

Touchpoints for e-mobility: Understanding the vehicle purchase process to more efficiently promote electric vehicles in Switzerland

Electric vehicles (EV) are seen as crucial to fulfil Swiss energy and climate goals. Yet, only 1.8% of newly sold cars in Switzerland in 2018 were electric.¹ To overcome this negative trend, vehicle purchase process has to be understood. For that, an online survey of 553 Swiss respondents was conducted. The results show that vehicle purchase process is very complex. Car dealers represent the most important external influence, yet pose a barrier to EV sales. Finally, potential EV adopters see a plurality of

information sources as significantly more important than EV non-adopters. The results helped identify the most important touchpoints and policy measures to promote EV sales. Namely, fostering the consultation of a plurality of information sources and car dealer EV training programs are suggested.



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1. Introduction

Thanks to social and environmental benefits, ES2050 envisages a significant growth of electric mobility to fulfil its goals. Roadmap Elektromobilität, signed by the Swiss government together with actors from private sector in December 2018, aims for the EV market share to increase to 15% by 2022.² The current numbers are however far below this target. Only 1.8% of newly sold cars in Switzerland in 2018 were electric.¹ More effective policy interventions are therefore urgently needed to achieve the stated goals.



2. Research question and method

A gap between positive EV attitudes and EV sales was identified by both, literature and practice.^{3,4} To overcome it, customer attitudes have to be understood, which strand of research is however largely missing.⁵ To understand them, this research has taken a process perspective, analysing the vehicle purchase process in its entirety, including individual stages, decision-making processes and external influences. This understanding helped identify **touchpoints for e-mobility and individual policy interventions** to more efficiently promote EV sales in Switzerland.

To answer the research question, an online survey of 553 Swiss respondents was conducted in December 2018. To participate, the respondents had to be 20-70 years old and their household had to possess at least one car. These conditions were selected so that respondents had an experience with car purchase.

References

1. Bundesamt für Statistik (BFS). (2019). *Strassenfahrzeuge – neue Inverkehrsetzungen*.
2. UVEK, BFE, ASTRA. (2019). Roadmap Elektromobilität.
3. Lieven, T., Mühlmeier, S., Henkel, S., & Waller, J. F. (2011). Who

3. Results

1. The **vehicle purchase process is very complex**. It consists of 5 stages both before and after the purchase that are guided by differentiated decision making strategies. The final car choice is thus not determined solely by the purchase stage, on the contrary. The critical decisions are taken in the search and alternative evaluation stages. Individual cars are analysed and consecutively narrowed down to consideration and evoked sets. Evoked set consists of 1-2 cars that customers prefer to buy. The final purchase decision is then finally determined by additional, mainly external, influences in the purchase stage. The model generated by this research illustrates the complexity of the vehicle purchase process with the identified **touchpoints (T1-T5)** through which policy makers can influence it.

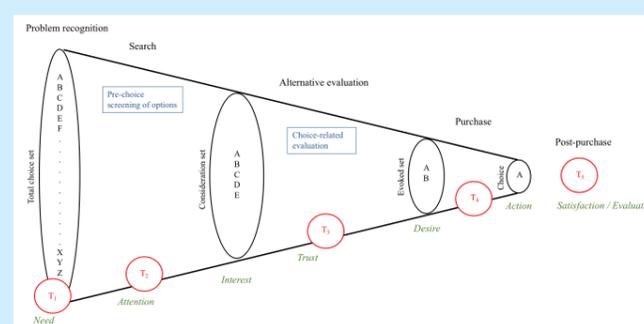


Figure 1: A comprehensive model of the vehicle purchase process

2. **Car dealers represent the key external influence** with role across all vehicle purchase process stages. They however also pose a **barrier to EV sales**. Only 5.3% of survey respondents were offered an EV by them. Yet, a statistically significant association was identified between EV consideration and EV being offered by car dealers. Secondly, car dealers can importantly reinforce ICE lock-in. Finally their role is even more pronounced towards EV non-adopters than potential EV adopters.

3. Test drives and car dealers are the most important information sources. Yet, **potential EV adopters see a plurality of information sources as significantly more important**, namely website of the car brand, Swiss EnergieEtikette and online car configurators. Personal discussions with car dealers are the only information source significantly more important for EV non-adopters than potential EV adopters.

4. Policy recommendations

Swiss policy makers have to be aware the complexity of the vehicle purchase process and deliver their interventions in support of EVs consequently. The research results suggest **four policy interventions to be delivered in relevant touchpoints**:

- T₁ Redefine regulation to generate the need for EVs
- T₂ Foster consultation of a plurality of information sources
- T₃ Obligatory EV training programs for car dealers
- T₅ Diversify financial incentives to post-purchase stage (i.e. use-based incentives - provision of free parking spaces, dedicated EV driving zones etc.)



Partners