

POLITECNICO DI TORINO  
FIRST SCHOOL OF ARCHITECTURE  
Master of Science in Eco-efficient Product Design  
**Honors theses**

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**Sustainable mobility roadmap**

by Andrea Gaiardo

Tutor: Claudio Germak

The aim of the paper was not to develop a technical manual for the design of sustainable mobility at infrastructure, product or service level, but rather to bring a critical analysis of its concept. Through the construction of a "roadmap" we have tried to define a guide for managing the complexity of sustainable mobility with the aim of helping the actors involved in the design process. Consequently, people interested in this paper could be not only designers of the transport sector, but also all the professionals involved in projects related to mobility in its different fields (planning, design, planning, implementation, monitoring and management).

Aspects and issues related to mobility and covered in the research, are commonly known, but they have not always been addressed in an integrated and seamless way, by putting in relation different actors, different technical cultures, different types of possible models and different drivers influencing the final model of mobility. This myopic view has embraced an unsustainable model for decades, a model which has brought many advantages to the society but also huge disadvantages we are paying for.

For this reason we need a radical change of paradigm of mobility because at the moment it is still too tied to a linear and sector design approach. Therefore, the approach needs to be mixed and contaminated by using a design that takes into account the economic, political, social and environmental issues involved. The new approach needs to consider the "big picture" with a multidisciplinary and systemic approach in order to answer to new challenges, new dynamics, new needs and new ways of living in modern society.

In order to define the final roadmap on sustainable mobility, the study was divided into three main levels:

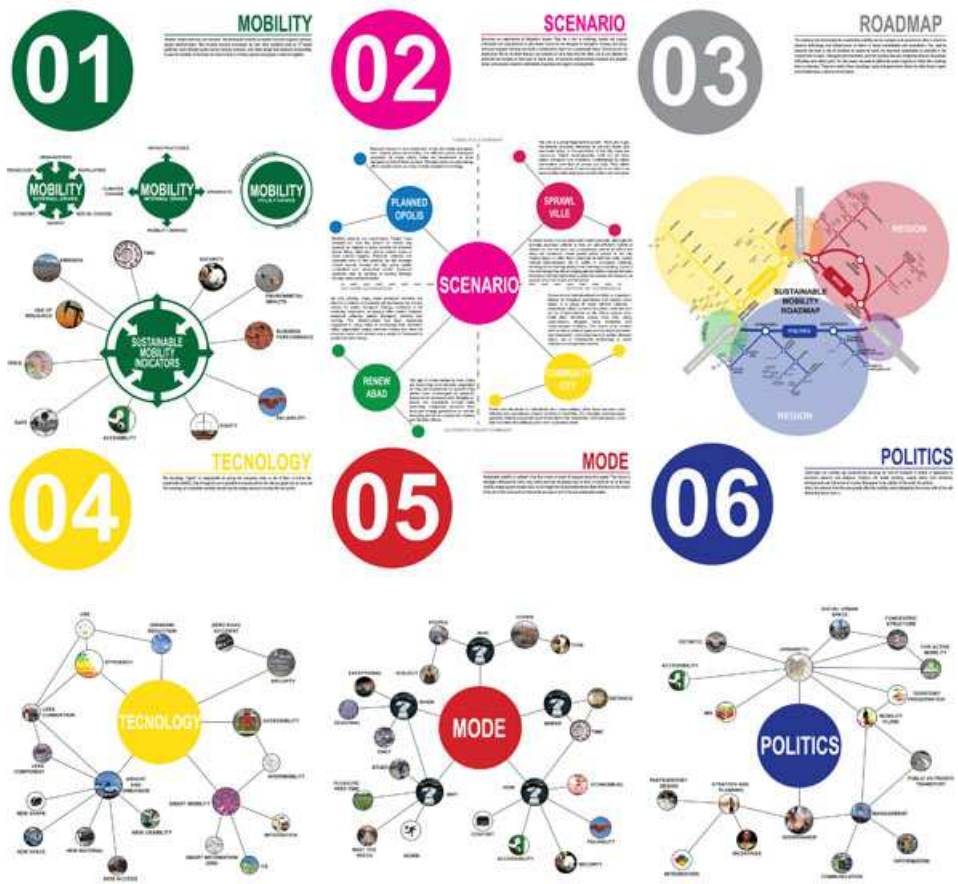
A *first level* where we try to solicit a new concept, not limited and reductive but if necessary innovative, concerning the issue and trying to establish whether the mobility can be considered sustainable or not. Within this first step we need to come out from our "field" of expertise exploring related areas concerning subjects and themes that implicitly or explicitly involve the mobility. Moreover we tried to specify what drivers influenced the mobility and we try also to define future scenarios.

A *second level* where we wanted to suggest the needs for any project involving the subject of the mobility, to take into account the correct observation scale of the problems it causes and results in the general context of actuation. An environment characterized and influenced by technical, economic, cultural, social and natural attributes. We specifically described the regions features involving the roadmap and its options.

*Finally, into the third level*, we wanted to investigate through the use of examples and case studies some of the themes discussed and described in the roadmap to draw some inspiration and practical considerations on the solutions adopted or studied in a sustainable perspective.



The roadmap to sustainable mobility is divided into three regions that influence one another in the implementation of sustainable mobility. These are the policies, mode and technologies. These three regions are in turn influenced by three external forces: the space infrastructure, culture and innovation



Summary and conceptualization of the chapters covered by the study

For further information, e-mail:  
 Andrea Gaiardo: [andregaiardo@hotmail.com](mailto:andregaiardo@hotmail.com)