E-Mobility: Chances and Threats

Actual Situation of E-Mobility in Europe

• If combined with electricity from renewable sources E-Mobility is the ideal solution to solve the problem of fuel consumption and air pollution

• Most suitable is the application in cities

• Internet and communication technologies allow intermodality of transport systems and help to compensate problems due to limited range

• Visible charging infrastructure reduces “range anxiety”

• A broader range of different models designed from the beginning as e-cars will be soon available in the market

… but market share is still very low with big differences between European countries
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E-Mobility Index

The index is a combination of different factors e.g. demand, frame-work conditions in the country and car models offered.

Markets outside of Europe develop faster.
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The TCO-Gap

- Public policy and boundary conditions are still more favorable for conventional cars
- The predicted steep rise in fuel prices has not occurred yet
- Modern drive trains with combustion engines have still potential for further reduction of emissions and fuel consumption
- Prices of electric cars are significantly higher than for conventional cars primarily due to battery prices and low production volumes

But for cars in fleets with high mileage but limited distance per trip E-cars with the possibility of intermediate charging begin to be economical

The visible success story for e-drives are

E-Bikes
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What needs to be done:

• R&D programs are necessary and are running, but industry needs economies of scale to offer competitive prices for electric vehicles

• Governments should support the demand by using political instruments to create better conditions for e-cars, e.g.
  + reduced taxes, favorable electricity prices, infrastructure, traffic/parking privileges
  + adopt purchasing rules/programmes of public authorities

  But no discrimination of other CO2-saving solutions

With the so-called “Schaufensterprogramm” the “National Platform Electromobility” in Germany has started to make E-mobility visible and demonstrate its use in every day life. The goal of 1 mio e-cars until 2020 on German streets remains confirmed.