

E-MOBILITY IN AGRICULTURE – DIFFERENCES IN PERCEPTION AMONG EXPERIENCED AND NON-EXPERIENCED ELECTRICAL VEHICLE USERS

**Lukas RIEDNER¹, Claudia MAIR¹, Martina ZIMEK¹,
Thomas BRUDERMANN¹, Tobias STERN¹**

Abstract

A growing population and the impact of climate change represent clear challenges for the agricultural sector. Adapting agricultural machinery, e.g. raising the use of electrical vehicles (EVs) is one way of meeting such challenges. Although interest in EVs and sustainable farming is becoming ever stronger, in practice the usage of EVs still remains at a relatively low level. As EV experience is key in deciding for or against e-mobility the present paper focuses on the differences in perceptions among experienced and non-experienced electrical vehicle users. The present study was conducted in the course of a pilot project on e-mobility in rural Austrian regions. 334 farmers were asked to assess the performance of e-cars and agricultural EVs. The responses of those with and without experience of EVs were assessed in terms of 13 attributes. While none of the selected attributes were deemed unimportant, there were clear differences in perceptions among those with and without EV experience. The results show that specific policy adaptations have to be made in order to increase the acceptance of EVs in the agriculture sector.

¹ University of Graz, Institute of System Sciences, Innovation and Sustainability Research, Merangasse 18/1, 8010 Graz, Tel.: +43 316 380-{7346|7330|7336|7344}, Fax: +43 316 380-9585, {claudia.mair|martina.zimek|thomas.brudermann|tobias.stern}@uni-graz.at