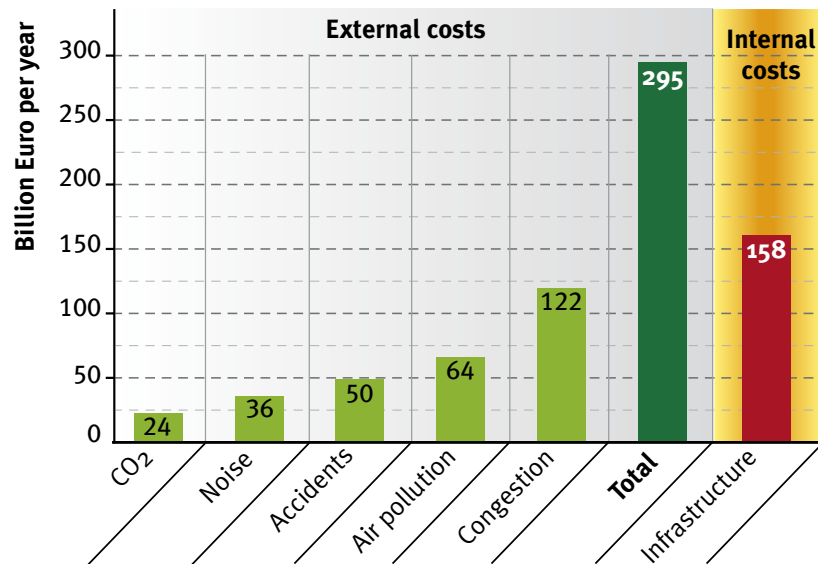


Overall, of the **Total External Costs** of the freight transport sector...

- **Heavy trucks** account for **25%**.
- **Light trucks** account for **9 %**.
- **Rail freight** accounts for **1%**.

Interesting facts come from the (conservative) estimates of the UNITE study (2003). As seen in Figure 2, not only is the level of external costs proving higher than the cost of road infrastructure, **but it represents almost 3% of all the goods produced in EU (GDP)**.

Figure 2: Costs of Road Transport in Europe (in Billion Euros)<sup>3</sup>



Source: Estimation for 2006 based on UNITE study

**This means that for 2006 the total external costs of road transport in Europe every year would be close to € 300 billion!**

**This is roughly the GDP of a country like Sweden.**

## 4. THE CURRENT EUROVIGNETTE DIRECTIVE (1999/62, AS AMENDED BY DIRECTIVE 2006/38)

### Objective:

- The Directive sets **the rules which** Member States (MS) must abide by, **IF** they wish to introduce road pricing (either “user charges” or “tolls”).
- It **does NOT oblige** MS to introduce road pricing for lorries.

### Scope:

- It applies to freight vehicles of a maximum permitted weight of over 3.5 tons on roads belonging to the Trans-European Road network.
- As of 2012, MS that operate user charges or tolls have to include all vehicles above 3.5 tons.

### Maximum upper limit:

- The revenues of user charges or tolls **must NOT exceed the infrastructure costs** (except in sensitive areas<sup>4</sup>).

### Use of revenues:

- Decision on the use of revenues is left with the MS.

3. Source: UNITE (2003) study, referring to costs as percentage of GDP in 1998 figures. Information adapted to 2006 figures. According to Eurostat the GDP for EU 15 in 2006 was € 10.855 Billion (in market prices).

4. According to article 11 of the Directive, in exceptional cases in mountainous regions a mark-up may be added to the tolls of a specific road section, which may not exceed 25% of the weighted average toll.

