

5E - National Scale Electric Drive: Experiences Across Europe

1 million e-cars by 2020 in Germany

Presenter: Detlef Schumann
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- **BridgingIT GmbH** is an IT consulting company founded in early 2008
- Nearly 500 consultants located in Mannheim, Frankfurt, Berlin Stuttgart, Karlsruhe and Cologne an Switzerland. This regional structure means that consultants are closer to customers
- Financially independent and economically successful
- Your consulting partner without vendor or sales dependency
- Attractive cost-performance ratio by low overheads, extraordinary employee self-services, and consistent outsourcing of internal support processes
- A focus on quality and sustainability is achieved by a strong participation of the employees on the company's profit
- Well-developed application and technology partner network

nearby – independent – sustainable



1. The showcase program

2. German national platform for electric mobility (NPE)

3. Three phase development approach for electro mobility

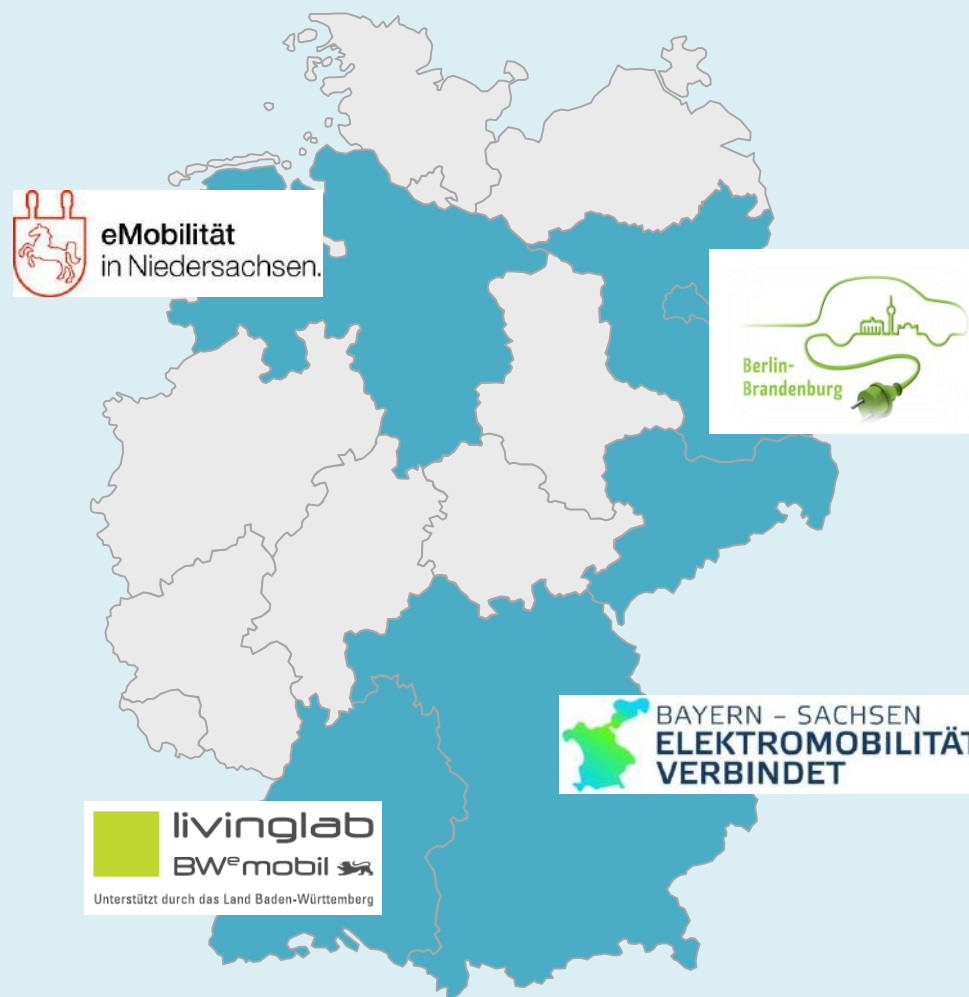
4. The current situation

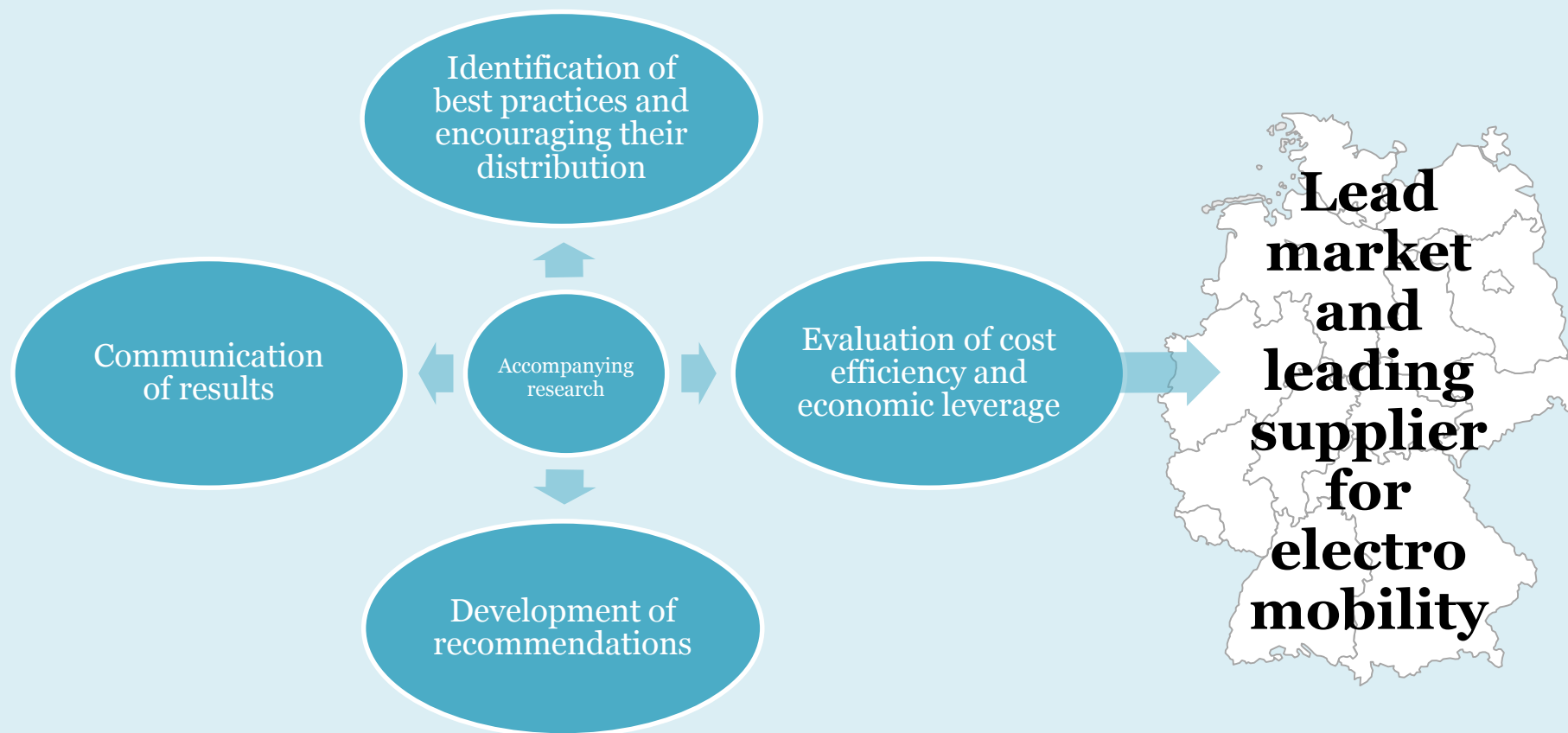
5. Conclusion and outlook

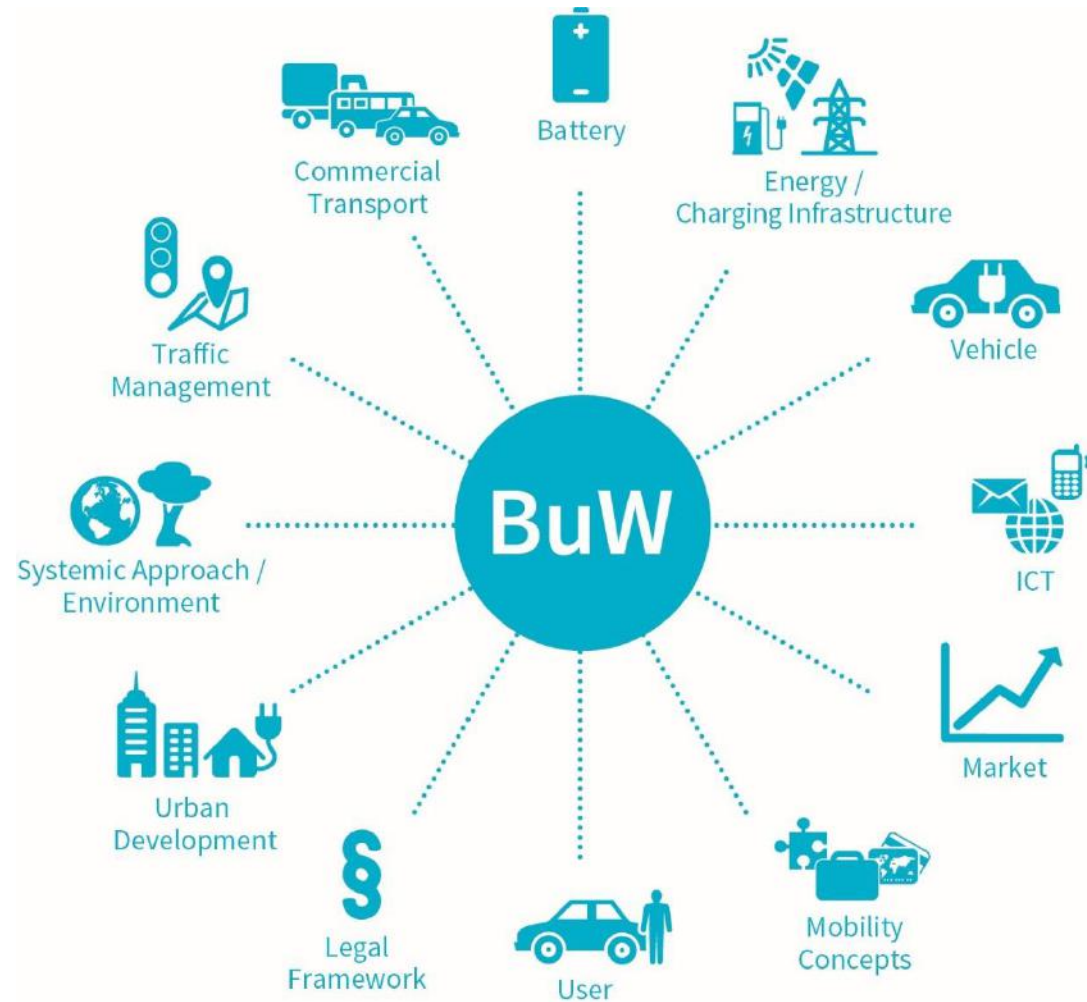
1. The showcase program



- 4 showcases in 6 German states
- 145 projects (90 federally sponsored, 40 state sponsored, 15 associated federally sponsored)
- Duration 2012 – 2016
- Vehicles:
 - 2.500 cars (90% BEV),
 - 1.000 pedelecs,
 - 8 lightweight vehicles
 - 20 motorcycles
 - 65 busses
 - 71 commercial vehicles
 - 15 municipal vehicles
- 2.100 charging stations



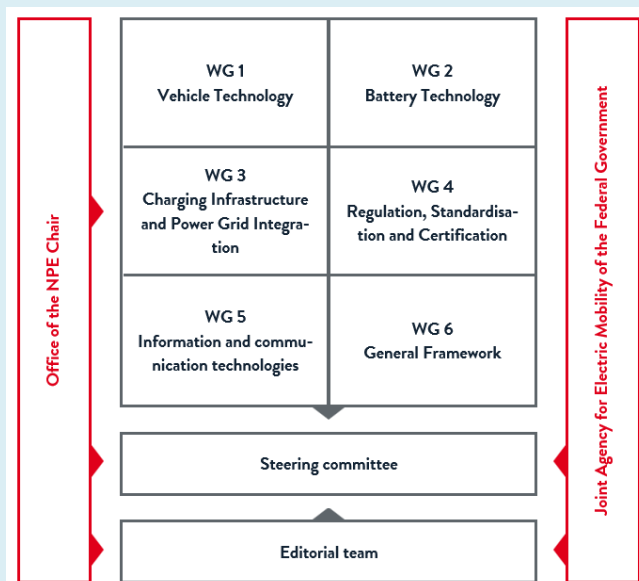




2. German national platform for electric mobility (NPE)



The German National Platform for Electric Mobility (NPE) orchestrates the development of electric mobility in Germany. The advisory body of the Federal Government brings together 150 representatives from industry, science, politics, trade unions and trade associations for strategic dialogue. Collectively, they investigate the economic, social and environmental potential of electric mobility and recommend actions for politicians and business.



„Working together for electric mobility“

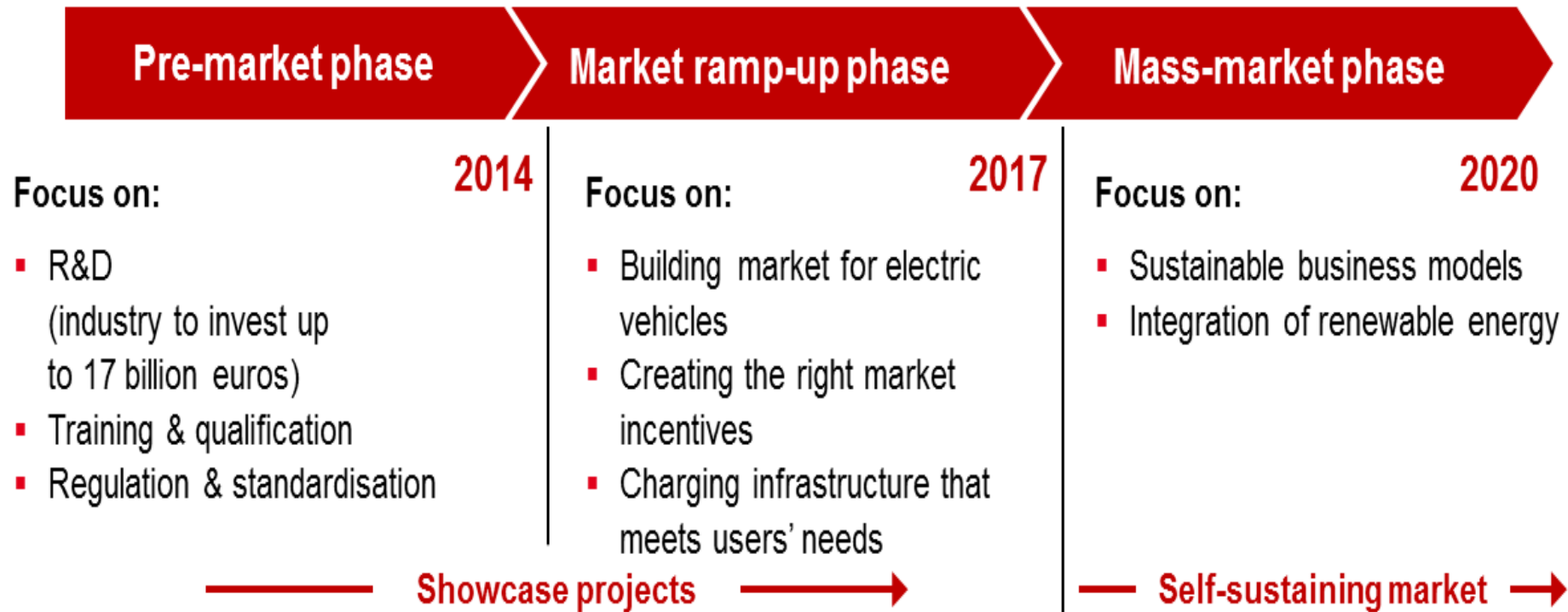


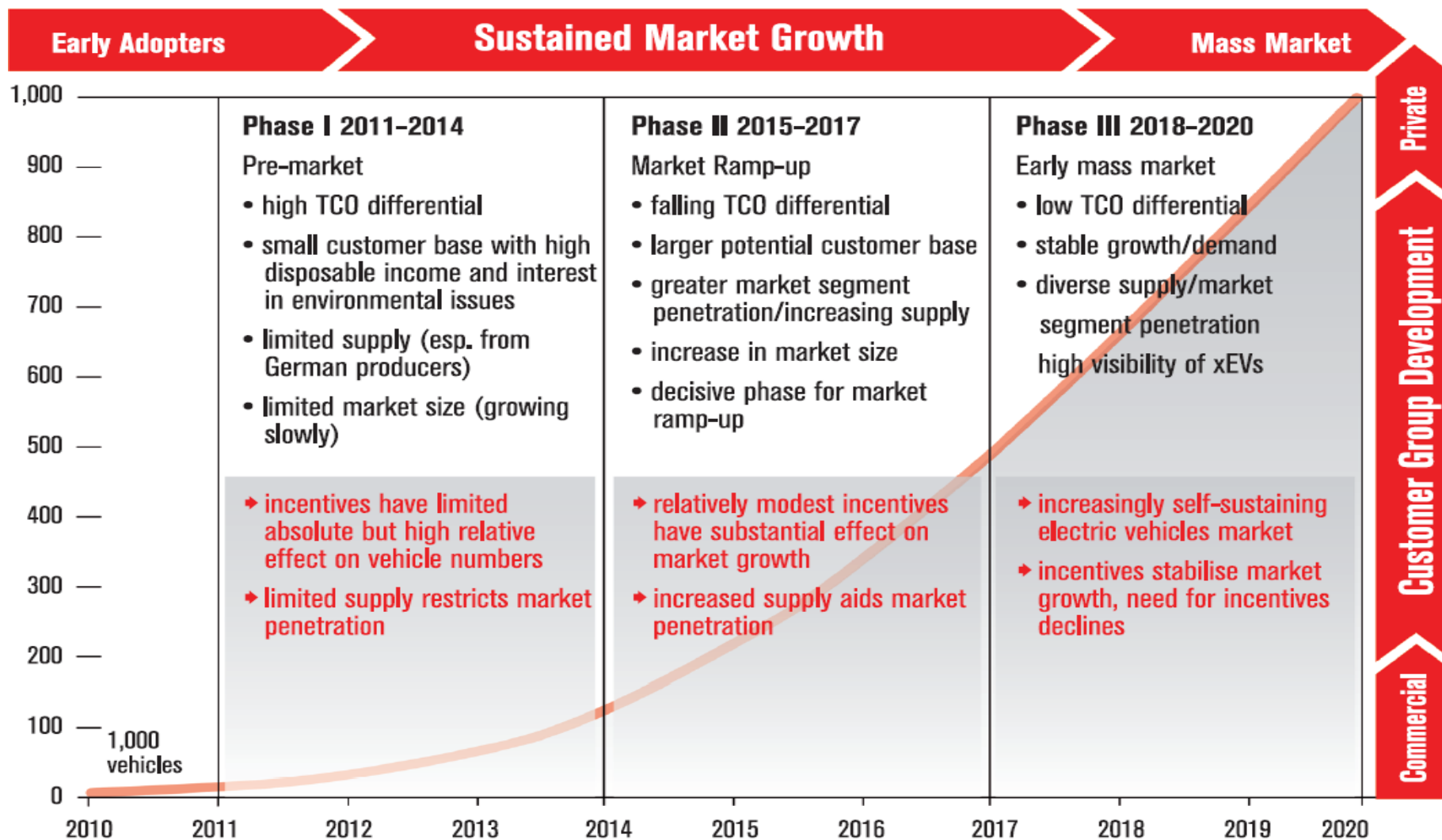
Prof. Dr. Henning Kagermann
President of acatech
National Academy of Science and Engineering, Chair of the NPE

3. Three phase development approach for electro mobility



The major goal of the NPE could be summarized under the slogan
“1 million e-cars by 2020”

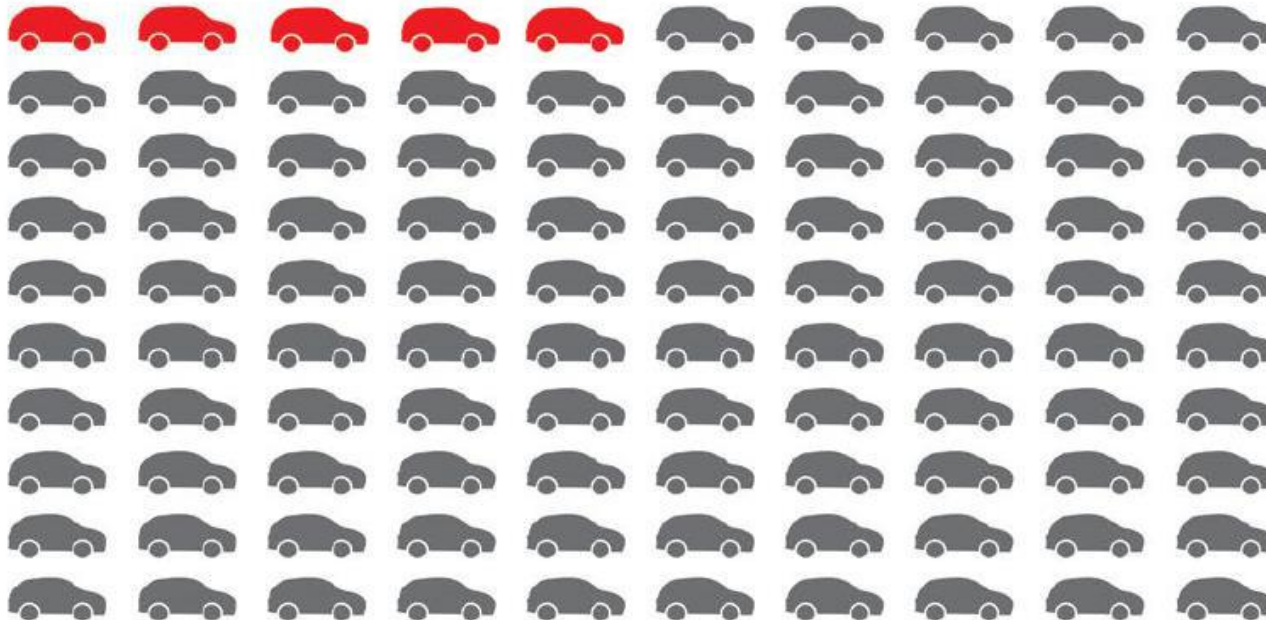




4. The current situation



Number of electric vehicles by end of 2016 ?



Top 5 issues out of showcase project results:

1. Barrier-Free access to load infrastructure (no Contracts and ad-hoc payment)
2. Tailored public infrastructure sponsored by the government
3. More public transport by electrical busses
4. Bigger selection of electrical cars
5. (Deregulation of) Legal framework for building private infrastructure

5. Conclusion and outlook



Car Manufacturing Industry

Tier 1 OEM

Utilities

Mobile Service Provider

(Smart) Cities

The plan will work in a different way than expected

We see a **transformation rather than a disruptive development** within a global environment. The final winners are not named now and everyone is keen on business

The NPE didn't have the tier 1 suppliers in focus when they start their approach but due to this we see today an **independent strong development ready for the market**

Utilities actually do not invest in charging infrastructure or smart services. They re-focused on the delivery of energy by using the old patterns of regulation.

As long as we do not have significant number of cars on the road **we will not see creative and new mobility services**. We have just a few developments

Environmental arguments are a very strong driver to use electric drive trains in cities. Commercial traffic and public transport is in focus

Germany's prosperity is heavily depending on the automotive industry and one of the major goals for an organization like NPE is to foster change rather than to keep old industry.

1 million e-cars by 2020 in Germany

Whether this happens by 2020 or some years later doesn't matter. We need to be honest to our self and accept that things going to change on a global perspective – Than we got a good chance!

Thank you for your attention!

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