

The Future Fuel for Mobility – Will Electric Vehicles Lead the Transition?

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Abstract

Despite year-long efforts in emission reduction and politics commitment to targets, with e.g. the Paris climate agreement, the traffic sector is clearly lacking behind. The energy transition rather seems a question of “when”. In the traffic transition discussion on the opposite, the debate is still a lot more about “how”. Vast opportunities meet complex challenges. The high number and wide base of influence factors make strategic roadmaps less obvious.

A highly complex fluent market development in multiple disciplines challenges established players. Agile software development and new business models chase hardware development with its industrial cycles and requirements. The market pull mechanisms are not easy to predict and often not quick enough to answer. Disruptive forces and end customer behavior are playing a decisive role, sometimes leading to fast adoption of innovation. In contrast to that, often regulatory bodies cannot keep up with speed in providing planning reliability for risky investments.

After the Diesel scandal has shattered trust in industry and conventional powertrain technology, electric mobility has been pushed forward. However, whether this concept will prevail is difficult to predict. With every trend seeing counter-trends, just now also combustion engine concepts are raising interest again and recently neglected discussions about natural gas, syngas and synfuels get stimulated. Will the automotive development determine the future mobility mix? Does infrastructure limit the deployment of concepts, such as electric mobility? What will the powertrain portfolio look like in the future? Will there be a market for fuel cell technology? Which role will conventional fuels play in the future?

Outline

- Future automotive powertrain concepts, technology roadmaps and market forecasts
- Analysis of their ecosystems in view of infrastructure integration requirements and intertwined value chains
- Discussion of challenges and concepts, opportunities of sector coupling for future mobility solutions

The presentation will combine technology trend with market development analysis and provide a holistic view on this exciting field of interest - an insider from strategic development of electromobility and future technologies reports.