

„Introducing true electric mobility in German pilot cities for a sustainable future”

OHM – Projects (ISD)

International Sustainable Development

in Cooperation with PRIMOVE Bombardier GmbH



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Starting point

In Germany the road transport accounts for over 70% of the total transport emissions. CO2 emissions resulting from the transport sector are projected to rise further if no counteraction is taken. CO2 emissions resulting from the transport sector lead to a high demand for climate-friendly means of urban transport.

The traffic density and environmental pollution is increasing in Germany. Due to the “chaos” on German roads, the demand to find practical and lasting solutions is high. Which will be the right strategy for the next decades and ***how can we implement the solutions?***

To be able to offer climate-friendly solutions for the transport sector, many research has been undertaken.

Institutional setting

Therefore, citizens' groups and political discussions started in Germany. A better traffic control and urban development could be reached by an additional, ***new traffic system and other state measures***. Moreover all actors consisted to find the best solutions for a sustainable future.

One big problem that has to be solved is the immediate pollutant output resulting from traffic in densely populated areas and cities.



Approach

However, beside the political readiness for efficient solutions in Germany, the decisions on the local, regional as well as international level are to become an important step to provide for an ***ecological and sustainable development of the transport sector***.

Outputs

In developing new technologies for sustainable and high-standard mass-transportation in Germany a great alternative to individual transportation has been established. In German cities, the traffic produce ***high pollutant outputs. Worldwide, 3 million people die as a result of bad air!***

These measures lead to the clear improvement of the quality of life and can be optimised by a removal of ecological infrastructure systems like ***E-Mobility Bus and Tram Induction – Systems***, underground induction coach systems, electric mobility as electrically moving cars, motorbikes and bicycles.



Pilot projects were introduced for mass traffic ***free of exhaust gas in Berlin, Braunschweig, Augsburg and Mannheim with the new induction technology for E-Mobility.***

Lessons

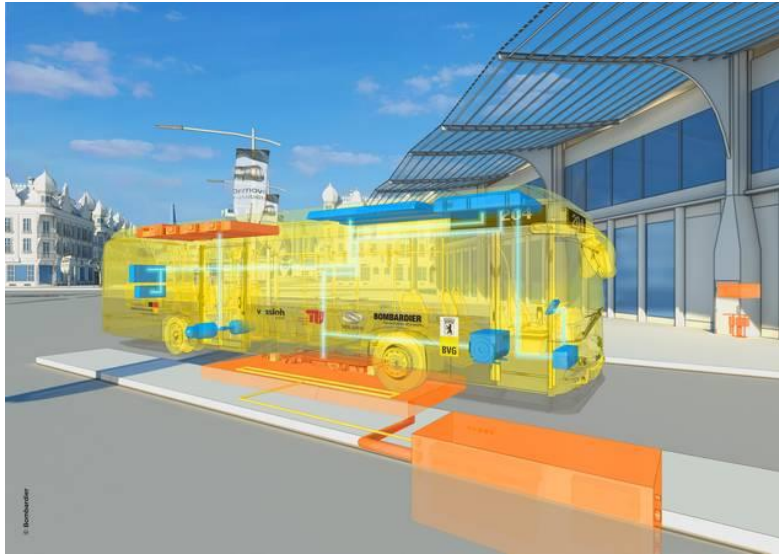
A result-open discussion between political decision-makers, town planners, citizens, academia and science created the foundation for extensive solution attempts and achieved the greatest possible consensus between the different groups. In German cities, the highly respected, very popular and efficient mass transportation that helps improving the traffic situation in urban areas and ***other ecological infrastructure systems must be introduced for a sustainable future.***

Transfer

First the local conditions are to be analysed and developed within the scope of an open discourse between all partners and in respect of demographic developments.

A challenge that must be concerned on time!!!

Climate-Friendly Technologies in the Transport Sector: Projects from German Cities with Induction Systems in Berlin a.o.



Bus line 63	9 km
Journey time	34 minutes
Journey time in %	85 %
Headway	20 minutes (weekday) 30 minutes (weekend)
Charging stations	4
Charging time	approx. 2 minutes
End stops	2
Charging time	approx. 5 minutes
Depot	1
Charging time	up to 15 minutes
Bus stops (total)	22 (roundtrip)
Number of e-buses	2



Bus line M10	12 km
Journey time	39 minutes
Journey time in %	80 %
Headway	10 minutes (weekday) 15 minutes (weekend)
Charging stations	2
Charging time	30 seconds
End stops	2
Charging time	up to 11 minutes
Depot	1
Charging time	up to 15 minutes
Bus stops (total)	26
Number of e-buses	5
12-metre	1
18-metre	4



Bus line 204	6.1 km
Journey time	24 minutes
Journey time in %	80 %
Headway	20 minutes
End stops	2
Charging time	4 - 7 minutes
Depot	1
Charging time	7 - 17 minutes
Bus stops (total)	18
Number of e-buses	4

BERLIN - GERMANY - PRIMOVE E-BUS
World`s first capital to introduce wireless charging



System to turn a complete bus line into an eco-friendly route using e-buses with the wireless PRIMOVE charging system and the compact PRIMOVE battery system.

Berlin`s route 204

Since August 2015, passengers on the city centre bus line 204 are able to enjoy a quiet and zero-emission ride through Berlin. The German Federal Ministry of Transport and Digital Infrastructure is supporting the project in the context of the “International Showcase Programme for E-mobility Berlin Brandenburg”.

Innovative PRIMOVE system charges the Berlin buses’ batteries at 200 kW in the very few minutes of dwell time spent at the terminal station. This allows the e-buses to serve a round trip along the 6.1 km long bus line without additional stops or battery changing for an entire day. A third charging station for overnight charging is installed at the bus depot of the local operator Berliner Verkehrsbetrieb (BVG).

Please come and see Berlin`s route 204!

Many thanks for your attention!