„MOBILITY IS CRUCIAL FOR THE FIGHT AGAINST CLIMATE CHANGE“

Smart2Wheels event, 22.9.2011

PRESS RELEASES

07.12.2012

Every car in the EU causes uncovered costs of 1,600 euros per year

New Study by the Technical University of Dresden

*A new study by Dr. Udo Becker (professor for transport economics at the Technical University of Dresden) was presented in Brussels yesterday. It shows that car traffic in the EU causes high uncovered costs that are not reflected in market prices ("external costs"). **Michael Cramer**, Green spokesperson for transport policy in the European Parliament said:*

"It is repeatedly claimed that car traffic is the cash cow of the EU. The new study by the Technical University of Dresden shows: the opposite is true.

On the one hand car use indisputably brings benefits to European citizens. But on the other it also creates huge costs. And these are only partially covered by car users. The remaining costs (noise, pollution, accidents and climate change) have to be borne by other citizens, other regions or future generations. This leads to inefficient mobility choices.

The study finds that every car in the EU creates uncovered costs of 1,600 euros per year. The annual total for the EU-27 amounts to 373 billion euros, the equivalent of 3% of the EU's GDP.

Given the average life span of cars in the EU of 10 years, every car generates external costs of 16,000 euros over its lifecycle. These costs mainly result from accidents (41%) and climate change (37%).

These prudent calculations provide a clear signal to politicians: The true costs of car use urgently need to be internalised. Only then can market prices induce rational and sustainable mobility choices. The objective of 'internalising external costs' has been defined in the EU Transport White Paper and adopted with large majorities by all EU institutions. We now need concrete steps towards this goal.

That would benefit everyone: We can avoid a large share of the costs of car use without putting an additional burden on citizens - provided that true costs provide the right incentives. We Greens are convinced that we can make mobility affordable while at the same time saving the climate."

The webstreaming of yesterday's conference "A fair deal for cars" is available **here**.

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TECHNISCHE UNIVERSITÄT DRESDEN

„Friedrich List“ Faculty of Transport and Traffic Science

The True Costs of Automobility: External Costs of Cars Overview on existing estimates in EU-27

Final Report

TU Dresden
Chair of Transport Ecology
Prof. Dr. Ing. Udo J. Becker
Thilo Becker
Julia Gerlach

Dresden, October 12th, 2012

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6. CONCLUSIONS: MAGNITUDE OF EXTERNAL COSTS, APPROACHES FOR POLITICAL ACTION

(1) Based on the assumptions described in this study, the cars used within the EU-27 externalize about 373 billion € per year (high estimate) on to other people, other regions and other generations (low estimate: 258 billion €). This is a considerable sum, and it leads to a level of car use that is inefficient from the perspective of society. Because "others" pay for large parts of the costs of transport, Europeans travel by car too much to enable an efficient situation. This in part also explains why there is a high level of congestion in parts of the EU.

(2) The findings of this study clearly show that the frequent claim "that cars cover all their internal and external costs" [2] cannot be sustained. Although no detailed estimation of charges and earmarked taxes of cars attributable to external costs has been made in this study, it is obvious that a sum in the range of 300 to 400 billion € of earmarked funds against these costs cannot be reached. On the contrary; it must be stated that car traffic in the EU is highly subsidized by other people and other regions and will be by future generations: residents along an arterial road; taxpayers; elderly people who do not own cars; neighbouring countries; and children, grandchildren and all future generations subsidize today´s traffic. They have to pay, or will have to pay, part of the bill.

(3) These findings suggest that political action is urgently needed. The sooner this happens, the more the transition process can be designed in a smooth, efficient, socially acceptable and environmentally friendly manner. The longer that action is delayed, the stricter, more severe and more expensive this process will be.

The results of this study advocate that the European Union should embark as soon as possible on a process that estimates external costs regularly and develops a smooth integration path of these costs into transport prices: Slowly and steadily, designed well in advance of implementation, with accompanying measures to support adaptation. Let it be remembered that there is no intention of creating additional revenue from transport users: the intention is to give price signals so that everybody adapts and hopefully nobody has to pay these prices. Then, all costs would be reduced, efficiency would be increased.

(5) Economic price settings and regulatory measures, framework settings and (land use) planning measures need at least as much political attention as technology. User price increases by internalising the external costs in consumer prices, while offering alternatives to car use, can change behaviour substantially – and this may be the cheapest option. Reducing the total number of vehicle kilometres travelled has the greatest effect on greenhouse gas emissions, and there is no risk of recoupling effects.

60. (Baum, et al., 2008)

(6) Technology measures such as biofuels or electric vehicles focus mostly on higher energy efficiencies and on reduction of greenhouse gases. Their effects on all other cost components of external costs are smaller. Noise and air pollution, as well as the large cost component of accidents, remain high, causing ongoing negative effects on society.

(7) Many projections of avoidance curves are based on new technologies aimed only at achieving greenhouse gas emission reductions. The discussion about greenhouse gas reductions in transport is primarily left to automobile technology experts. This approach is misleading because other fields (like economic approaches or land use approaches or behavioural changes) are neglected; and these are fields in which reductions come at a much cheaper price. The TransPoRD-project as a key research project on European greenhouse gas reduction measures in the transport sector concludes: "Technologies known today will not be sufficient to achieve GHG reduction targets of -60% to -80% by 2050"[61] . Consequently, a combination of all possible approaches is needed: internalisation of external costs, pricing measures, technology development, land use changes, strong regulation (e.g. banning fossil fuel cars in certain regions after certain years). Modal split changes are needed to tackle the problem.

61. (Schade, 2011, p. 11)

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Federal Office for Spatial Development ARE

Transport costs

The national transport costs are set out in the so-called Transport Account for Switzerland, which summarizes the total outgoings for and revenue from road and rail facilities. Complementing the existing sub-accounts for internal infrastructure and running costs (Road and Rail Accounts) and the estimates of external transport costs, the Transport Account is designed to provide a full picture of the cost situation.

BFS: Transportrechnung – Kosten und Erträge (in German)(1)

The term external transport costs denotes those costs imposed, but not borne by users of the mobility infrastructure. The key factors in this regard include accidents, noise, health protection, climate, nature and landscape. Expenditure borne by society as a whole for public service provision is not allocated to the external transport costs.

Account is taken of all transport costs, including external costs and benefits, in accordance with the originator principle. This concept influences the individual's choice of transport mode and boosts the efficiency of the overall system by promoting competition between the different transport options. The distance-related Heavy Vehicle Fee (HVF) is designed to charge heavy-goods vehicles for the costs they impose on the country as a whole.

The price per tonne-kilometre is determined on the basis of the external costs of road-freight traffic. The HVF represents the first broadly based mechanism for the apportionment of external transport costs. Under the terms of the Federal Heavy Vehicle Fee Act (Schwerverkehrsabgabegesetz; SVAG), Article 7, para. 3, the Federal Assembly is obliged to update its estimates of external heavy-goods transport costs and benefits on a regular basis in line with the latest research findings.

Benefits of transport

By contributing to the generation of added value, economic growth and employment, road and rail transport offers wide-ranging benefits. Its price and utility are intensely discussed in many circles, and its costs - specifically its external costs - have been the subject of various studies. For a definitive assessment, the Federal Office for Spatial Development (ARE) and the Federal Roads Authority (FEDRO) jointly commissioned a study on the benefits of transport.

But benefits come in many different forms and shapes. The study analysed their various manifestations and succeeded in structuring the many different concepts of transport utility and the ways of reconciling them with the attendant costs. It comprises four sub-projects plus a synthesis report and was published on 27 October 2006 in conjunction with the Transport Account and external climate costs.

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1. http://www.bfs.admin.ch/bfs/portal/de/index/themen/11/02/blank/key/02/01.html