

Capacity Area B2 Topic 1.3 Deliverable 2

Scientific publication on interplay of rational and affective factors in the decision process to buy an electric vehicle

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The conducted research was successfully submitted to the journal Energy Research & Social Science (Impact Factor: 4.771) and accepted for publication (16 August 2020). The article will appear published in September/October as:

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Abstract:

Electric vehicles (EV) are critical to fulfilling global climate goals. Despite their environmental and societal benefits, only 2.2% of cars sold worldwide in 2018 were electric. To understand the reasons for the low level of EV purchasing and help define measures for more effectively promoting their sales, the vehicle purchase process should be understood. For this purpose, we studied consumer behavior literature and conducted an online survey of 553 Swiss car owners. This resulted in the generation of a novel conceptual framework of the vehicle purchase process. This consists of five stages that are underlined by differentiated decision-making strategies. Second, the results show that car dealers play a critical role at all stages of the process, but remain a barrier to EV sales. Finally, the importance of a plurality of specific information sources and of the existence of charging options is significantly correlated to EV consideration. Based on these findings, touchpoints for electric mobility at relevant stages of the vehicle purchase process are identified, and policy interventions for more effectively promoting EV sales in Switzerland are suggested.

The conducted research serves as an important foundation for our on-going research addressing investor and consumer preferences for electric mobility. The insights particularly inform the following research streams that are in progress:

- Investigation of consumer preferences for bundled offers for EV and charging services
- IAT (implicit association test) study to analyze implicit gender associations to EVs as a determinant of EV sales.
- Social norms and their influence on customer EV purchase willingness.
- Choice experiment on consumer preferences for smart EV charging offers.