E-MOBILITY STRATEGY

SHORT VERSION

Vienna ahead City of Vienna

Designing the future
Motorised traffic causes roughly 40 per cent of CO₂ emissions in Vienna.

**SHORT VERSION**

**THE E-MOBILITY STRATEGY OF THE CITY OF VIENNA 2015**

In view of population growth, urban mobility is turning into a great challenge for modern metropolises.

*Transport continues to be the area with the greatest need to catch up.*
Vienna is a city with a long-standing e-mobility tradition due to the fact that electricity powers a large portion of public transport (suburban rail, underground, trams and city buses). In motorised individual transport, there have been recent moves towards electric cars and motorcycles as well as e-bikes. There is also hope that, apart from electric-only cars, plug-in hybrid vehicles, which offer a significantly extended driving range, will become more widespread. Virtually all large automobile manufacturers have announced that electric cars or plug-in hybrids will be added to their product range in the years to come.
The future of urban mobility is turning into a great challenge for modern metropolises. It touches many areas, from urban planning to transport policy, from energy and environmental aspects to economic factors. As an environmentally friendly, socially and economically equitable urban transport system is made available, individual mobility needs have to be taken into consideration and new types of mobility must be combined with existing modes.

E-mobility is an opportunity of re-thinking mobility. It should trigger a more flexible approach to diversity in mobility and better interaction of different types of transport modes, i.e. multimodality.

E-MOBILITY IS THE KEY
The E-Mobility Strategy presented by the City of Vienna is a document covering urban e-mobility in all its aspects – from infrastructure to electric vehicles and users. It reflects the fundamental approach of the City of Vienna to e-mobility and identifies the goals and proposals for the projects of the next few years.

On the one hand, it is aligned to the frameworks and strategies of the European Union and the Austrian federal government, on the other hand, it is in sync with the strategies and objectives of the City of Vienna in the fields of energy, transport and urban planning.

Thus, the e-mobility strategy primarily focuses on measures for

- the electrification of vehicle fleets
- the installation of the required charging infrastructure.

The fundamental transport policy-related objectives of the City of Vienna, such as “the city of short distances”, a lower percentage of trips by motor vehicle, priority to eco-mobility and the reduction of noise and exhaust emissions, are top of the list. According to the STEP 2025 Urban Development Plan and the Urban Mobility Plan, 80% of all trips in Vienna are to be done by public transport, cycling or walking while the share of
E-Mobility is a chance to re-think mobility

Motorised individual traffic is to decline to 20%. It is expected that the total number of passenger cars in Vienna will decrease slightly in spite of the population growth.

However, it is not enough to merely electrify passenger-car traffic, transport must on the whole primarily be shifted to more city-compatible modes. In Vienna, city-friendly electric vehicles (tram, underground and suburban train) already account for roughly 30% of passenger transport; more than 30% of persons do not require external energy sources as they walk or ride bicycles.

The benefits of electric cars lie in reduced airborne pollutants and noise emissions as well as energy efficiency. However, they do not offer any benefits in terms of space – electric cars need the same amount of space for parking as conventional cars.

The increased use of electric cars does not do away with problems such as traffic jams, obstructions, street parking, obstacles or danger to pedestrians and cyclists.
A SOLUTION TO URBAN TRANSPORT PROBLEMS?

In densely built-up cities, priority to public transport is more important than more environmentally friendly motorised individual transport. E-mobility in individual transport should thus not be seen as a substitute for public transport but a target-oriented way of complementing it. However, there are no plans to grant electric vehicles exemptions from parking space management rules or give them permission to use public transport lanes (such as bus lanes), which is the case in many other European cities.

This is why the City of Vienna primarily addresses “frequent users” such as corporate fleets or taxi operators, as well as regional commercial transport (deliveries made by vans or small trucks) as it supports the introduction of e-mobility.
As the e-mobility strategy is part of the Urban Mobility Plan, actions are derived from this plan.

The principles set forth in the e-mobility strategy will apply until ca. 2025; revisions or amendments may be required earlier, depending on technological or organisational changes.
EXPANSION OF THE CHARGING INFRA-STRUCTURE

Part of the charging infrastructure expansion falls within the remit of the City of Vienna. By supporting expansion activities or adopting related legislation (e.g. the Vienna act governing indoor carparks, which already requires empty cable ducts to be provided for future charging stations in new carpark buildings), the City can pave the way for progress.

Preferably, charging stations should be installed in (semi-)public spaces such as on parking lots, at filling stations or in indoor carparks so that they do not use public space, which is limited in the city.

However, a few charging spaces in public areas make sense as they can help overcome the emotional barriers to the use of electric cars and are useful in strategic locations (e.g. mobility points, e-taxi ranks, e-car sharing locations). In this context, compatibility with the cityscape and the functions of public space must be taken into consideration.
Electric vehicles are the environmentally friendly and efficient alternative when it comes to transporting goods and passengers in the city when motorised individual traffic is the only option.

The great benefit of electric vehicles is that passengers and goods can be transported with zero emissions, low noise levels and more efficiently (due to a better performance coefficient) as well as more economically, thanks to independence from rising fossil fuel prices.

City logistics plays an important role with a view to resource-conserving mobility. In the Smart City Wien Framework Strategy, the City committed to cooperation with the logistics industry so as to optimise flows of goods and traffic with the help of e-mobility.
It is in the interest of the City of Vienna for energy suppliers to build on existing options (such as the "TANKE" system of Wien Energie) as they offer a one-stop shop for tailor-made business models and integrated solutions for private and business customers which are economically viable, suited for every-day use and user-friendly.

These solutions should include the entire range of services from check-up of the existing electricity supply infrastructure to the installation of charging stations and billing of energy.

The use of electric vehicles will become another alternative to cars with conventional propulsion systems in taxi operations in the near future. When calling a taxi, customers ever more frequently ask for an “environmentally friendly” vehicle, and they look for the companies offering these. For further information about the e-taxi project of the City of Vienna, please visit www.etaxi-wien.at.
Rail-bound public passenger transport is the most environmentally and city-friendly transport mode in the e-mobility context.

Wiener Linien, the Vienna transport operator, is testing several hybrid and electric buses in the inner-city area to see how the innovative and environmentally friendly propulsion systems do on a day-to-day basis. The test operations of these hybrid and electric buses are evaluated continuously and form the basis of the e-bus fleet extension.

Researchers in Vienna – both in the academic and the corporate worlds – are bringing ground-breaking innovations to e-mobility and corporations such as Siemens, Bombardier or Kapsch have established global competence centres in their Vienna locations. This is the know-how which the City can build on; it will support further development, with a special focus on enhanced cooperation between businesses and research institutions.
Since February 2015, the research project “e-delivery on demand” has been up and running as a true showpiece of “Transform+”. Tests are being run in the Liesing industrial estate to see how car pooling, delivery services or car rental can be organised as practically and efficiently as possible.

The aim is to develop and implement a needs-based and cost-effective model for the pooling of logistics using small commercial vehicles with electric drives. Apart from cost savings for users, the pooled use of electric vehicles offers a significant added benefit through reduced emissions.

Further mobility labs are planned for the future.

Potential users are often reluctant because they lack knowledge and information about e-mobility. Information campaigns are to raise awareness in this context.

The need for training and continuing education for new job profiles emerging in e-mobility will be assessed. The outcome will form the basis of action to be developed, co-designed and launched with cooperation partners in continuing education and training.
Concrete catalogues of measures will be prepared for these fields of action. The development of e-mobility and progress in the implementation of measures will be examined in an annual monitoring process.

Depending on developments in technology and marketing as well as on changes in the framework conditions, the E-Mobility Strategy will be adjusted and refined ("self-adjusting strategy").
The E-Mobility Strategy of the City of Vienna was adopted by the City Council on 23 September 2015 and may be downloaded from https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008435.pdf or collected free of charge from Wiener Planungswerkstatt during opening hours.

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