



Electrical and conventional car- and bike- sharing

Smart solution 12
Smart mobility solutions

Measured impacts

73%
reduction in CO2 emissions

8
car- and bike-sharing stations operated

Up to 40
car- and bike-sharing stations planned



Cologne

Technical partners

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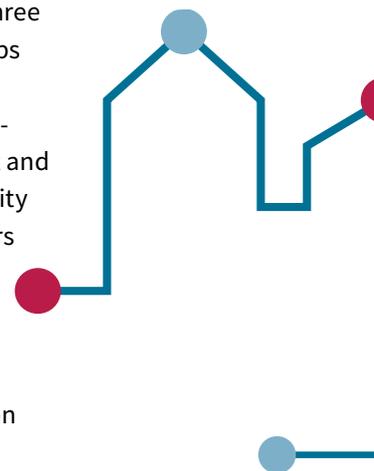
What is it?

Electric and conventional car- and bike-sharing services were integrated into mobility stations (Factsheet 42) using charging infrastructure at public charging locations. This enables the effective usage of electric vehicles in different locations around an urban area.

What did GrowSmarter do?

This measure began in 2016 and was completed in late 2017 in Cologne with eight car-sharing locations, seven of which including e-charging. Three locations also included e-bikes. Key steps included the identification of suitable locations for car-sharing as well as bike-sharing locations and the development and formalisation of agreements with the City administration and private stakeholders to ensure installation of the facilities.

The car-sharing company Cambio, the public transportation company KVB and the Cologne city administration signed contracts to enable the use of



parking spaces for e-car-sharing as well as e-bike-sharing services.

Users of public transportation has the opportunity to use the car- and bikesharing services with their public transportation ticket (Multiticket or eTicket), and the solution thus reduces the need for private car ownership.

Lessons learnt

Identifying sites at which services could be located was time consuming. In terms of operation, the optimal sites for mobility stations are not always ideal for car-sharing. Car-sharing services must be located in optimal locations to ensure financial viability of operations and significant shifts in citizen behaviour (with resultant environmental benefits). This is best achieved through long-term planning and cooperation.

City administrations could explore ways to streamline processes, which currently depend on engagement of actors across a range of municipal departments to, for example, grant permits for parking spaces. Mobility stations can serve as “shop windows” for a range of services and can therefore be useful in marketing. These should be supported with integrated ticketing platforms to ensure fast transactions and enable public transport tickets to be “topped up” with other services.

Upscaling & replication potential

Deciding which locations should be chosen for the car-sharing locations is key for the implementation of an otherwise technically feasible measure with high potential to replicate. Legislation that promotes such services and facilitates regulation for the rented parking spaces should be in place before implementing the measure.



Location is key! Cities must build partnerships for establishing dedicated infrastructure for electric vehicles. Special agreements for data collection are needed.

How did the measure work?

Technical feasibility



The measure is technically feasible without any major issues faced. Issues related to land allocation and legislator gaps are important to be considered and prevented.

Economic feasibility



Challenging to achieve, since the location of the stations was not optimal. Moreover, the electric vehicles cost more, and acceptance issues may have led to reduced utilization rates.

Replication potential



Car- and bike sharing stations can be implemented everywhere. Particularly suitable are residential and mixed areas with a good local infrastructure and a good access to public transport as well as a good network of cycle paths.