

Climate change:
**The role of sustainable inland transport in
emissions reduction and adaptation**

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CHALLENGES !

- ▶ **Negotiation: Ministry of Environment**
- ▶ **Technical development vs. Behavior change**
- ▶ **Situation different from one country to another**
- ▶ **Question of efficient control tower**
- ▶ **Support from local governments and private sector**



25%

The Decarbonising Transport initiative

- ▶ builds a **catalogue of effective CO₂ mitigation measures**
 - ▶ provides **targeted analytical assistance** for countries and partners to identify climate actions that work
 - ▶ gathers and shares **evidence for best practices** that will accelerate the transition to carbon-neutral mobility
 - ▶ **shapes the climate change debate** by building a global policy dialogue and by bringing the transport perspective to the table
- The catalogue of measures to be launched **in May 2020 at the ITF Annual Summit in Leipzig**
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Measures

- Brief description of the measure
- The potential impacts on CO₂ emissions
- The potential areas costs could be generated
- Additional considerations (possible other benefits or risks)
- Related measures
- Links to further reading

Congestion pricing

Overview

Congestion pricing in urban areas sets a price for road travel with the objective to reduce congestion, time losses and adverse environmental impacts.

Congestion pricing can be variable (the price changes with different levels of transport demand throughout the day) and may be dynamic (the price changes in real time as sensors monitor traffic levels).

Congestion pricing may apply to a specific zone of a city (e.g. in London), to a specific road (e.g. the a cordon/ring road in Stockholm) or to specific segments of urban highways (e.g. free-flow lanes in the US).

CO₂ benefits

CO₂ benefits of congestion pricing stem from modal shift (e.g. to public transport or more fuel efficient vehicles that are subject to preferential pricing) and from reduced congestion.

The London scheme achieved a 16% CO₂ emissions reduction within the charging zone (50% of this is due to the reduced number of vehicles entering the zone (resulting in a traffic decrease of around 20%), 50% of this is due to congestion reduction). The London-wide CO₂ reduction is estimated at around 1% of London's total road traffic CO₂.

The Milan scheme achieved a traffic reduction of 12% within the zone (and 3.6% outside the zone). The traffic of vehicles subject to the charge is estimated to have shifted to traffic around the area (35%), to public transport (48%) and to cars that were exempt from the scheme (17%).

Costs

Implementation costs are costs for setting up the tolling infrastructure (i.e. for monitoring and payment); costs for operating the system are enforcement costs, costs for maintaining the infrastructure and payment systems.

In general, depending on the pricing levels that are set (e.g. per day, per type of vehicle or per vkm travelled) a net revenue of congestion pricing schemes can be expected (frequently this is then earmarked for road and/or public transport infrastructure enhancements).

Annual revenues of the Singaporean scheme are around €40-50 million, while the annual operating costs amount to around €8 million. The London scheme's implementation costs (first phase) amounted to around GBP160 million; operating costs are around GBP 43 million per year. In 2005-06, the scheme generated a surplus of GBP122 million.

Sustainable development benefits

- ◆ Reducing congestion levels leads to reduced air pollution levels and time gains (which ultimately contribute to productivity/GDP increases for the concerned area)

- ◆ In London, it is estimated that road casualties reduced between 40-70 per year thanks to the congestion charging zone.

- ◆ Pricing levels and systems should be adjusted over time to account for changes in road use/demand within the charging zone.

Negative effects

Congestion pricing can

- ◆ increase traffic around the congestion charging zone,

- ◆ cause inequity by affecting low income groups comparatively more than high income groups,

- ◆ have adverse effects on land-use patterns.

Inclusive Dialogue Across Sectors

- ▶ Joint project on “Transport-related CO₂ Emissions of the Tourism Sector” between ITF and the UNWTO, report launched at COP 25
- ▶ Stronger partnership among transport and urban planning and housing sectors
- ▶ Linking outputs from Ministers’ Roundtable on Transport (ITF Summit) and Climate Change in May 2020 to COP 26
- ▶ Contribute to UNFCCC publications and products



Thank you!