

ELECTRIC VEHICLES IN VIENNESE FLEETS

Every year, up to 60,000 commercially used cars and up to 8,000 vans are newly registered in Vienna. Although new EV registrations in these vehicle classes (passenger cars and vans in the N1 motor vehicle class) have been growing at rates of up to 100% since 2013, their share is still below 2%.

In absolute figures, 1,796 commercial electric cars and 725 electric vans were on the road in Vienna in 2018.

The spread of purely electrically powered fleet vehicles is therefore still in its infancy.

IN BRIEF

- Vehicle fleets are considered a promising market niche for the introduction of electromobility.
- So far, there are only a few examples in Vienna showing the transition to electric vehicles in public and company fleets.
- In recent years, a local network of providers, consultants and stakeholders has been established around the topic of electromobility.
- Fleet operators who had already gained experience with electric vehicles are very satisfied with their decision.
- However, the transition to electric vehicles is complex and requires a system change.



Picture: ITA-SB

Public charging infrastructure in Vienna.

WHAT IS IT ABOUT?

Vehicle fleets are considered a promising market niche for the introduction of environmentally friendly electromobility. In Vienna, however, there are only a few examples showing the transition to electric vehicles (EVs) in public and company fleets.

In 2014, the city of Vienna adopted a comprehensive strategy framework for the so-called Smart City Vienna concept, which already addresses the electrification of vehicle fleets and the development of the necessary charging infrastructure. Despite economically favourable conditions, however, the spread of electric vehicles in this sector fell far short of political expectations.

This raises the question as to which factors are relevant for the spread of EVs in fleets. A better understanding of these factors should also provide starting points for how the electrification of vehicle fleets can be supported in the future.

Despite this low share of EVs in commercial and public vehicle fleets, a comprehensive network of manufacturers, infrastructure providers, consulting and financing companies as well as interest groups has been established in Vienna over the past five years. Some of them have specialised in the market segment of company fleets. These actors cover various aspects that are important for a functioning local EV market. However, the demand side is still very reluctant to respond to this offer.

BASIC DATA

Project title:	Verbreitung von Elektroflotten in der Smart City Wien
Project team:	Bettin, S., Ornetzeder, M., Pavlicek, A.
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KEY RESULTS

So far, it has been mainly those fleet operators who are active in the field of mobility or logistics and expect a competitive advantage from their commitment that have opted for EVs.

The study examined the introduction of EVs at Post AG, ÖAMTC (Austrian Automobile Association) and TÜV AUSTRIA (Austrian testing, inspection and certification service provider). Very early on, these operators had started to include EVs into their fleets and addressed the topic extensively. All three operators introduced electromobility gradually, and their fleets continue to feature a mix of internal combustion engines (ICE), EVs and hybrid vehicles.



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The postal service is a pioneer for electromobility.

Their experience with e-mobility so far is largely positive. All three of them stated that an important motivational factor was to prepare their own company for the increasing expansion of electromobility throughout society and to adapt or expand their own business areas from an early stage. Possible future changes in regulations (e.g. driving restrictions for ICE) were anticipated and influenced the decision.

The restructuring of fleets to EVs involves several aspects. It is not only about the acquisition of EVs, but also about the development of a new system that goes far beyond the corporate or operational context. The following topics are of particular relevance to the current situation in Vienna: (1) charging infrastructure, (2) costs, (3) internal aspects of the transition, (4) regulatory environment, (5) vehicle supply, and (6) gender – women are more willing to switch to EVs.

WHAT TO DO?

Company fleets are a key market for EVs. In Vienna, only a few operators have started to convert their fleets so far. However, with around 70,000 newly registered vehicles per year, the potential is enormous. There are several starting points to support the wider spread of electromobility in the corporate context:

- Interested fleet operators must be approached in a targeted manner. Fleets with predictable mobility requirements, or those with a green image or having close links to the supply side (e.g. network operators or energy service providers) show potential.
- The availability of suitable vehicles is currently a barrier to the transition to EVs. On the one hand, it is imperative to expand the range of vehicles. On the other hand, delivery times must be shortened and planning security for buyers must be increased.
- Companies that already use EVs report that these vehicles are competitive from a financial point of view. However, other companies lack this experience. Financial support for the development of in-house charging infrastructure would also promote the spread of EVs.

FURTHER READING

Ornetzeder, M.; Bettin, S.; Pavlicek, A. (2020) Elektroflotten in Wien. Eine Untersuchung über Herausforderungen und Chancen von E-Fahrzeugen in Fahrzeugflotten. ITA-Projektbericht Nr. 2020-01: Wien; im Auftrag der Magistratsabteilung 7. epub.oeaw.ac.at/0xc1aa5576_0x003b7cf6.pdf

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