



NoAE 5th Project Day Green Cities Kick-off Workshop 18 April in Düsseldorf

Thomas Meißner eMO Berlin Agency for Electromobility c/o TSB Innovations Agency Berlin – Transport and Mobility

18 April 2012



Pilot Region for Electric Mobility, financed by the Economic Stimulation package 2

- Berlin/Potsdam is selected as one of eight "Pilot Regions Electric Mobility" by the Federal Ministry of Transport, mid 2009 to end 2011
- 130 mill. € programme to support introduction and service of electric vehicles for passenger and freight transport as well as installation of re-charging infrastructure
- Development of Electric Mobility as a subject of mobility
 - new integrated mobility services
 - new business models for transport operators passenger/freight
 - contribution to strategic objectives of the urban policies, e.g. Urban Development Plan, Energy Efficiency and Climate Protection Programmes
- Establishment of a long-term basis for E-mobility in the regions





- In total 14 demonstration projects running with support from federal ministries such as Pilot Region programme involving 5 projects ranging from Car Sharing to retail delivery Total financial volume of ongoing projects more than 100 mill. €
- Basis infrastructure with currently approximately 110 public charging stations (Vattenfall, RWE)
- Integration into the roadmaps of transport and environment policy
- Interaction with urban traffic management (new: Berlin Traffic Information Center) will be established step by step









Pilot Region Berlin-Potsdam Project example: BeMobility

Objectives

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- Operation of an e-car sharing fleet for use inside and outside the Berlin S-Bahn circle
- Integration of the e-fleet in Public Transport Schemes
- Analysis of user behaviour and user acceptance
- Evaluation of different types of fleet operation and new mobility products

Operation of a public e-vehicles fleet

- Set-up in 3 phases (laboratory, test, pilot) from Dec 2009 to Oct.
 2011
- 45 cars (Toyota Prius Plug-in Hybrid, Smart ED, BMW Mini E, Citroen C1 elec., Citroen C-Zero/Peugeot iOn, Mitsubishi i-MiEV, Mercedes-Benz Vito E-Cell)
- 50 e-bikes (pedelecs)

Project coordinator: Deutsche Bahn (German Railway intermodals service)







Demonstration of electric vehicles for efficient and environmentally friendly goods delivery by

- new and innovative concepts
- new user advantages in laboratory areas
 - dedicated loading areas for delivery vehicles
 - extended and area-related time slots for delivery

Field tests

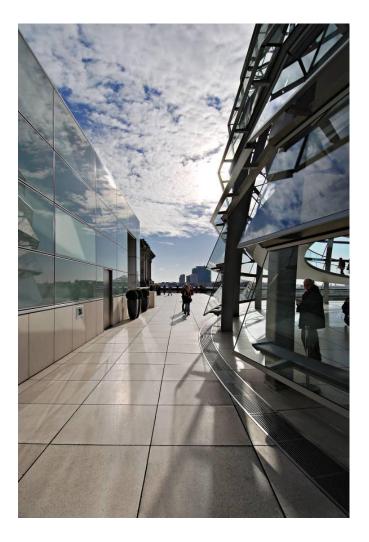
- Fashion logistics (city logistics) operated by Meyer&Meyer
- Courier, express and parcel services (CEP) operated by Deutsche Post DHL



Operators: Deutsche Post DHL, Meyer&Meyer Transport Services







Berlin-Brandenburg strives for the leading Centre of Electric Mobility in Europe – along the value added chain:

Research - Development - Manufacturing, Education - Demonstration

To achieve that, Berlin-Brandenburg shall

- establish an international show case for Electric Mobility
- build-up areas for demonstration, research and production
- generate attractive schemes for education and qualification
- attracts investors and talent on international scale
- "Berlin is going electric" Action plan for Electric Mobility 2020 – released in March 2011

For the stringent coordination of the coming activities and projects in the Berlin-Brandenburg region, the eMO has been established to

- support the municipality to organise large scale demonstration activities
- promote innovation in companies and scientific institutions
- create and expand education and training programmes
- attract new stakeholders and create opportunities for expansion
- facilitate dissemination of and access to information, improve communications

- Sept. 2010: Decision of the Berlin Senat to establish eMO
- Nov. 2010: Launch of eMo, Agreement of cooperation between Berlin Partner (in charge) and TSB, G. Lobenberg, Director of eMO since Jan. 2011

Action Plan • Project portfolio • Masterplan • "show case" application





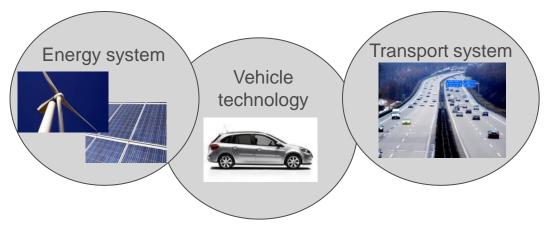


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Mandatory features of a show case for Electric Mobility

- (1) Achieving the critical mass with regard to number and density of vehicles, infrastructure, user patterns etc.
- (2) Following a systematic and integrative approach <u>Energy system</u> – <u>vehicle technology</u> – <u>transport system</u>

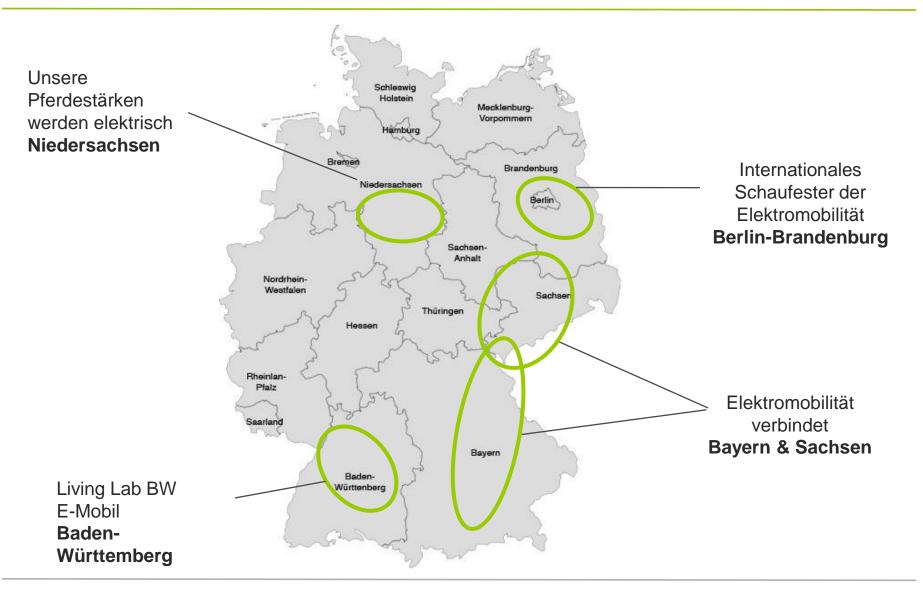


- Crucial 3 years activity to support the market penetration; projects might start 2nd half of 2012
- Joint programme involving four federal ministries (transport, economy/technology, research, education, environment)
- 180 mill. € public funding earmarked for 4 show cases in Germany

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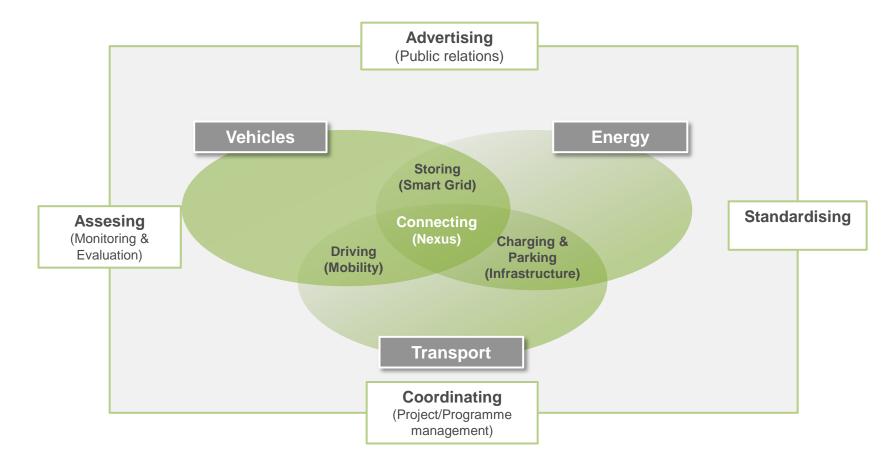
9 Four selected show cases – awarded 3 April 2012





Portfolio of the Berlin-Brandenburg approach to achieve show case status

- Application-oriented Priorities
- horizontal Functions



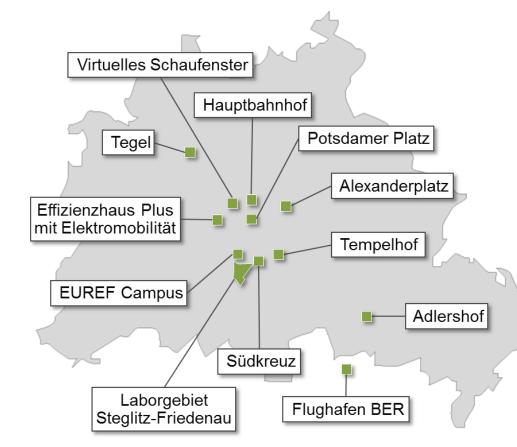


eM⊍

- 9 of 10 worldwide leading automotive manufactures contribute to the show case
- 257 partner, thereof some 200 private companies
- 35 "core" projects flanked by 39 supplemented and associated projects
- 165 mill. € budget, thereof 75 mill. € from the industry, and up to 25 mill. € from the Berlin Government; max. 50 mill € federal funding can be achieved
- 5.200 electric vehicles, thereof 4.000 passenger cars, busses and commercial vehicles
- 3.700 charging devices, thereof 1.400 publicly accessible

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Electric Mobility in Berlin-Brandenburg – Sites and Functions



- Tempelhof: showcase and centre for practical experiences (s. next slide)
- EUREF (European Energy Forum) Schöneberg:

Technical laboratory and test centre for e-mobility



 Tegel: RTD and production of new Urban Technologies such as sustainable mobility with the core "emobility"







- The introduction of Electric Mobility is a promising option towards sustainable mobility on mid to long-term basis with global and local implications
- Even if this presentation focuses on battery powered vehicles: Electric Mobility is not restricted to a certain technology – the decisive factor is given by the 100 % use of renewable energy sources
- Suitability for daily use has been proven, but major issues are still to be resolved
 Electric Mobility is not yet a "fast-selling item"
- Berlin-Brandenburg have the ambition towards a leading region for Electric Mobility on European level
- Lessons learned with demo projects of the recent 3 years and a well-coordinated approach should pave the way towards a big shop window for Electric Mobility
- Next important step to foster integration and to support implementation: The complex international show case for Electric Mobility Berlin-Brandenburg

