Smart charging solutions for electric trucks: comparing different perspectives

Background

Transport electrification imposes great pressure on the energy system, which is why smart charging solutions need to be developed, e.g. to optimize the timing and rate of electricity consumption by vehicles.

A number of actors from several societal sectors need to collaborate to develop smart charging solutions for electric trucks, including grid companies, electricity providers, charging operators, transport and logistics companies, vehicle manufacturers, charging equipment manufacturers and local and national governments. However, a joint understanding of smart charging for electric trucks is currently lacking, hence, different actors have different and partially conflicting assumptions and priorities with regard to development and implementation of smart charging solutions. Therefore, there is a need for continued knowledge development about actors’ perspectives on smart charging.

This master thesis project will be connected to two ongoing research projects, one investigating broad actor collaboration in heavy vehicle electrification, and another one focusing on particular roles of energy companies.

Examples of master thesis objectives

- To compare how actors from different societal sectors understand smart charging solutions for electric trucks;
- To investigate the role of collaborative efforts in developing smart charging solutions for electric trucks

The specific objectives and research questions will be discussed and formulated by the students in collaboration with the supervisor/examiner.

Prerequisites

- Courses related to industrial organization and innovation management.

Contact information

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