

Parking in the context of Mobility hubs

In the city of Cologne, three mobility stations offering parking spaces and multiple transport alternatives at one location have been established in the context of the Growth Smarter project¹. The mobility stations (Mobility Hubs) vary in both size and type of location, and the transportation options offered include public transport, electric car-sharing, conventional car-sharing, timesharing of private and (during the project) public parking spaces, as well as conventional bike-sharing and e-bike-sharing.

Objectives

Mobility Hubs solutions have been designed to improve air quality and lower traffic and carbon emissions by making it easier for local residents to transition to more energy/emission-efficient transport alternatives.

Description

The city of Cologne has established three mobility hubs for up to 20 EV and 50 pedelecs including a larger number of electrical pedelecs, which are available both as standard bikes or cargo bikes.

Additionally, in such Mobility Hubs public parking spaces can be reserved beforehand by car-drivers. Parking space are available through dynamic pricing schemes, depending on traffic volumes in order to reduce traffic and CO₂-emissions.

The objectives of the measure were to provide:

- A) Reducing traffic volumes
- B) Transition to more energy/emission-efficient transport alternatives
- C) Transition to renewable fuels
- D) Improved traffic flows

The targets for the mobile stations were defined as follows:

- To reduce carbon emissions and improve air quality
- To favour sharing mobility, diminishing the need for private car or bike ownership

The 3 Mobile hubs have been located in Bahnhof Mülheim, Charles-De-Gaulle-Platz and Stegerwaldsiedlung. In order to make the Mobility Hubs visible, they have been equipped with information signs (stelae), showing type of services and conditions..

¹ <https://grow-smarter.eu/lighthouse-cities/stockholm/>

Impact & outcomes

The pilot results showed in the following table indicate that the reduction of pollutant emissions nearby the Mobility Hubs areas is on average significantly higher than in the city as a whole.

Theme/Topic	Location - 800 m Radius			District		Köln
	Bahnhof Mülheim	Charles-de-Gaulles-Platz	Stegerwald-siedlung	1/Innenstadt	9/Mülheim	
Start	01.04.2016	01.08.2016	01.08.2017			
Emission of Hazards						
Reduction 2014-2018:						
kg	32.357 kg	7.459 kg	9.414 kg	174.880 kg	201.730 kg	1.666.660 kg
Procent:	20,70%	14,23%	14,99%	14,40%	13,59%	14,61%
g/ inhabitants	2.106 g	1.827 g	1.639 g	1.613 g	1.833 g	2.189g

The table clearly shows that Bahnhof Mülheim Mobility Hub nearby the railway station has the largest CO2 reduction. At this location, indeed, the subway station as well as several bus lines in addition to the station itself have determined the highest impacts.

Concerning the parking slots, the Bahnhof Mülheim Mobility Hub is located nearby residential buildings, and a shopping street is also within walking distance.

Public transport facilities are available at Charles-de-Gaulle-Platz as well, but this location turned out to be a rather bad location, because the accessibility to the train station is not good.

Barriers / constraints and how they have been overcome

The city administration had to obtain a political decision for the permits to be granted or for the contracts to be concluded. A total of 41 organizational units had to be involved in the internal administrative participation procedure, which considerably delayed implementation

The City of Cologne had a fundamental interest in keeping all pollutant emissions as low as possible or, where possible, to reduce them, also against the background of public welfare. Nevertheless, the City of Cologne cannot act as the unique operator of the mobile station and thus a complex coordination activity involving several actors was undertaken.

Furthermore, during the implementation phase, it soon became clear that there were regulative barriers. For example, legal requirements, preventing the Mobility Hubs from being built on publicly dedicated areas.

Due to different regulative approaches (contractual involvement of the participating industrial partners), the economic risks (risk and profit) lied exclusively with the providers, not with the City of Cologne.

Good Practise

Time for planning and implementation

Three years for planning and implementation 2016-2019

Rough costs and resources

The Mobility hubs received a Smart City and Community EU funding of €25mil in total, of which about 1/5 to the city of Cologne.

Further information available at / from

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