

## Topic: Strategies to address bottlenecks in nascent green innovation ecosystems

**Start:** possible from now (duration approx. 5-6 months)  
**Location:** flexible  
**Betreuer:** Thomas Draschbacher and Michael Rachinger

### Problem statement/goal:

The diffusion of systemic innovations is a complex problem that is often described as a „chicken-and-egg“ causality dilemma. These innovations do not emerge individually, but are dependent upon an ecosystem of directly and indirectly connected actors and their complementary contributions. Additionally, innovation challenges are not distributed equally among actors in the innovation ecosystem. Some components or complements are inferior in quality, performance or availability. They are known as bottlenecks and form key hindrance factors to the diffusion of innovations. This particularly applies to the diffusion of „green“ innovations, which hold potential advantages over existing technologies regarding their environmental impact. In many cases, these innovations are not driven by markets or technologies, but promoted by governmental institutions in spite of existing bottlenecks. Therefore, the identification of these bottlenecks and the selection of viable strategies to address them prove highly decisive for the establishment of green innovation ecosystems. The goal of this thesis is to analyze different actors' strategies to address bottlenecks in the downstream areas (infrastructure, vehicle wholesale and retail, fleet operators, ...) of the innovation ecosystems of battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs) in Austria.

### Tasks:

- Literature review regarding bottlenecks in innovation ecosystems
- Identification of major players in the downstream parts of both ecosystems in Austria
- Identification of perceived bottlenecks and major players' strategies to address them in the downstream parts of both ecosystems in Austria based on secondary data (newspapers, press releases, company reports)
- Verification and further analysis of major players' perceived bottlenecks and strategies to address them via interviews
- Written thesis to present the final results

**Requirements:** VO Unternehmensführung und Organisation or General Management and Organization, Technology Management recommended but not mandatory, Strategic Management recommended but not mandatory

**Field of study:** preferably Wirtschaftsingenieurwesen-Maschinenbau, Production Science and Management, Software Engineering and Management

**Additional information:** Please apply with CV and transcript of records to [thomas.draschbacher@tugraz.at](mailto:thomas.draschbacher@tugraz.at)