Summary:

(When) are financial policy instruments environmentally effective?

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Path dependency, both institutional and technical, is a main challenge to the paradigm shift from dependence on private car to sustainable transport. An understanding of how policies at national and local levels can change the path dependency is of great importance for devising strategies and policies for the paradigm shift, and bypassing barriers to their implementations. The focus of this study is on the behavioural response of an agent – an individual or an institution – to economic instruments, and an insight to institutional barriers for making economic instruments effective and legitimate in response to the environmental concerns of our time.

(When) are economic policy instruments environmentally effective? Are they efficient, effective and legitimate? Are economic instruments alone sufficient to respond to the complexities of the transport system? Can behavioural economics or institutional sociology give support to the design of the economic policy instruments in order to meet the challenges of environmental concerns that we face? This report summarises different Work Packages (WP) designed in the project EcoEnvi to address these questions.

The Brundtland Report introduced the notion of 'sustainable development' into the political agenda some 27 years ago. The transport sector has become in focus due to the importance of the sector in the sustainability context, environmentally, socially and economically. The desire to move towards sustainable transport is becoming increasingly universal, with almost all jurisdictions adopting this as a policy objective. Often the reality is very different, and policy actions remain little more than statements of intent (Hickman and Banister, 2014).

Path dependency, both technical and institutional, is a main challenge to the paradigm shift. A theoretical understanding of how policies at national and local levels can change the path dependency of private car system, deeply embedded in our society and the dominant car-based notion of transport policy within government and professional agencies, is of great importance for devising strategies and policies for the paradigm shift, and bypassing barriers to their implementations. Paradigm shift from dependence on private car to sustainable transport will take a long time and will demand continuous effort.

This study provides an understanding of the behavioural response of an agent – an individual or an institution – to economic instruments, and an insight to institutional barriers for making economic instruments effective and legitimate.

The report begins with an outline of the theoretical frameworks – behavioural economics and institutional sociology – and a description of the transformation of the politico-economic mode of the governance of the Norwegian transport sector to a neo-liberal regime with its emphasis on deregulation, liberalization, and the market-based governance of the sector. The other WPs are; a meta-analysis of the economic instruments; the case study of the Stockholm congestion pricing scheme; four case studies of incentives for alternative fuel vehicles in Norway and Sweden, and; two case studies of the effects of economic incentives in the public sector. These moments of the project are summarised in Chapters 3-7. Chapter 8 presents a discussion of the findings in the project and an attempt to respond to the challenges we had set in the project – the research questions related to the adequacy of economic policies in response to our environmental concerns. We conclude that the efficiency, effectiveness and legitimacy of the economic instruments depends on the context. The efficiency of economic instruments is not a key criterion when the objective is paradigm shift to sustainable transport, or when the objective is to support the take-off of a clean technology. We also point to institutional barriers for the efficiency and effectiveness of an economic instrument, and the design of the instrument to overcome these barriers in the case of incentive schemes in the public administration. Chapter 9 presents some recommendations on the design of economic policy instruments based on the research conducted in this study.

We also conclude that behavioural economics and institutional sociology are among the disciplines that can provide insight to the complexities of the transport system and support the design of policy instruments. "Science seeks answers through the lens of theories. If it is a hubris for natural scientist to imagine that there can be a single theory of everything, it is the height of arrogance for social scientists to do so. Different theories can illuminate reality in different ways, and these ways of illuminating reality also drive action so perhaps the episteme-phronesis distinction is also in need of revision." (Low, 2013, pp 218).