

External costs (by mode of transport)

Dimension - Environment

Associated Key Factor:

Attitudes and implementation of principles relating to sustainable development

Data Source:

European Conference of Ministers of Transport

ECMT, 1998b. Efficient Transport for Europe, Policies for Internalisation of External Costs.

European Conference of Ministers of Transport (ECMT). Paris, France.

<http://www1.oecd.org/cem/>

General Availability:

Reporting unit: Euro/(10) vehicle km

Reporting level: national

Reporting period: regularly

Data available from 1995

Availability by country:

1995 - 1995: EU-15

1995 - 1995: Member States (EU-15)

Data Source:

Institute

INFRAS, 2000. External costs of transport (accidents, environmental and congestion costs) in western Europe. Paris. INFRAS Zurich, IWW, University of Karlsruhe.

<http://www.infras.ch>

General Availability:

Reporting unit: Euro/(10) vehicle km

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The indicator:

The external costs of transport are large and uncertain. The most important categories of external cost are accidents, air pollution and climate change. Congestion is the largest component in many urban areas. The variation of the marginal external costs is as great within transport modes as between modes. This indicates that the level of marginal costs depends heavily on the type of vehicle and the traffic situation considered. In general they main categories of external costs relate to: noise, accidents, air pollution, climate change, nature, urban effects and upstream process. Moreover the indicator differentiates between the different modes of transport.

How is it measured?

Is measured as minimum and maximum marginal costs per transport mode (not including congestion) (Euro/10 vehicle km for road freight; Euro/vehicle km for other modes) these figures are based on estimations on the costs of damage through emissions etc.

What is the policy relevance of the indicator?

The reduction of external costs of transport is a main policy goal of EU environment and transport policies. There are two sets of policy tools that aim to reduce external costs:

1. 'Command and control' measures that directly reduce emissions (e.g. the Auto-Oil programmes), or other kinds of external impact (e.g. traffic bans in urban neighbourhoods);
2. Pricing mechanisms (e.g. taxes, charges, subsidies) that give incentives to change users behaviour towards 'cleaner' transport. In most cases the internalisation of external costs refers to this set of policy tools.

Internalisation policies are dealt with in the fact sheet on "Internalisation of External Costs", which focuses in particular on pricing instruments.

The main principles for internalising (uncovered) environmental costs are set out in various international agreements (Vancouver, 1996; CEI, 1997; UN, 1997; ECMT, 1998a; UNCEC/WHO, 1999):

Pollution Prevention: transport needs must be met without generating emissions that threaten public health, global climate, biological diversity or the integrity of essential ecological processes.

Health and Safety Protection: transport systems should be designed and operated in a way that protects the health (physical, mental and social well-being) and safety of all people, and enhances the quality of life in communities.

Nature-saving Land and Resource Use: transport systems must make efficient use of land and other natural resources while preserving vital habitats and maintaining biodiversity.

The Indicator is relevant for the following pathways of the FORESIGHT FOR TRANSPORT exercise: