

The development of sustainable mobility strategy in Belgian cities

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ABSTRACT

Nowadays, city local governments focus their strategic vision on the development of the urban sustainability. For this, they develop drivers, strategies, structures on green local improvements. To be sustainable, cities reinforce actions and plans on resource management, mobility, climate, building and public spaces. In order to be sustainable and smart, challenges are set to ensure successful implementation of sustainable mobility strategies through the development of appropriate policies, actions, decisions and controls. The development of sustainable mobility strategy requires the involvement of strategic actors, infrastructures, funding and socio-demographic parameters. To ensure this, sustainable mobility strategy has to be strengthened by an efficient management control system and a real measurement of institutional factors' risk. The development of mobility controls ensures homogeneity between behaviours, decisions, objectives and strategies for mobility issues. In order to make the link between control, strategy and sustainability, new researches propose new frameworks and systems. These frameworks reinforce the strategic contribution of values, rules, monitoring and enhancing awareness and interactions. Based on that, the management control framework of Malmi and Brown is more and more associated with the implementation of sustainable strategies.

This paper explores the development of sustainable mobility strategies in two Belgian cities (Namur and Leuven). To analyse how city local governments implement, control and develop mobility strategies and plans, this paper refers to Malmi and Brown's model. The research proposes two hypotheses that set the importance of the integration of an adequate sustainable mobility control system and the institutional factors on the design and the use of mobility strategy control. This paper proposes a new conceptual model to support the development of sustainable mobility strategy. For this, the choice of two Belgian cities is made according to

similarities (population size, explicit will to develop sustainable mobility strategy, focus on sustainable transport, initiation period of mobility issues' implementation, number of person in charge of mobility, level of willingness to develop mobility system, focus on car free and strategic mobility challenges) and differences (region, language, regulative factors, normative factors and cognitive factors).

To test our conceptual framework, an explorative qualitative case study is done in these two Belgian city local governments. The data collection requires a fieldwork of 12 weeks, 54 internal and external documents, and 20 semi-structured interviews (mobility managers, politicians, sustainability managers, policemen and administrative workers). Results shows differences between the implementation and development of Namur and Leuven. Leuven has an average quality of sustainable mobility control system. Leuven requires developing new adapted indicators to face new city challenges and more effective collaborations between involved departments and actors. The case of Namur shows that its sustainable mobility control system is weak because of the non-adapted indicators to strategy and the weakness of the formal structure of mobility strategy. Results identify different institutional factors that have a significant impact on the development of sustainable mobility strategy; the most relevant are formal regulations, political power, local cultures, support of direct and indirect actors and the sensitiveness on sustainable culture. The proposed conceptual model also highlights if the impact of mobility strategy controls and institutional influences have a weak, medium or strong impact on the development of mobility strategy. Results validate our proposed conceptual model. However, this model has to be tested on other sustainability issues (energy, green building, green housing, green and neutral climate), cities and regions.

Keywords: sustainability mobility strategy, sustainable mobility values, sustainable mobility control system, Belgian institutional factors, collaboration