

## Innovation strategies of companies in the mobility sector to reduce GHG emissions

Main Supervisor: **Rupert Baumgartner** [showcase 1]

Research field “Innovation and sustainability research: Organizational strategies to deal with climate change”

Research question 1 | Cluster 3

Links to showcases Steininger 2, Posch 2, Schulev-Steindl 2, Meyer 1, Meyer 2

**Background:** GHG emissions from the mobility sector are still rising and account for about 30% of Austrian GHG emissions, and it is necessary to change this dynamic in order to reach the goals of the Paris agreement. The mobility sector is composed of companies offering private and public transport of goods and for persons, companies offering products, technologies and services, and of the regional, national and international political and regulatory system. Different technological innovations, like electric or fuel cell vehicles, and business model innovations, like car sharing, are introduced by companies and supported by national policies. Both green technological innovations and system innovations for sustainability (Smith et al. (2010)) will frame corporate innovation activities (Pinkse and Kolk (2010)). However, there is still a limited understanding regarding motivations, drivers, barriers and outcomes of innovation strategies of companies in the mobility sector, especially regarding radical innovations.

**Goal:** The goal is to develop an informed understanding of innovation strategies of companies working in the mobility sector. The following research questions are of interest:

- Which innovation strategies are developed and implemented by companies working in the mobility sector? Is mitigating climate change a relevant factor in these strategies?
- Which drivers, barriers and outcomes are related to these innovation strategies?
- Are different companies cooperating with each other and with other actors in the mobility system to reduce GHG emissions?

To answer these research questions a multi-level analysis (Paul et al. (2017)) is necessary as corporate innovation strategies will be influenced by other actors in the mobility system, by corporate decision makers, and by national and international political actors.

**Methods and disciplinary background:** Theoretical basics for this research are management science, decision theory, systems theory and innovation theory with a focus on multi-level analysis. The research design will be informed by the design research methodology (Blessing and Chakrabarti (2009)). Research methods which will be used include quantitative and qualitative methods of empirical research and multi-level analysis.

### References:

- Blessing, L., Chakrabarti, A. (2009). DRM, a Design Research Methodology. London: Springer.
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- Smith, A., Voß, J.-P., Grin, J. (2010). Innovation studies and sustainability transitions: The allure of the multi-level; *Research Policy*, 39 (2010) 435–448.