



SEMINAR

Household EV fleet adaptation as a reaction to price regulations: A stated adaptation experiment

Date: 12 September 2025

Time: 09h00 - 11h00

Venue: Jose Eduardo dos Santos Campus

Online: MS Teams:

<https://bit.ly/JEDSProfKowald>

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ABOUT THE SEMINAR:

A reduction of diesel and petrol vehicles and a shift from conventional to electric vehicles (EV) is part of many governments' plans towards transport decarbonisation. To encourage such a shift, governments need to implement effective policies. In a stated adaptation experiment, respondents were presented with hypothetical pricing strategies concerning prices for fuel, electricity, and public transport. The scenarios were based on the cost and composition of actual mobility tools in the household, and respondents were asked to adapt their household fleet in response to the provided hypothetical pricing strategies. The effect of such cost-related interventions on their decisions was modelled in an integrated choice and latent variable (ICLV) model. The results suggest that the decision to remove a conventional vehicle and/or replace it with an electric vehicle can be effectively promoted by

increasing fuel prices, lowering electricity prices, and lowering PT fares. An analysis of attitudes revealed that people with greater intention to buy an EV are less affected by any pricing strategies. Incentives for removing a conventional vehicle are only effective for people who are more concerned about the environment.

ABOUT THE SPEAKER:

Matthias Kowald studied social sciences at the University of Duisburg (Germany) and completed his PhD at the Institute for Transport Planning and Systems (IVT) at ETH Zurich (Switzerland). His PhD-thesis focusses on the influence of social networks on leisure travel behaviour. From 2012 to 2016 he worked at the Swiss Federal Office for Spatial Development (ARE) and was responsible for the national transport surveys and the national transport demand models. Since 2016, he is full Professor for Transport Behaviour at the RheinMain University of Applied Sciences in Wiesbaden.

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