

Master plan for developing electric vehicle charging in Stockholm

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- Charging plan for EVs
- EV infrastructure
- Emission reduction

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 690699.

Location: Stockholm, Sweden

Organisations involved: [The City of Stockholm](#)

What is the solution?

Private citizens driving electric vehicles (EVs) mainly charge their vehicles overnight at or near their homes. In addition, many company cars have charging facilities on site. However, craftsmen, delivery and taxi business, as well as visitors to the city, also need access to daytime charging facilities; and not all citizens can charge at home.

For this measure, the city will develop a charging Master Plan to oversee and complement the infrastructural development for EV charging in order to ensure that it is effectively meeting user needs rather than just covering popular hotspots. The plan includes a publicly accessible dynamic map which shows existing as well as planned charging sites. The map will help private companies interested in providing public charging to find suitable locations where these can be established. It will also be a tangible tool to convince more businesses and private citizens to choose EVs. Private utility companies have already shown interest in providing on-street fast charging infrastructure.

How does it work?

Several working groups and high-level round tables were set up to develop Stockholm's EV charging strategy to ensure it will effectively meet the needs of all drivers, including business users. The charging strategy is based on several pillars:

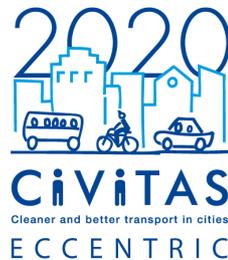
- Offering charging possibilities on city-owned parking facilities, both for short time use and with individual contracts for private car owners, renting their own parking lot for long-term from the city's parking company.
- Providing know-how and information about charging technology and installation requirements to private parking companies, shopping mall owners, private companies, housing companies and house owners.
- Provide spots for "charging streets", i.e. clusters of 4-10 chargers in a row on strategically chosen streets to partners willing to finance and operate on-street chargers. The city does not operate on-street chargers.

With the aim to provide 0.1 public charging units per EV, and the number of EVs estimated at 15,000 by the year 2020 it would mean the city needs in total 1,500 public charging units by 2020. The goal is to put 500 of these on public streets at about 50 locations with 10 charging opportunities per site.

A study resulted in many possible locations for on-street charging, the results are indicated on a publicly accessible dynamic map which shows existing as well as planned charging sites. Parties interested in setting up charging infrastructure can consult this map. The market parties can apply to get a five-year contract for one or several of these spots to set up and operate charging facilities there. The contract is awarded following a set of requirements that have been pre-defined. If the awarded parties do not manage to set up the charging infrastructure within six months the contract is cancelled and the spots can be applied for by another market party. In 2017 a little over 100 charging points were installed in 15 streets. The work is ongoing and more charging streets are to come. The ambition is to grow with approx 150 units/year during the period 2018-2020.

Expected results

The long-term effect of this measure is an increase in private and business EVs thanks to good accessibility of charging infrastructure. This will result in a decrease of fossil fuel driven cars with the associated effect of less noise pollution, more efficient use of energy and less emissions. It will also make new areas available for residential use in city planning.



THE CIVITAS INITIATIVE
IS CO-FINANCED BY THE
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Business model

This measure receives €113,000 from CIVITAS ECCENTRIC.

Find out more

Information about charging equipment and how to install in garages and parking grounds: fixaladdplats.se

Map over available spots for charging streets in Stockholm: <http://194.71.132.77/utpekadeladdplatserkartan/>

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Living lab area in Stockholm: <https://civitas.eu/eccentric/stockholm>