University of St.Gallen
Institute of Responsible Innovation,
Sustainability and Energy

Solar powered mobility at zero costs and zero emissions

Research on new business models leveraging the convergence of the energy and automotive industry*

Moritz Loock
University of St.Gallen

**partly based on Loock, Everts, Pons-Seres de Brauwer, Scherbeck, & Wüstenhagen (2026), Marketing Review St. Gallen (forthcoming)*

Objectives of this seminar

- Highlight the role of business model research for solar powered mobility; elaborate on two iconic business models and how business model innovation moves beyond the icons.

- Present two research projects in more detail: (1) looks at efficiency of the EV sales process at car dealerships. (2) investigates how specifics of large e-mobility fleets influence optimisation strategies in electric power and energy reserve trading.

- Sharing learnings on the role of business research at the convergence of the automotive and energy sector and signal interest and openess for collaboration.

Agenda

- **The role of business models and how companies are moving beyond two iconic business models***
- Research project 1: Efficiency of the EV sales process at car dealerships
- Research project 2: Specifics of large e-mobility fleets and electric power and energy reserve trading
- Wrap-up

** based on Loock, Everts, Pons-Seres de Brauwer, Scherbeck, & Wüstenhagen (2026), Marketing Review St. Gallen (forthcoming)*

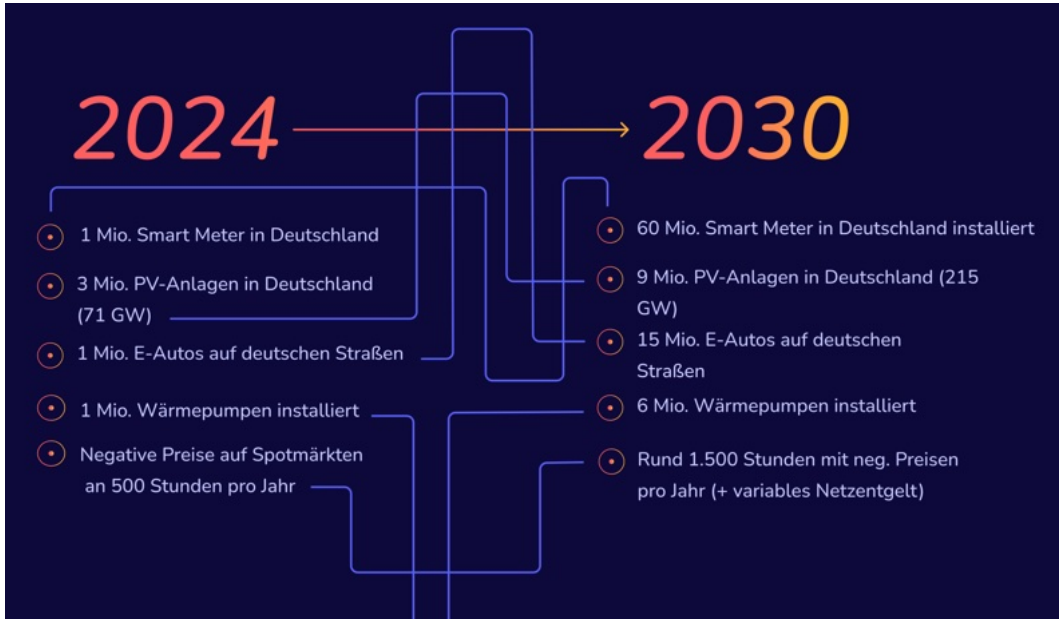
For most of the last century, energy and mobility were two distinct industries

Energy

Mobility

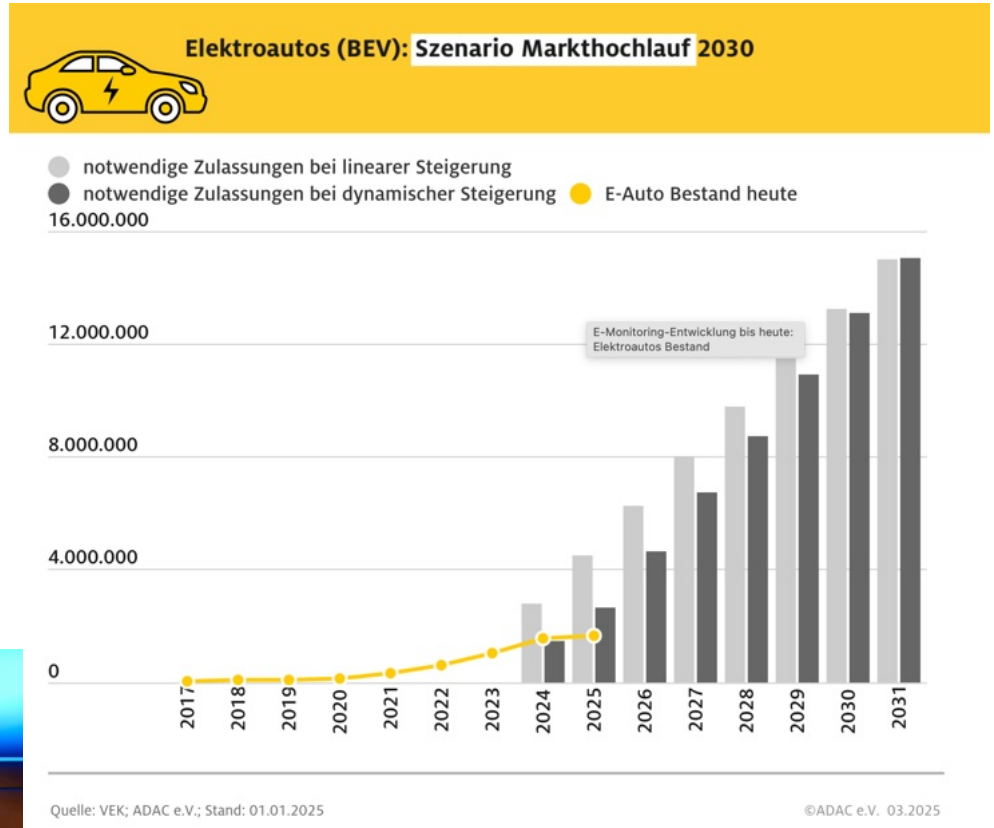
However, today the boundaries of both sectors are being redrawn

Energy



https://spotmyenergy.de/

Mobility



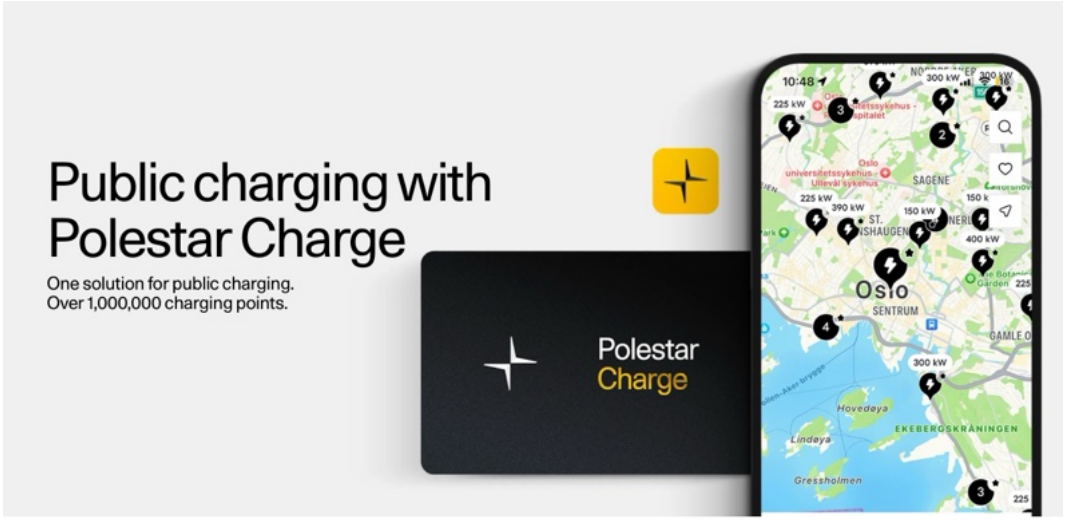
https://www.adac.de/news/e-monitoring/

Various energy and automotive companies have recently announced new product bundles

https://de.renault.ch/elektroautos/r5-e-tech-electric.html

«Powerbox, a bidirectional charging station»

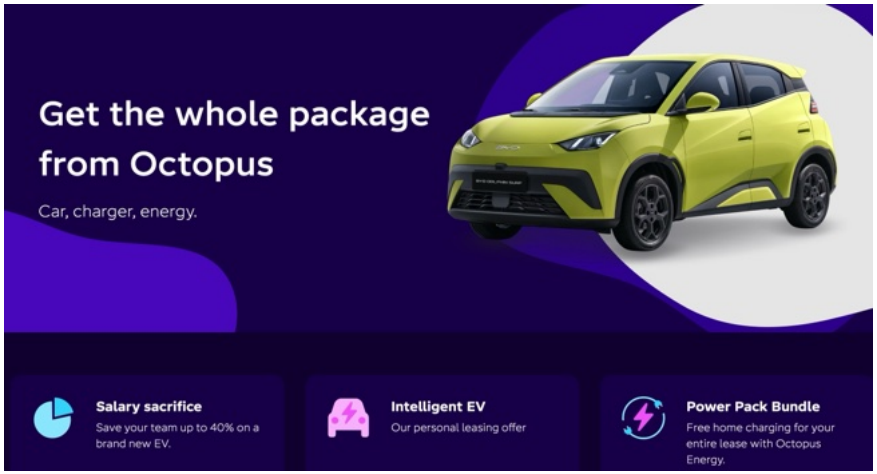
https://media.renault.com/mobilize-v2g-where-the-future-electric-renault-5-becomes-a-source-of-energy/



https://www.polestar.com/uk/charging/charging-network/

EnBW

https://www.enbw.com/elektromobilitaet/zuhause-laden



https://octopusev.com/?utm_source=octopusenergy&utm_medium=webpage&utm_campaign=drivingpage

These offerings show variance in their underlying business models

- Business models are combinations of patterns that answer central questions of how a business creates and captures value (Gassmann & Frankenberger, 2025)

- Business models thereby define who the customers are and what value propositions are offered to customers, how the value is delivered, and how the monetization work

➢ *Technological possibilities resulting from the convergence of renewable energy and electric vehicles abound, the commercial success of these innovative new offerings hinges on their ability to provide value to EV drivers, hence the business model*

Central questions have emerged from our studies that determine business models

1. **Is the electricity self-generated or purchased?** In other words, does the consumer have solar panels on their roof, or do they buy renewable energy from the market?
2. **Where does charging take place?** At home, at work, or on the road?
3. **What charging mode is used?** Instant (“dumb”), smart unidirectional, or bidirectional (V2H/V2G)?
4. **How is the charging process controlled?** At the level of the car (e.g., EV software), the charging point, the home (e.g., home energy management system), or the grid?
5. **What is the revenue model?** Pay per use, monthly subscription, dynamic tariffs, or others?
6. **Who owns the car?**

Asset Ownership (Energy)	Make		Buy	
Charging Location	@ home	@ work	on the road	
Charging Mode	instant	smart unidirectional (V1G)	smart bidirectional (V2H/V2G)	
Control	Car	Charging point	Home	Grid
Revenue Model	Pay per use	Monthly subscription (fixed price)	Dynamic tariff	Other
Asset Ownership (Car)	Privately owned		Third-party owned	

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Loock, Everts, Pons-Seres de Brauwer, Scherbeck, & Wüstenhagen (2026), Marketing Review St. Gallen (forthcoming)

An icon is the «Early Electrifier» business model for home charging with privately owned solar PV

https://alois-mueller.com/e-mobilitaet-infrastruktur/

Asset Ownership (Energy)	Make		Buy	
Charging Location	@ home	@ work	on the road	
Charging Mode	instant	smart unidirectional (V1G)	smart bidirectional (V2H/V2G)	
Control	Car	Charging point	Home	Grid
Revenue Model	Pay per use	Monthly subscription (fixed price)	Dynamic tariff	Other
Asset Ownership (Car)	Privately owned		Third-party owned	

- Value proposition: This model is often expected to lower energy costs, mainly through charging with own solar energy. Enabling self-consumption, e.g. by bundling EVs and PV systems, can be a promising value proposition of either equipment providers or utilities partnering with OEMs.
- In countries like Switzerland, for example, around 60% of the population rent their homes, which limits their ability to install solar panels or access a privately owned parking space.

Loock, Everts, Pons-Seres de Brauwer, Scherbeck, & Wüstenhagen (2026), Marketing Review St. Gallen (forthcoming)

Another icon is the “Charging At Filling Station” business model for charging on the road

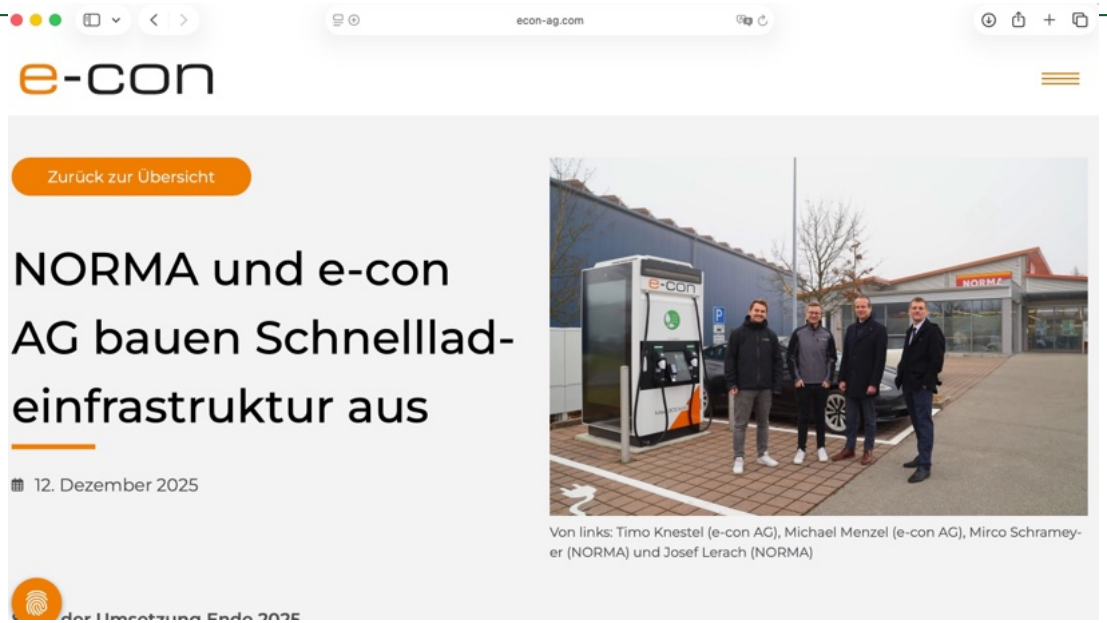
https://app.gofast.swiss/assets/uploads/GOFAST_St_Gallen_West_38d1bed45a.webp

Asset Ownership (Energy)	Make		Buy	
Charging Location	@ home	@ work	on the road	
Charging Mode	instant	smart unidirectional (V1G)	smart bidirectional (V2H/V2G)	
Control	Car	Charging point	Home	Grid
Revenue Model	Pay per use	Monthly subscription (fixed price)	Dynamic tariff	Other
Asset Ownership (Car)	Privately owned		Third-party owned	

- Value proposition: This model is often expected to provide very fast charging to minimize stop time, and it is frequently compared to the refueling time of cars with internal combustion engines (ICE).
- As long-distance travel is an important aspect of individual mobility, many business models of utilities or charging providers offer value through fast charging.

Loock, Everts, Pons-Seres de Brauwer, Scherbeck, & Wüstenhagen (2026), Marketing Review St. Gallen (forthcoming)

Companies are now moving beyond the two icons – refinining «Charging At Filling Station”



Asset Ownership (Energy)	Make		Buy	
Charging Location	@ home	@ work	on the road	
Charging Mode	instant	smart unidirectional (V1G)	smart bidirectional (V2H/V2G)	
Control	Car	Charging point	Home	Grid
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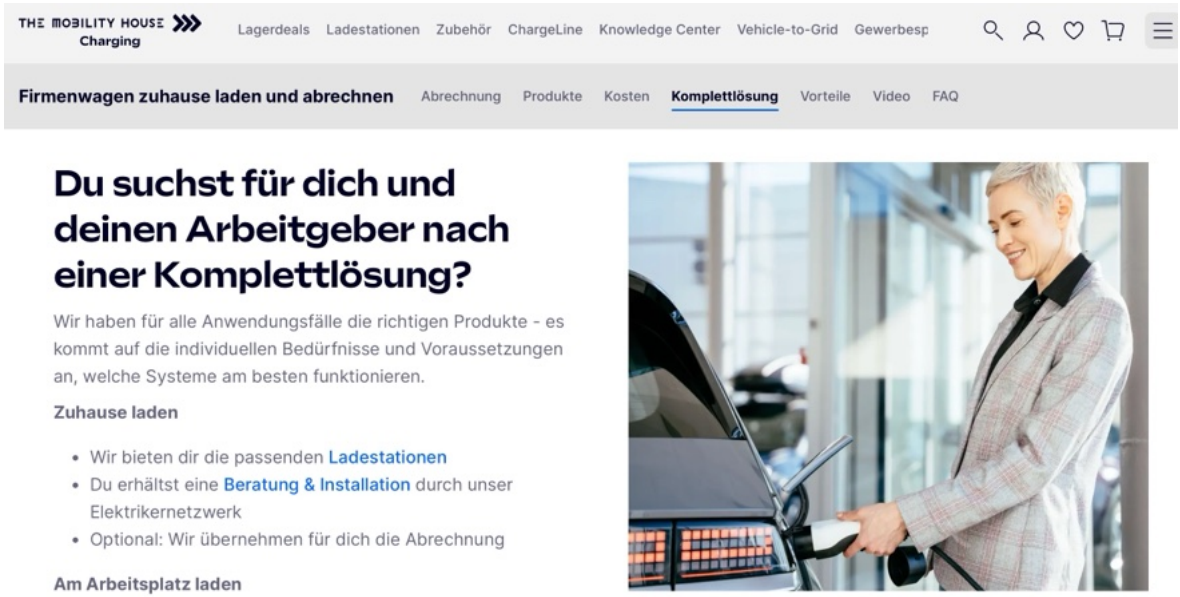
Asset Ownership (Car)	Privately owned		Third-party owned	

- For instance, improved revenue models, such as monthly subscriptions plans, offer significantly lower costs than pay-per-use models.
- In addition, some providers offer reduced charging rates based on more nuanced revenue models (e.g., retailers incorporating charging as part of their retail strategy).
- Furthermore, novel business models expand the scope of charging locations on the road beyond those within a single charging network, allowing drivers to conveniently use charging stations of different providers across Europe.

Loock, Everts, Pons-Seres de Brauwer, Scherbeck, & Wüstenhagen (2026), Marketing Review St. Gallen (forthcoming)

Companies are now moving beyond the two icons – refining charging at home



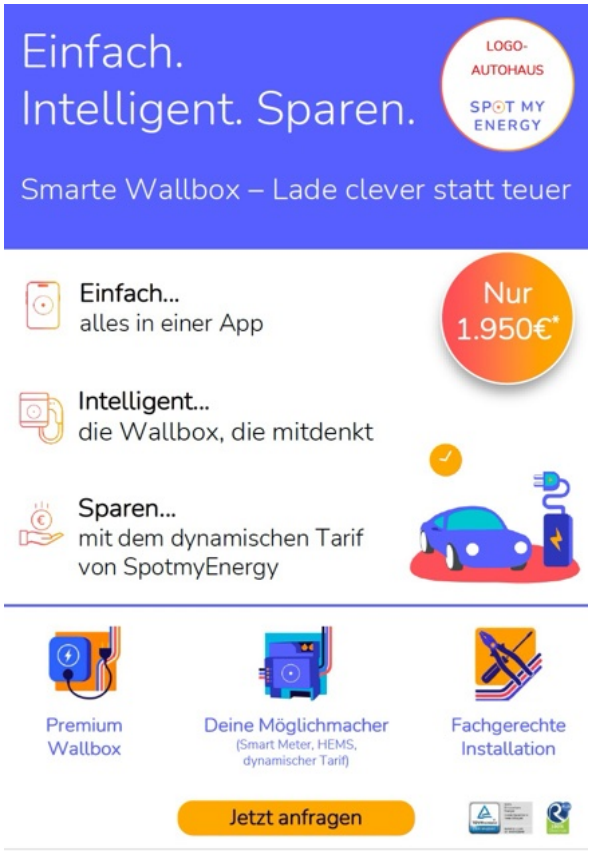
https://www.mobilityhouse.com/de_de/firmenwagen-zuhause-laden-abrechnen#produkte

Asset Ownership (Energy)	Make		Buy	
Charging Location	@ home	@ work	on the road	
Charging Mode	instant	smart unidirectional (V1G)	smart bidirectional (V2H/V2G)	
Control	Car	Charging point	Home	Grid
Revenue Model	Pay per use	Monthly subscription (fixed price)	Dynamic tariff	Other
Asset Ownership (Car)	Privately owned		Third-party owned	

- For instance, new models incentivize self-consumption with third-party owned cars (e.g., company cars) that are used privately and employers offer their employees specific home charging tariffs.
- Other examples include business models with different charging and steering models that combine self-consumption with smart charging and dynamic tariffs to reduce the cost of charging electricity that is not self-generated.

Loock, Everts, Pons-Seres de Brauwer, Scherbeck, & Wüstenhagen (2026), Marketing Review St. Gallen (forthcoming)

Companies are now moving beyond the two icons –enabling smart charging



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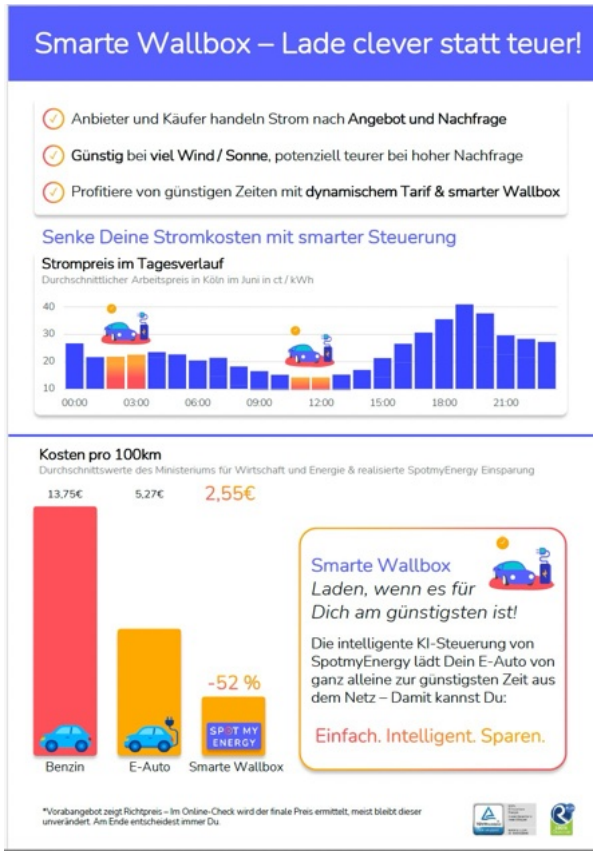

Asset Ownership (Energy)	Make		Buy	
Charging Location	@ home	@ work	on the road	
Charging Mode	instant	smart unidirectional (V1G)	smart bidirectional (V2H/V2G)	
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More information:

Loock, M. & C. Pons-Seres de Bauwer (2026): **The economics of smart EV charging at home: A review and research agenda**, R&R Sustainable Mobility and Transport

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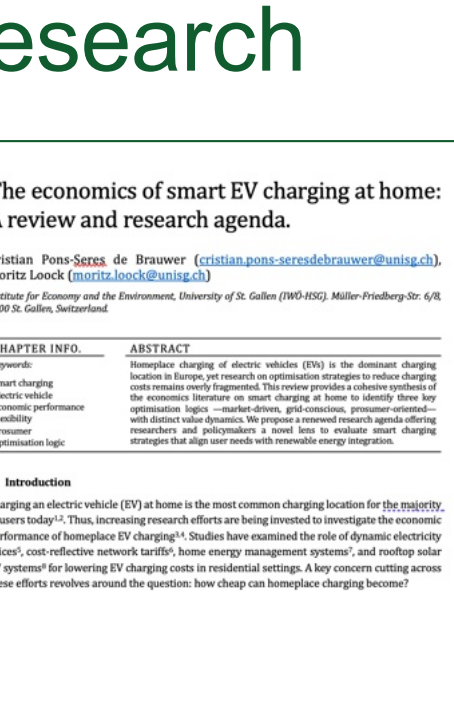
Business model perspective: A tool for mapping research


The economics of smart EV charging at home: A review and research agenda.

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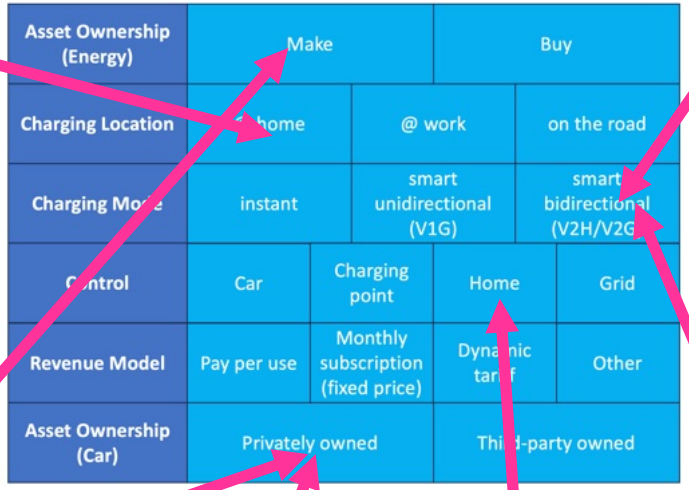
CHAPTER INFO. / ABSTRACT

Keywords: Smart charging, Electric vehicle, Economic performance, Flexibility, Prosumer, Optimisation logic

Homeplace charging of electric vehicles (EVs) is the dominant charging location in Europe, yet research on optimisation strategies to reduce charging costs remains overly fragmented. This review provides a cohesive synthesis of the economics literature on smart charging at home to identify three key optimisation logics —market-driven, grid-conscious, prosumer-oriented— with distinct value dynamics. We propose a renewed research agenda offering researchers and policymakers a novel lens to evaluate smart charging strategies that align user needs with renewable energy integration.

1. Introduction

Charging an electric vehicle (EV) at home is the most common charging location for the majority of users today[1,2]. Thus, increasing research efforts are being invested to investigate the economic performance of homeplace EV charging[3,4]. Studies have examined the role of dynamic electricity prices[5], cost-reflective network tariffs[6], home energy management systems[7], and rooftop solar PV systems[8] for lowering EV charging costs in residential settings. A key concern cutting across these efforts revolves around the question: how cheap can homeplace charging become?




Energy Policy 114 (2018) 540–548

Contents lists available at ScienceDirect

Energy Policy

journal homepage: www.elsevier.com/locate/enpol


The flexible prosumer: Measuring the willingness to co-create distributed flexibility

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ARTICLE INFO / ABSTRACT

Keywords: Solar photovoltaics, Battery storage, Vehicle-to-grid, Consumer behavior, Business models, Smart grid

Rising shares of fluctuating renewables increase the need for flexibility in the power market. At the same time, the emergence of the prosumer has created new opportunities for co-creation of distributed flexibility. As of yet, there is surprisingly little empirical analysis in terms of whether individuals are actually ready to co-create flexibility, and if so, under which conditions these resources can be mobilized by grid operators or electricity supply companies. We address this gap in the energy economics literature with three studies analyzing in total 7'216 individual decisions in a series of choice experiments with 902 study participants in three main domains of residential energy presumption: (1) solar PV plus storage, (2) electric mobility, (3) heat pumps. We develop a novel measure of the prosumers' willingness to co-create flexibility, and solicit their preferences for power supply contracts with varying levels of flexibility to derive implied discomfort costs. Our results indicate that current and potential electric car and solar PV users exhibit a higher willingness to co-create flexibility than heat pump users. Reaping the potential in those two domains requires taking the prosumer perspective into account when designing policy instruments and creating adequate business models.

1. Introduction

Matching supply and demand over time is a key challenge in power markets. In traditional electricity markets, demand has largely been taken for granted, while the necessary flexibility has been built into the supply side through peak power plants and centralized storage. Increasing shares of fluctuating renewable energies have enhanced the need for flexibility to avoid imbalances in the power system. Established and new companies develop novel business models to provide flexibility (Helms et al., 2016). Decentralization trends in the energy market offer new opportunities for matching supply and demand in a distributed manner. Distributed flexibility provision can take different forms: Shifting demand and supply over time and/or building up local storage capacity. Successfully mobilizing flexibility in distribution grids can help to delay or avoid investments in extending centralized grid infrastructure (Gordijn and Akkermans, 2007; Veldman et al., 2013), resulting in cost efficient energy systems and allowing smooth integration of renewables (Denholm and Hand, 2011). While centralized sources of flexibility (e.g. gas-fired power plants or hydropower reservoirs) are well understood, the tendency of decentralized electricity consumers becoming prosumers (producers and consumers at the same time, cf. (Bergman and Eyre, 2011; Kotler, 1986; Toffler, 1980)) provides a potentially valuable source of – so far underutilized – flexibility (Gordijn and Akkermans, 2007; Kubli, 2017; Veldman et al., 2013). Decentral prosumers can provide flexibility by optimizing the timing of their electricity production and consumption, and by making decentralized storage available (e.g. through investing in batteries or providing heat reserves through a more flexible heating behavior). A better understanding of whether and under which conditions prosumers are actually ready to contribute to flexibility provision is important if these resources are to be mobilized.

This paper empirically investigates prosumers' willingness to co-create flexibility with a series of studies across three main domains of energy use: (a) solar PV plus storage, (b) electric vehicles, (c) heat pumps. By conducting three choice experiments with a unique sample of actual and potential flexible prosumers in Switzerland (N = 902), we aim to answer the following two research questions:

1. To what extent are prosumers willing to co-create flexibility?
2. Are there differences between the three technology domains?

Our paper makes three main contributions to the extant literature on smart grids and flexibility in the power market. First, we answer the call for "putting people in the loop" (e.g. Sowe et al., 2016) and for

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https://doi.org/10.1016/j.enpol.2017.12.044
Received 23 August 2017; Received in revised form 21 December 2017; Accepted 25 December 2017
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Energy Research & Social Science

Does solar power add value to electric vehicles? An investigation of car-buyers' willingness to buy product-bundles in Germany

Alexander Staudt


UNIVERSITY OF ST.GALLEN

School of Management, Economics, Law, Social Sciences, International Affairs and Computer Science

Master of Arts HSG in General Management (MGM22)
Master's Thesis

Strategies to Improve EV Resale Values in Germany

A Conjoint Analysis


UNIVERSITÄT ST.GALLEN

Hochschule für Wirtschafts-, Rechts- und Sozialwissenschaften, Internationale Beziehungen und Informatik

Bachelorarbeit

Smart Meter als Treiber neuer Geschäftsmodelle

Eine Übersicht und Kategorisierung im deutschen Stromsektor


Universität St.Gallen

Hochschule für Wirtschafts-, Rechts- und Sozialwissenschaften, Internationale Beziehungen und Informatik (HSG)

Bidirektionales Laden bei führenden deutschen Automobilherstellern: Umsetzungsstand, Anwendungsfelder und Herausforderungen zwischen Literatur und Praxis

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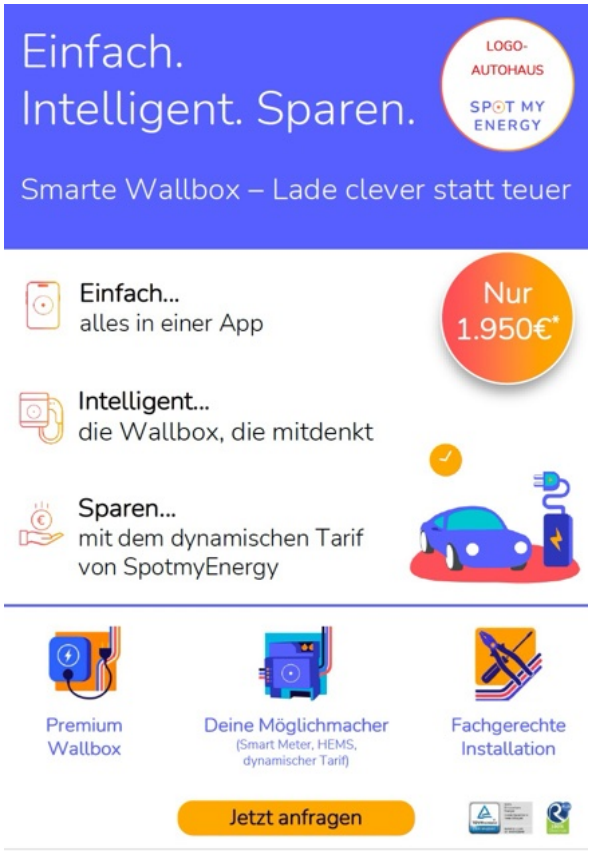
Agenda

- The role of business models and how companies are moving beyond two iconic business models
- **Research project 1: Efficiency of the EV sales process at car dealerships**
- Research project 2: Specifics of large e-mobility fleets and electric power and energy reserve trading
- Wrap-up

Companies are now moving beyond the two icons –enabling smart charging



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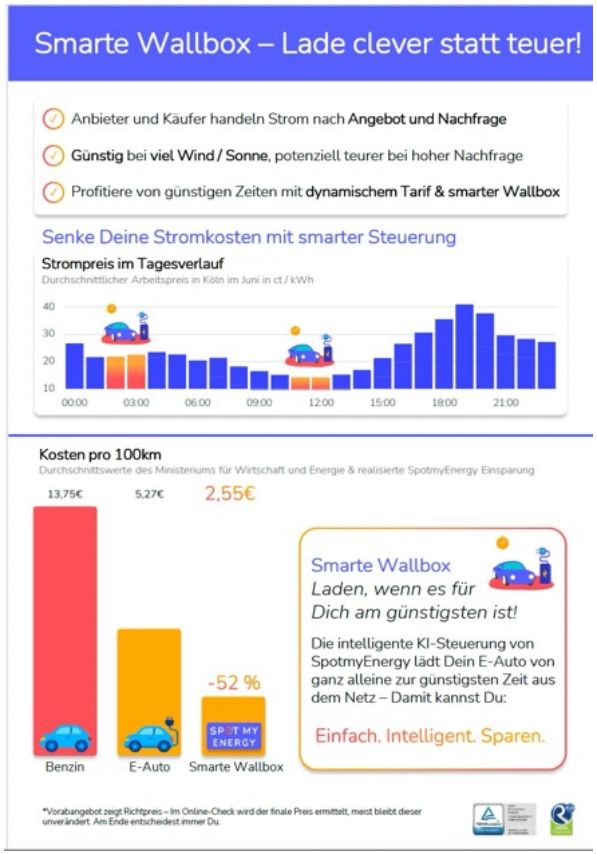

Asset Ownership (Energy)	Make		Buy	
Charging Location	@ home	@ work	on the road	
Charging Mode	instant	smart unidirectional (V1G)	smart bidirectional (V2H/V2G)	
Control	Car	Charging point	Home	Grid
Revenue Model	Pay per use	Monthly subscription (fixed price)	Dynamic tariff	Other
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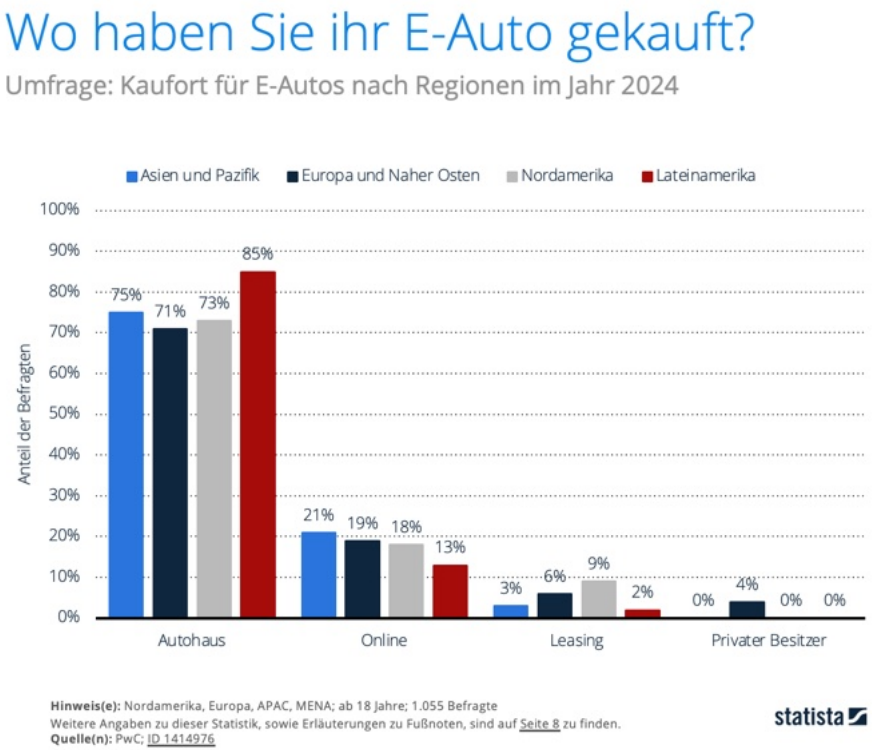
… but it is challenging to provide such comprehensive information at the point-of-sale

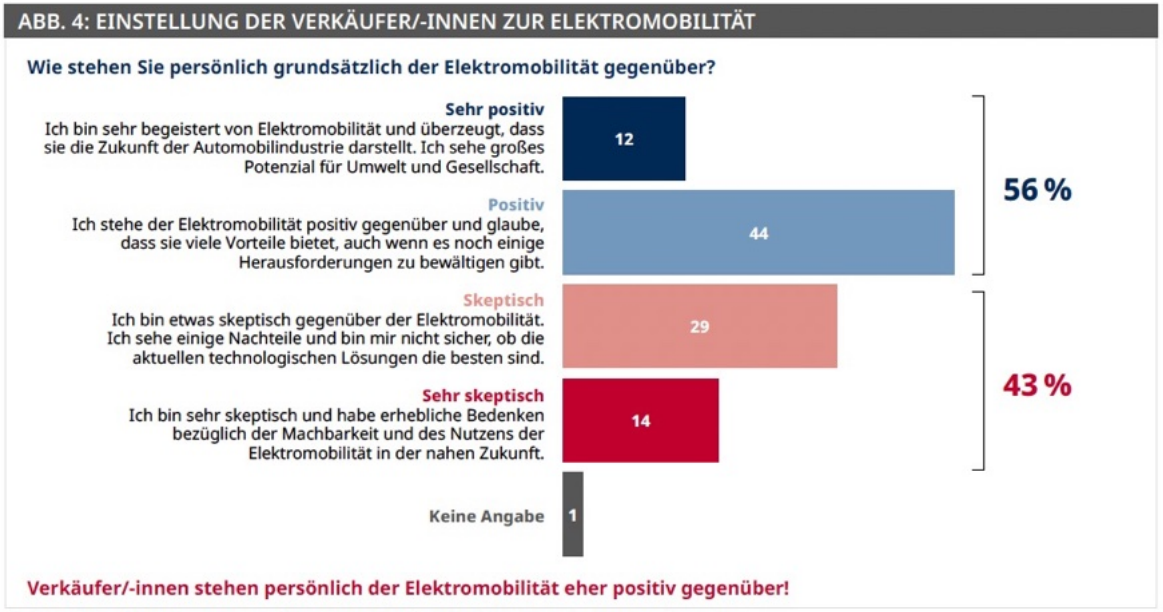
- Extensive text-based explanation exceeds capacity load of individuals within car dealerships and interactive, time-consuming explanation through trained sales-personnel can be challenging due to limited availability of qualified personnel and financial limitations.

- Thus, it is of interest to explore more effective, heuristic alternatives that reduce information complexity and succeed in communicating the value-added of EVs in a prosumer context

- This research elaborates the role of instore-design by addressing following research questions: **How can «prosumer-based» in-store design promote diffusion of electric vehicles?**

… furthermore: the EV sales process at car dealerships provides additional challenges (I)

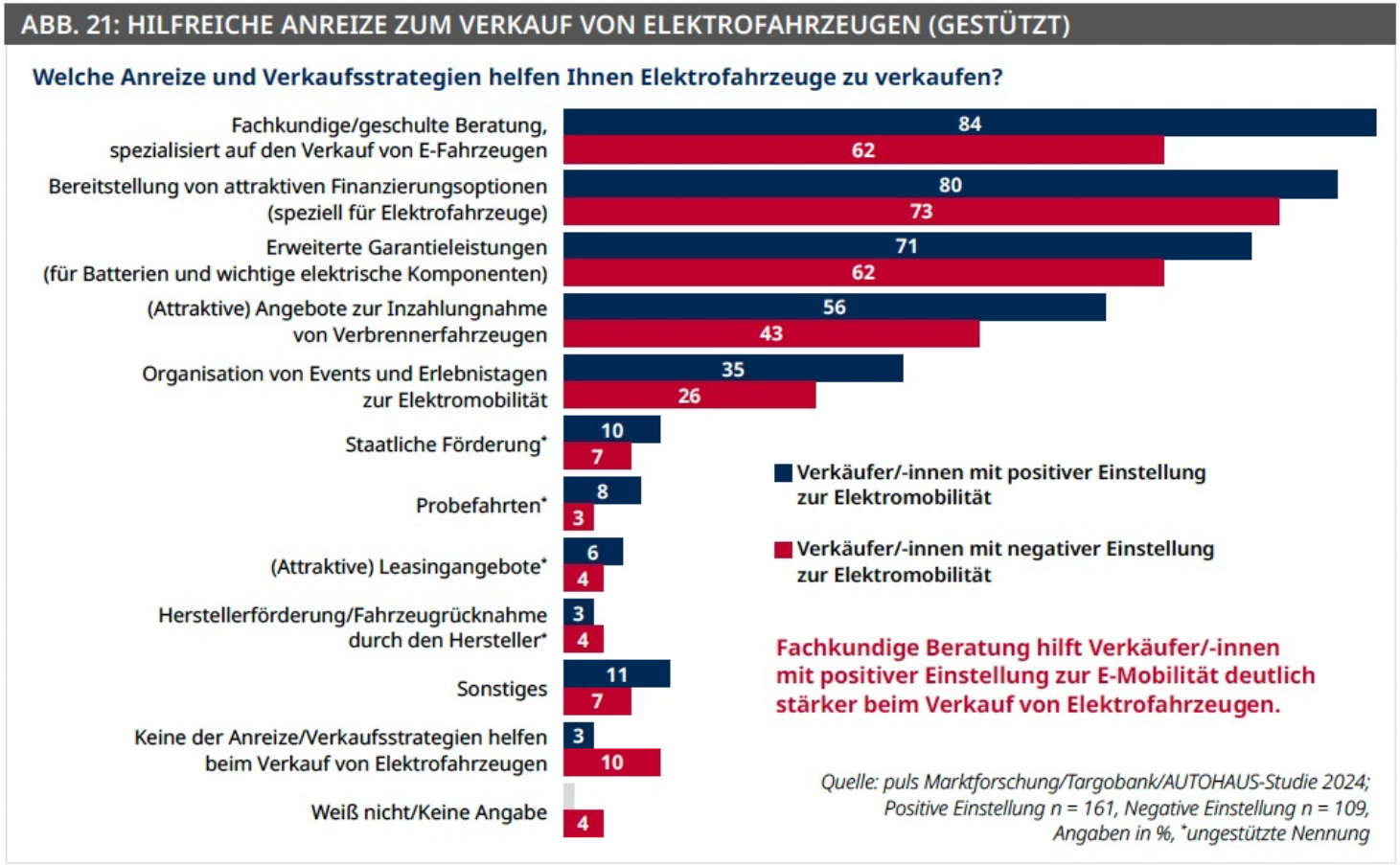




Quelle: puls Marktforschung/Targobank/AUTOHAUS-Studie 2024; Basis: Gesamt = 300, Angaben in %

https://media1.autohaus.de/fm/3478/targobank-verkaeuferstudie-2024.pdf

… furthermore: the EV sales process at car dealerships provides additional challenges (II)



https://media1.autohaus.de/fm/3478/targobank-verkaeuferstudie-2024.pdf

Regular EV presentation: Easy to implement but limited explanation of salient EV features

A novel, explanation-based presentation (the "prosumer display"): An investment into informing customers - but is it effective and does it pay?

Sample of the online pretest*

Sind_Sie...._Q4

		Häufigkeit	Prozent	Gültige Prozente	Kumulierte Prozente
Gültig	männlich	61	55,0%	55,0%	55,0%
	weiblich	50	45,0%	45,0%	100,0%
Gesamt		111	100,0%		

In_welche_Altersgruppe_fallen_Sie_Q2

		Häufigkeit	Prozent	Gültige Prozente	Kumulierte Prozente
Gültig	18-35 Jahre	28	25,2%	25,2%	25,2%
	36-50 Jahre	25	22,5%	22,5%	47,7%
	51-65 Jahre	37	33,3%	33,3%	81,1%
	66-80 Jahre	21	18,9%	18,9%	100,0%
Gesamt		111	100,0%		

Was_ist_Ihr_höchster_Bildungsabschluss_Q46

		Häufigkeit	Prozent	Gültige Prozente	Kumulierte Prozente
Gültig	(Fach-) Hochschulabschluss/ Diplom/ 2. Staatsexamen	14	12,6%	12,6%	12,6%
	Bachelor/ Bakkalaureus	6	5,4%	5,4%	18,0%
	Fachhochschulreife/ Fachabitur ohne FH-Studium	5	4,5%	4,5%	22,5%
	Haupt-/ Volksschulabschluss/ 8. Klasse POS ohne Lehre/ B.-Ausbildung	1	,9%	,9%	23,4%
	Haupt/ Volksschulabschluss/ 8. Klasse POS mit Lehre/ B.-Ausbildung	35	31,5%	31,5%	55,0%
	Mittlere Reife/ Realschule/ 10. Klasse POS ohne Abitur	32	28,8%	28,8%	83,8%
	allg. Hochschulreife/ Abitur	12	10,8%	10,8%	94,6%
	höherer akademischer Abschluss	6	5,4%	5,4%	100,0%
Gesamt		111	100,0%		

Fahren_Sie_ein_KFZ_Q47

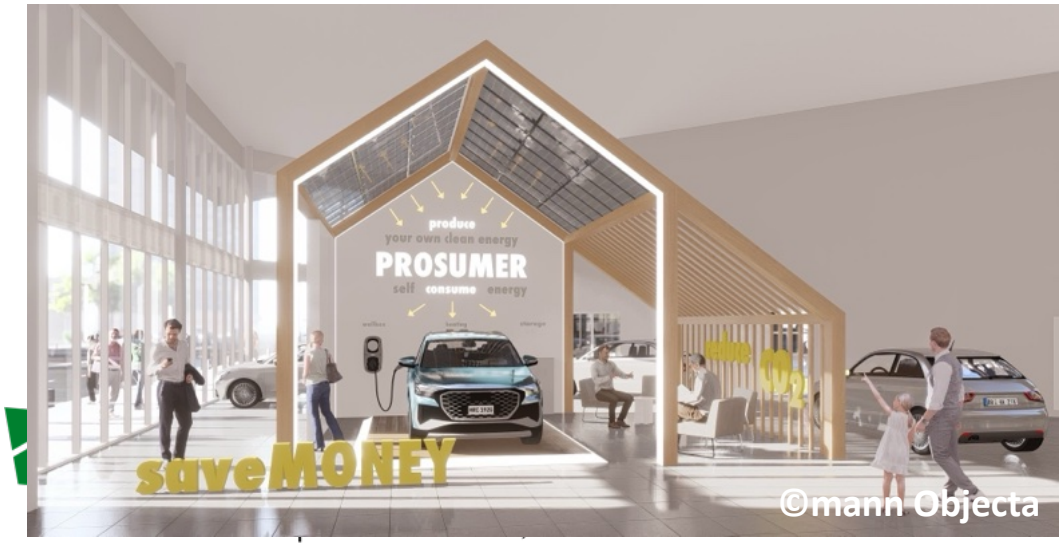
		Häufigkeit	Prozent	Gültige Prozente	Kumulierte Prozente
Gültig	Neuwagen	111	100,0%	100,0%	100,0%
Gesamt		111	100,0%		

Welche_Antriebsart_hat_Ihr_Haupt_KFZ_Q48

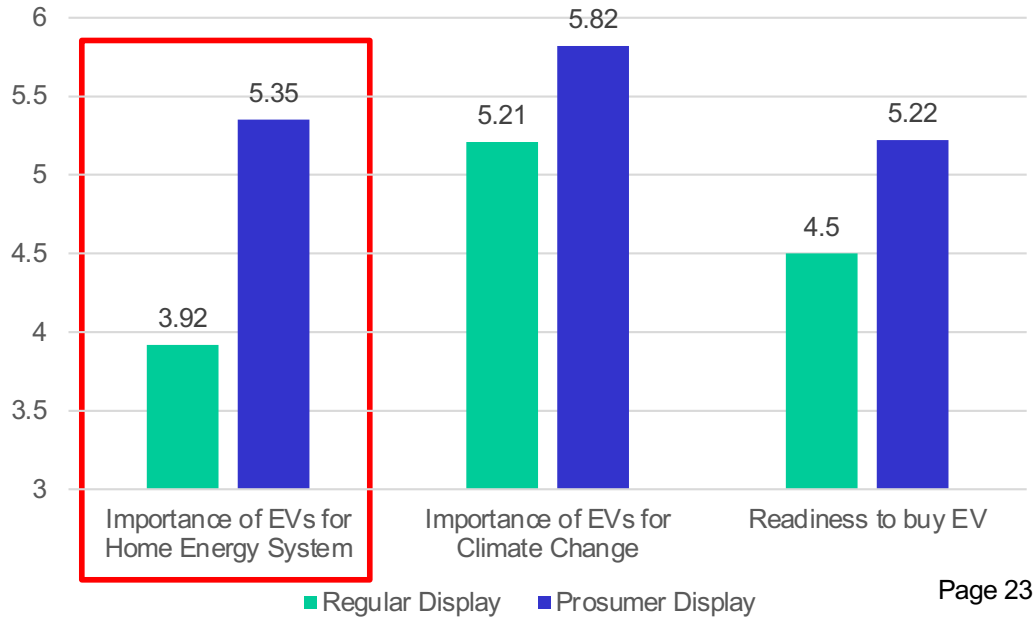
		Häufigkeit	Prozent	Gültige Prozente	Kumulierte Prozente
Gültig	Benzin Motor	96	86,5%	86,5%	86,5%
	Diesel Motor	15	13,5%	13,5%	100,0%
Gesamt		111	100,0%		

* Subsample from a larger sample (n=512, Germany); participants of the subsample are new car owners only to control for potential variance among new and used cars, leased and company cars users

Results: Switching from regular EV presentation to an explanation-based presentation (the “prosumer display”)

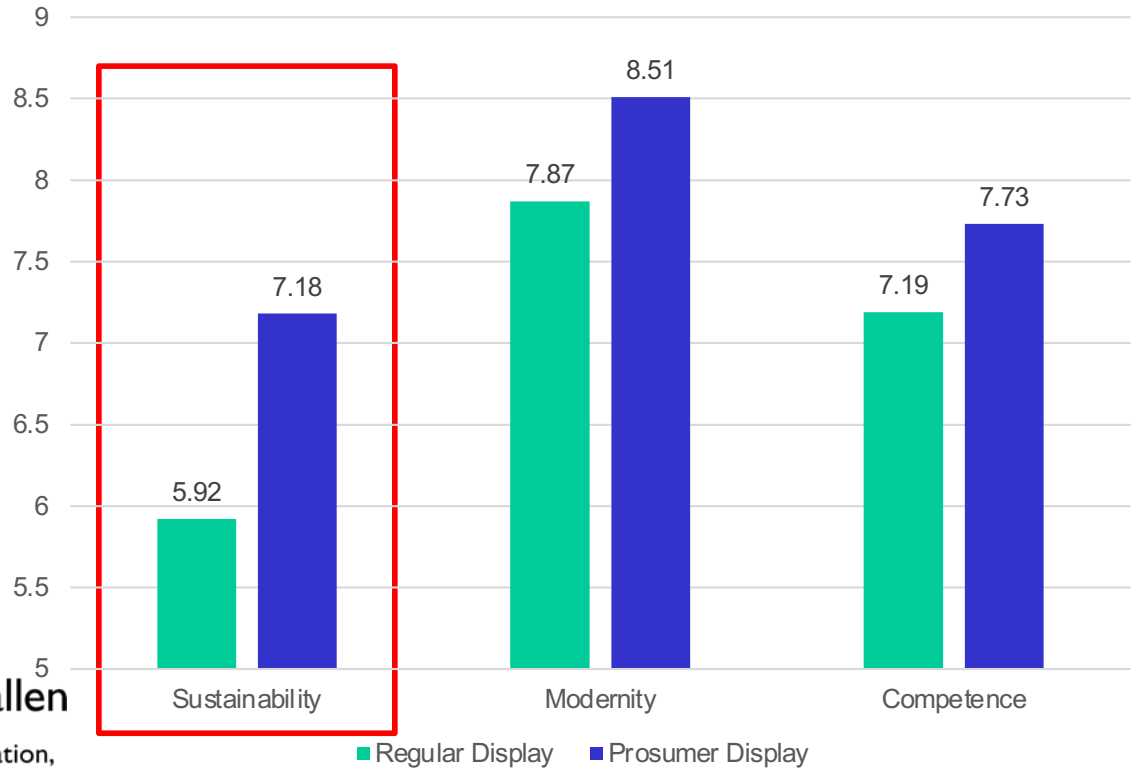


- Car dealerships can help customers to better understand the role of EVs for home energy systems if they use an explanation-based EV presentation (the “prosumer display”) instead of a regular EV presentation
- Customers exposed to an explanation-based presentation (the “prosumer display”) regard EVs more important for the energy system at home.



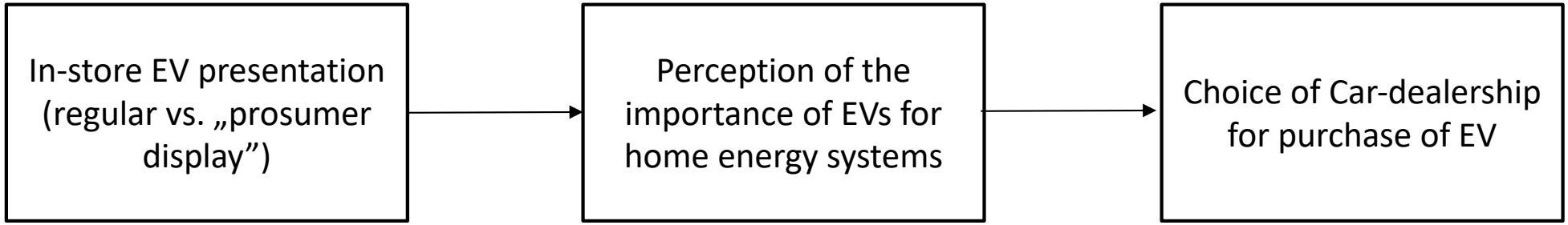
Car dealerships profit from more informed customers (I)

- Early evidence that in a real-store environment this effect spans over various dimensions of the evaluation of the car dealership from a customer point of view, such as how sustainable, modern and competent a car-dealership is perceived



Car dealerships profit from more informed customers (II)

- Following a more elaborated understanding of the relevance of EVs for home energy systems, customers are more likely to choose the car dealership for the purchase of an EV



Explanatory model that is emerging from the pretest

```
REGRESSION
      /VARIABLES= Inwiefern_halten_Sie_Elektroautos_aufgrund_der_im_Bild_darges
      /DEPENDENT= Würden_Sie_das_Autohandelsunternehmen_auf_dem_Bild_welches
      /METHOD=ENTER
      /STATISTICS=COEFF R ANOVA.
```

Modellzusammenfassung (Würden_Sie_das_Autohandelsunternehmen_auf_dem_Bild_welches)

R	R-Quadrat	Korrigiertes R-Quadrat	Standardfehler der Schätzung
,27	,07	,06	3,29

ANOVA (Würden_Sie_das_Autohandelsunternehmen_auf_dem_Bild_welches)

	Quadratsumme	df	Mittel der Quadrate	F	Sig.
Regression	90,46	1	90,46	8,38	,005
Residual	1154,99	107	10,79		
Gesamt	1245,45	108			

Koeffizienten (Würden_Sie_das_Autohandelsunternehmen_auf_dem_Bild_welches)

	Unstandardisierte Koeffizienten		Standardisierte Koeffizienten		
	B	Standardfehler	Beta	t	Sig.
(Konstante)	4,61	,54	,00	8,55	,000
Inwiefern_halten_Sie_Elektroautos_aufgrund_der_im_Bild_darges	,28	,10	,27	2,89	,005

Implications and next steps (I)

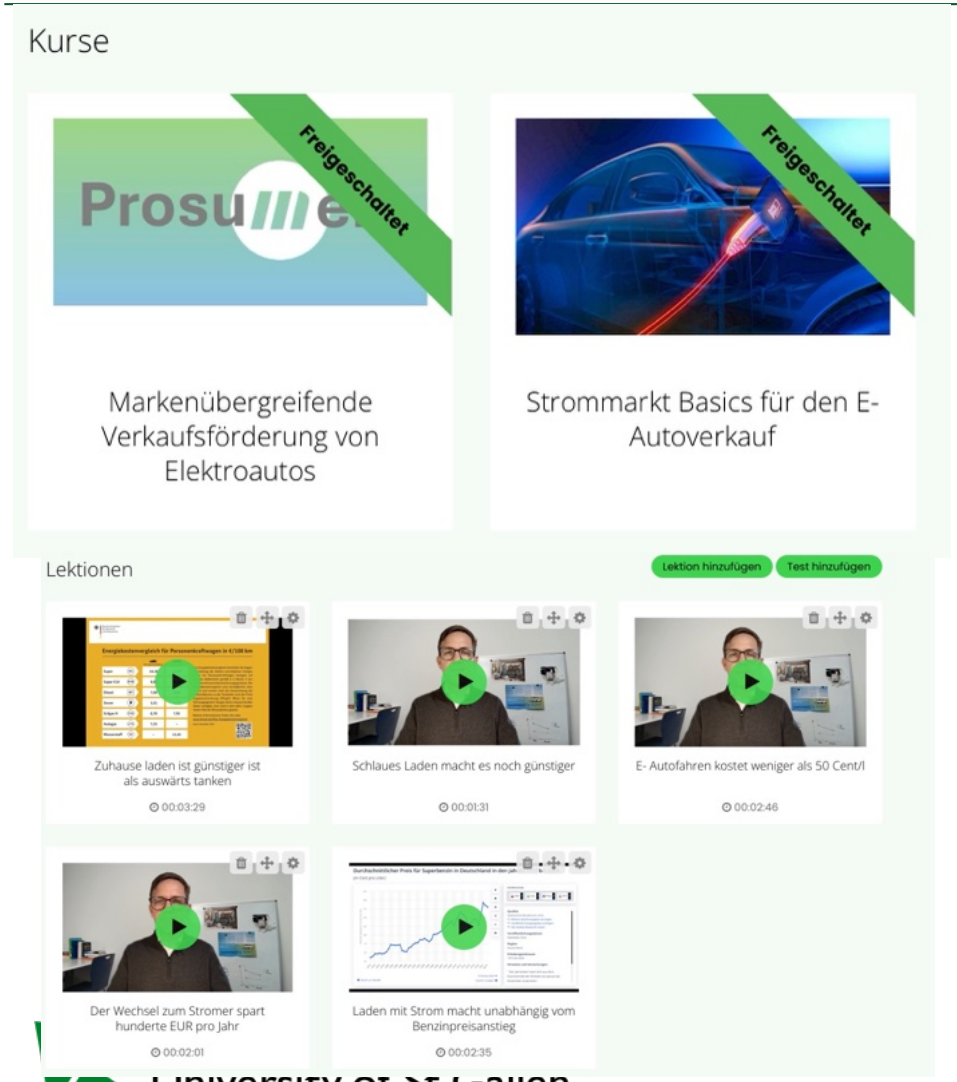
- The online pretest suggests that car dealerships can effectively inform customers about salient advantages of EVs if they adjust their product presentation, using a “prosumer display” and that car dealerships may profit from more informed customers

- Following the results of this pretest the prosumer display appears an interesting instrument to promote sales of electric vehicles; an investment into a prosumer display appears beneficial for car dealerships and can be an interesting instrument to improve market positioning (e.g. for incumbents or new entrants)

- It is suggested to replicate this online pretest in a real store environment and develop adjusted versions of the prosumer display, that account for specific needs of car brands and dealership locations

Implications and next steps (II)

Implications and next steps (III)



EV Academy for Car Dealerships

Kundinnen und Kunden haben neue, Strommarkt spezifische Fragen und Beratungsbedarf. Die Fähigkeit Strommarkt Basics in die Beratung zu integrieren, wird zu einer wichtigen Verkaufskompetenz.

Lernziele:

- Strommarkt Basics erarbeiten und für die Beratung im Autoverkauf nutzbar machen
- Einen Überblick geben über die spannenden Themen an der Schnittstelle von Mobilität und Strom
- Kompetenzen aufbauen für souveräne Beratungsgespräche an der Schnittstelle von E-Autos und Strommarkt

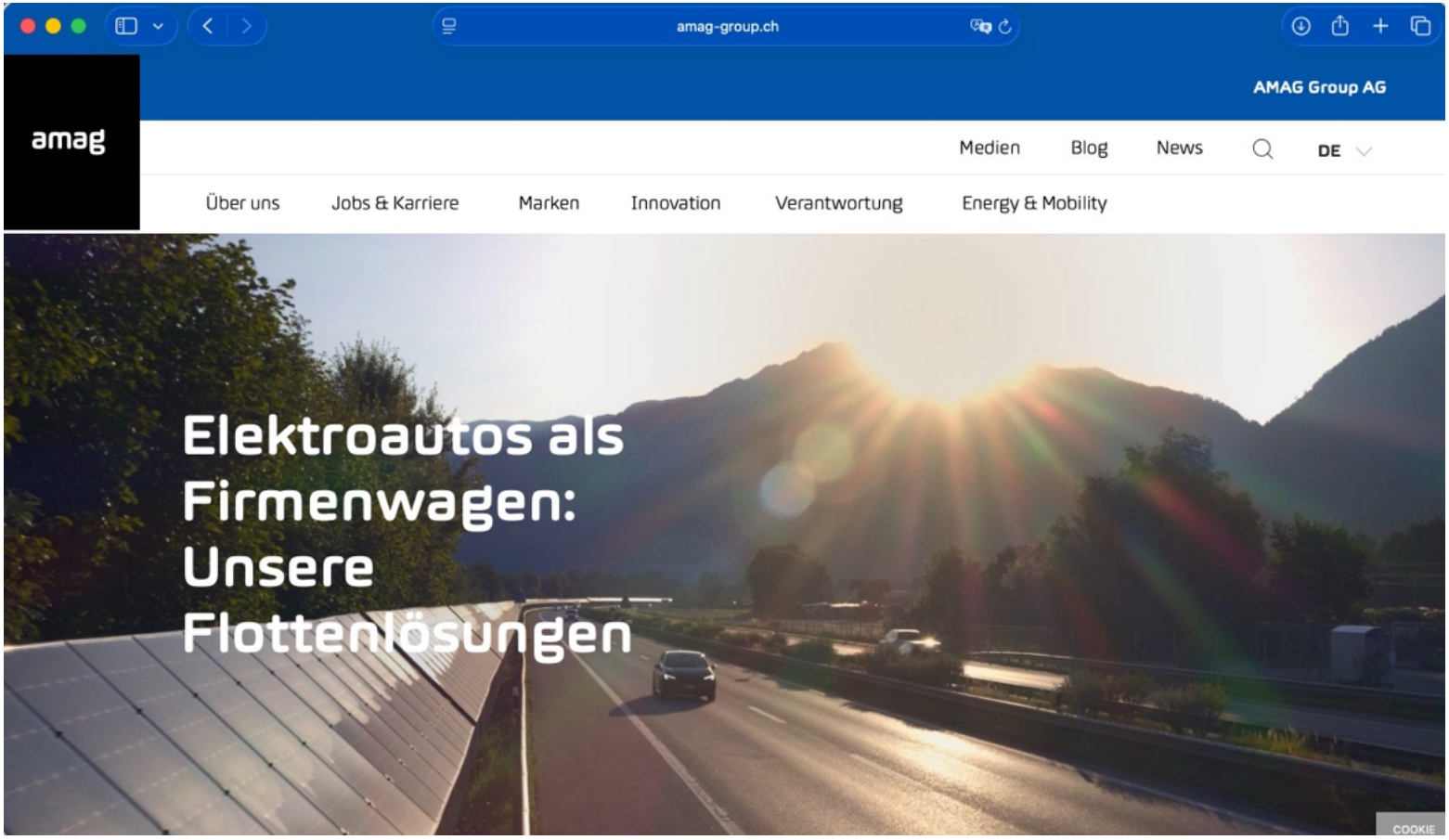
https://mann-objecta.coachy.net

Agenda

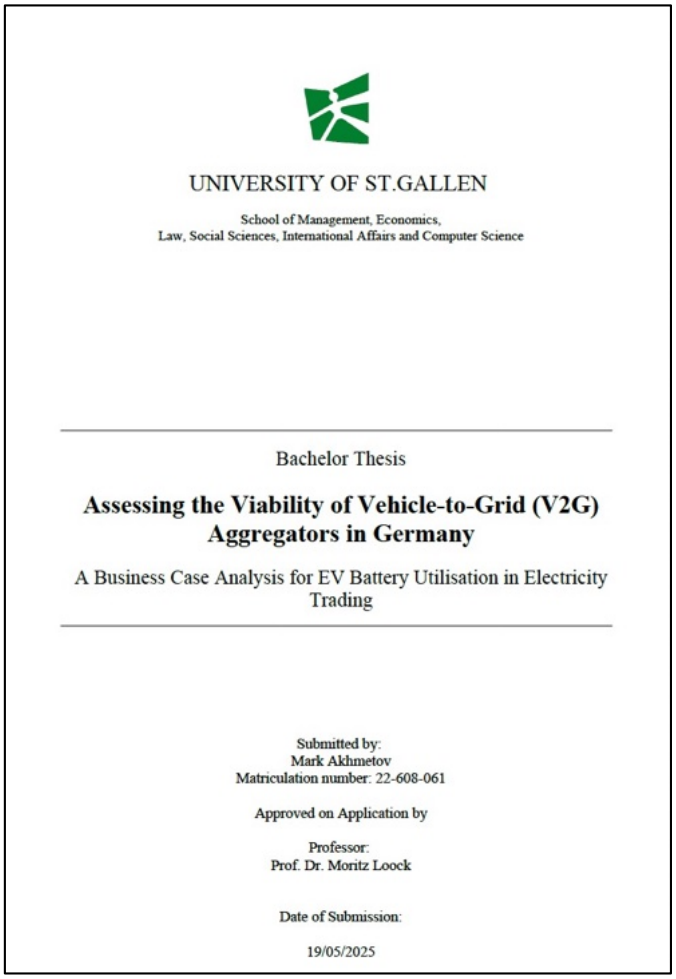
- The role of business models and how companies are moving beyond two iconic business models
- Research project 1: Efficiency of the EV sales process at car dealerships
- **Research project 2: Specifics of large e-mobility fleets and electric power and energy reserve trading**
- Wrap-up

EVs as company cars

Asset Ownership (Energy)	Make		Buy	
Charging Location	@ home	@ work	on the road	
Charging Mode	instant	smart unidirectional (V1G)	smart bidirectional (V2H/V2G)	
Control	Car	Charging point	Home	Grid
Revenue Model	Pay per use	Monthly subscription (fixed price)	Dynamic tariff	Other
Asset Ownership (Car)	Privately owned		Third-party owned	



Aggregating and managing fleets of EV company cars



UNIVERSITY OF ST.GALLEN

School of Management, Economics,
Law, Social Sciences, International Affairs and Computer Science

Bachelor Thesis

Assessing the Viability of Vehicle-to-Grid (V2G) Aggregators in Germany

A Business Case Analysis for EV Battery Utilisation in Electricity Trading

Submitted by:
Mark Akhmetov
Matriculation number: 22-608-061

Approved on Application by

Professor:
Prof. Dr. Moritz Loock

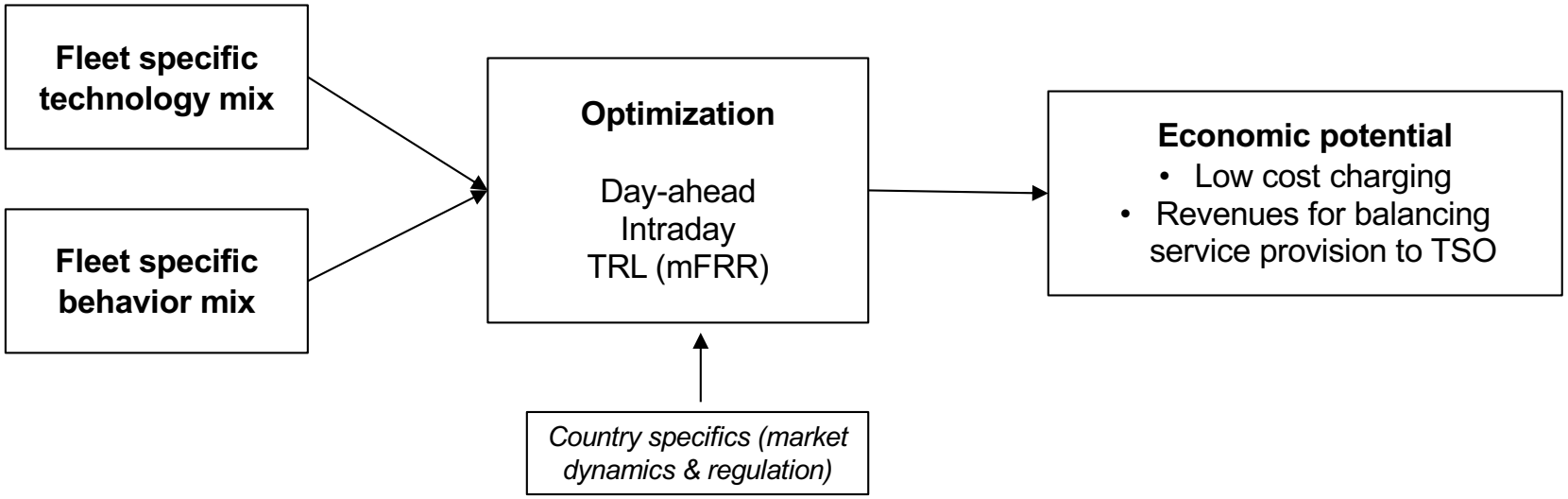
Date of Submission:

19/05/2025

- Battery storage systems are increasingly deployed at large scale in flexibility and reserve markets.
- Recently, it has been argued that **aggregated electric vehicle (EV) fleets** could offer similar flexibility services.
- However, unlike large battery parks, e-mobility fleets are often less coherent:
  - They constitute of **fleet specific technology** (vehicles and charging equipment) and **fleet specific behavior** (e.g. different and changing charging and driving patterns), which in combination makes forecast an interesting challenge.
- At the same time, use for providing flexibility could be economically attractive, as the capital costs of the vehicles are not allocated to flexibility products, resulting in significantly lower opportunity costs compared to other power assets.

How do specifics of large e-mobility fleets influence optimization strategies in electric power and energy reserve trading?

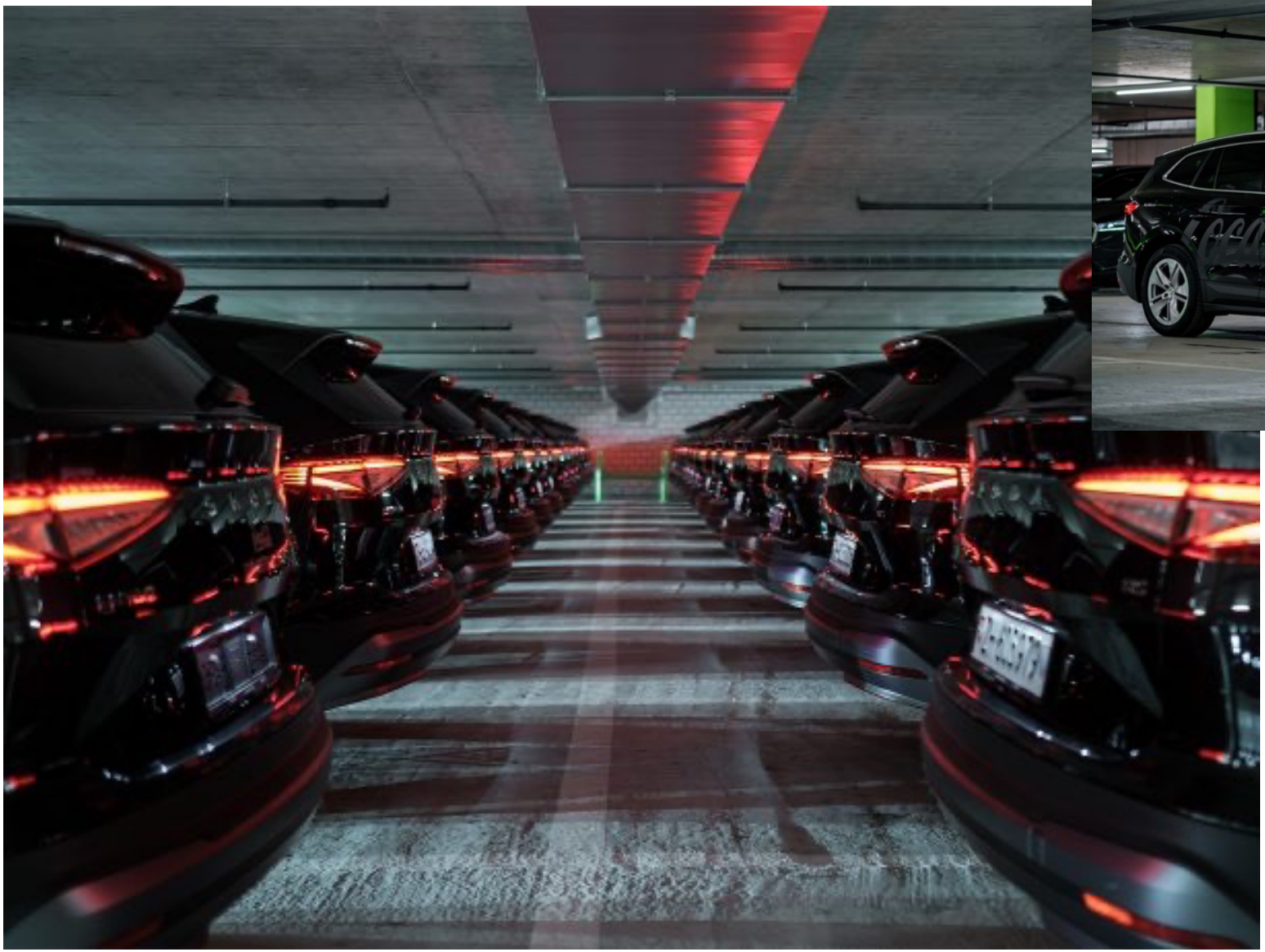
- This paper draws on an analysis on a unique, large-scale database of an e-mobility fleet in Switzerland with fine-grained data of a fleet approx. 1’500 vehicles.
- In a first step a state-of-the art optimization model is derived from literature to assess the overall economic potential.
- In a second step, it is tested how different features of the fleet affect and change the optimization model and the economic potential as its outcome.



Fleet specific subunit of around 100 ID.Buzz Cargo (with installer specific usage behaviour)

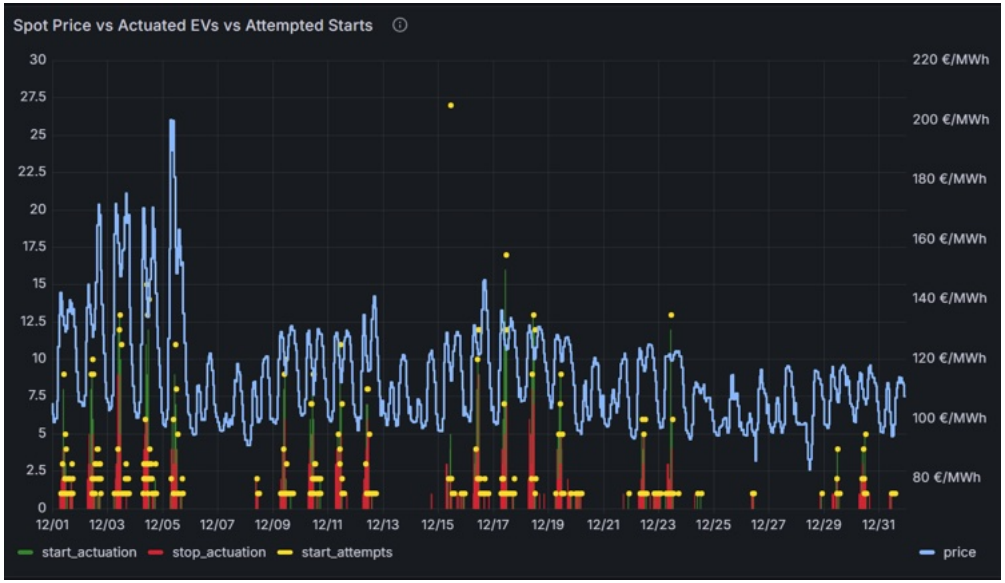
https://www.amag-import.ch/de/flotten-einsatzfahrzeuge/corporate-fleet/erfahrungsberichte/helion.html

Fleet specific subunit of around 177 Škoda Enyaq (with field service specific usage behaviour)



https://www.amag-import.ch/de/flotten-einsatzfahrzeuge/corporate-fleet/erfahrungsberichte/coca-cola.html

Data snap-shot



Next steps

- We test how different features of the fleet affect and change the optimization model and the economic potential as its outcome
- We assume that a heuristic trading strategy is more sucessful in dealing with dynamics from fleet specific behaviors and technology and specific local context compared to complex standard optimization
- Based on this, we seek to draw implications for a more fine-grained understanding in regard to the energy economic fundamentals of pooling electric vehicles

Agenda

- The role of business models and how companies are moving beyond two iconic business models
- Research project 1: Efficiency of the EV sales process at car dealerships
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- **Wrap-up**

Wrap-up

Learning	Why important	Topics
#1: Business models provide a useful perspective of analysis for understanding dynamics at the convergence of the energy and automotive industry	A business model perspective helps to focus on interesting variance in company offerings, especially value propositions towards customers By considering and exploring this variance, business model research can develop precise prescriptions to improve whole business models or single aspects Given the impact of business models on social accaptance and diffusion, this potentially provides meaningful support for the diffusion of e-mobility	Classification of business models, acceptance studies of bms and bm elements, dynamics among business models (e.g. complentarity and competition of bms)
#2: The delivery configuration is an important element of business model research	Some value propositions are especially sensitive to efficient delivery, e.g. novel value propositions or value propositions that require detailed explanation	Challenges and opportunities for an efficient design of the EV sales process at car dealerships and beyond
#3: Monetization is an important element of business model research	Providing resources and capabilities to create and deliver value propositions is expensive, a detailed understanding of financial viability is a critical element for bm performance	considering regulatory, technical and behavioral contingencies, field studies

Thank you ☺

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University of St.Gallen
Institute of Responsible Innovation, Sustainability and Energy