

The future of sustainable transport system for Europe

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Received: 4 October 2012 / Accepted: 23 April 2013
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Abstract The EU has launched targets for energy efficiency and the reduction in pollutant emissions in the transport sector. It establishes a framework to foster the promotion and development of a market for clean vehicles. In 2011 the EU passed a “Roadmap to a single European transport area—Towards a competitive and resource efficient transport system”. This roadmap includes 40 concrete initiatives for the next decade to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment. The objectives concern well-functioning passenger and freight links that are vital for European undertakings and citizens. At the same time, the proposals will dramatically reduce Europe’s dependence on imported oil. All in all the EU transport policies aim at fostering clean, safe and efficient travel throughout Europe, which requires innovations in many areas—like safe electric cars—and needs to engage not just the users but the entire transport industry facing drastic structural changes.

Keywords Road traffic · GHG emissions · Energy dependence · Biofuels · Electric cars · EU transport policy

1 Introduction

Traffic has various positive and negative aspects: transport systems are necessary for the mobility of goods and people. Therefore, they should be as comfortable and at low-cost as possible. Nevertheless, there are harmful side effects: (1) traffic congestion is increasingly becoming a severe problem in many large cities around the world. (2) Traffic belongs to one of the most important polluters with destructive impacts on the climate. (3) Traffic causes accidents and noise, which is a serious problem for the health of people. (4) Traffic needs expensive infrastructure. To ensure the benefits and fight the negative impacts, we have to develop intelligent concepts. These strategies include educational measures, technical innovations and regulatory intervention. In addition, we need mobilising the potential of traffic calming measures how to reduce traffic congestion and at the same time noise. Further, there is a demand for calculating costs for road infrastructure, congestion and pollution of greenhouse gases (GHG) and deals of the allocation of these costs to vehicle types under the aspects of different pricing purposes. The following article will provide an overview on how the European Union will tackle the problems mainly focussing on road traffic. Therefore, the main focus is on the decision-making process of the EU and a judgement on its implications and consequences.

2 Relevance and general goals of transport policy in the EU

2.1 A fully integrated network in the internal market and a sustainable modal split

To judge about the traffic policy needs to clarify the conditions under which transport systems and policy are

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