

Available online at www.sciencedirect.com



Transportation Research Procedia 4 (2014) 116 - 119



Mobil. TUM 2014 "Sustainable Mobility in Metropolitan Regions", May 19-20, 2014

# Communicating electric mobility futures: towards a school of mobility. Combining futures research and strategic implementation process <sup>1</sup>

### Ingo Kollosche <sup>a,\*</sup>

<sup>a</sup> Technical University Berlin, 10587 Berlin, Germany

#### Abstract

The aim of this article is to examine a specific way of communicating the results of a future study on electric mobility. The article proposes a methodological approach based on the results of a scenario process on electric mobility in Berlin in 2025. Future-oriented conceptions of electric mobility are lacking, and there is a need for policies specifically designed to implement electric mobility and multi-modality and integrate them into mobility systems. The paper illustrates this by means of a current project which is endeavoring to integrate a specific electric mobility scenario into the curriculum of a driving school in Berlin.

© 2014 Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license

(http://creativecommons.org/licenses/by-nc-nd/3.0/).

Selection and peer-review under responsibility of Technische Universität München

Keywords: futures research, scenario planning, electric mobility, communication

#### 1. Bridging the gap between futures research and strategic planning

Future studies and strategic planning have much in common. One shared feature is the implementation of their respective results. Future studies and planning also involve processes of communication, which is directly relevant to the special case of electric mobility, where the challenge lies in raising its level of visibility, providing hands-on experience with it, as well as motivation for people to use it.

\* Corresponding author. Tel.: +49 30 314 78770; fax: +49 30 27875. *E-mail address:* ingo.kollosche@tu-berlin.de

<sup>&</sup>lt;sup>1</sup>A full version is submitted for publication in European Journal of Future Research

"Future researchers are developing the methodology of 'long-range planning". (Roney 2010, p. 72). There are some obvious connections between strategic planning and future studies (Curry and Hodgson, 2008) – for instance, both approaches have to do with long-term and sustainable developments, with strategic implications in the present. The main purpose of future studies is to analyze, describe and evaluate complex and dynamic systems from a temporal, functional and social perspective. Processes of change and social developments are the central objects of study. Strategic planning - for example, integrated transport planning - is always a reaction to changing social, economic, ecological and technical conditions. Planning is always contextualized: specific conditions, values and interests, as well as conflicting goals all affect planning processes. Integrated transport planning has to take into account infrastructural and technical issues as well as the perspectives of the actors involved and their interrelationships.

The conditions of future thinking and strategic planning are characterized by complexity, contingency and choice. In these circumstances, linear thinking and principles of simple causality do not work. Social forms, institutional arrangements and general patterns of behavior do not remain stable over time, which means that, when interpreting a current situation, its possible difference (its contingency) has to be kept in mind. Under such conditions, the challenge facing strategic planning and futures research is to incorporate ambiguity and uncertainty. Both approaches have to be capable of evolving and processually designed. Strategic planning in conditions of uncertainty and ignorance has to be adaptive, variable and flexible with respect to environmental changes, meaning that strategy-building can itself be understood as a learning process.

Every learning process is based on a certain communicative structure. For that reason tools of communication are necessary for the creation of futures. Futures research is in addition to the thematic focus a process of structured communication. Whether in the scenario analysis or participatory methods, it is always a question of how processes are structured. The scenario technique is both a learning and communication tool. It is the central method of foresight communication, but only in combination with other methods and approaches to communication. Using the example of the development of electric mobility in Berlin, it is possible to show how this works in practical terms.

#### 2. The discourse on electric mobility: the need for foresight communication

Electric mobility is considered as an indicator of change in our automobile transport system, but it is only one form of future mobility. It is an additional step that strengthens efforts to change the existing mobility system, which is based on individual car ownership and the dominance of the internal combustion engine. But electric mobility involves more than just replacing the combustion engine with electric motors.

The discourse of electric mobility in Germany has been dominated by political, economic and technical issues. Electric mobility has attained a certain prominence in the public realm, but the positive attitude towards electric vehicles does not guarantee that people will actually buy them. The "newness" of electric mobility in a non-technical sense has not been made clear. People feel they don't need electric mobility. Therefore, more effective modes of communication and more effective project designs are required in order to put people in touch with the technology and its potential, where electric mobility is presented as part of a broader and more integrated approach to new mobility.

A durable foresight communication of electric mobility has to be based on a "system transition roadmap" (Auvinen et al., 2013, p.3). Consistent conceptions of future electric mobility systems on the basis of scenario processes could form the basis for such a roadmap. Such conceptions may serve as a support for decision-making processes and guide normative discourses on what is wanted, but they don't constitute the roadmap as such. The future will not come about accidentally or take place without people noticing. The proactive creation of preferred futures by the actors involved requires follow-up communications, policies and action.

#### 3. Electric mobility scenarios: Berlin 2025

The scenario technique is the most important methodological tool in futures research. Scenarios "are of a crucial practical importance for public policy, management and strategic thinking in general" (Aligica, 2005, p. 815). Scenarios on mobility and traffic development are an increasingly used tool in traffic planning and management. The potential of the scenario method can be illustrated using the example of electric mobility. A scenario process has been implemented in the context of the research project "User behaviour analysis and spatial planning of the regional

Download English Version:

## https://daneshyari.com/en/article/1106319

Download Persian Version:

## https://daneshyari.com/article/1106319

Daneshyari.com