

43/2019

22 October 2019

On the eMove360 °

## **Electromobility: Germany is not ready**

- **VDE Renewables brings the automotive industry together at one table with the aim of developing concrete proposals for "sustainable electric cars made in Germany" as an international benchmark in order to secure jobs.**
- **To this end, the industry is calling for quality marks for the entire value chain, starting with the extraction of raw materials in compliance with humane working conditions, the safeguarding of sustainable and ecologically sound processing and the recycling and reuse of batteries.**

(Munich/Alzenau/Frankfurt, 22.10.2019) Sales forecasts for electric cars worldwide are trending upwards. European carmakers and suppliers are seriously reorienting themselves so that they can continue to play a leading role in the race to the top in the electric mobility sector. "In order for the European automobile industry to maintain its leading position, decisive steps are now necessary: There is a lack of implementation of practice-oriented regulatory framework conditions for e-mobility in order to achieve the targeted growth figures," explains Ansgar Hinz, CEO of VDE. Towards this goal, in a Roundtable Workshop before the eMove360° trade fair in Munich, VDE Renewables brought together experts and stakeholders from the manufacturing, supply chain and finance industries, the insurance industry and industry associations to discuss market entry barriers and solutions such as quality criteria for the sustainable production and use of electric vehicles and their batteries. It quickly became clear that neither Germany nor Europe is sufficiently prepared for the electric future. However, the experts see great opportunities for the success of the automotive industry in the production of sustainable electric cars. "We want to set benchmarks with sustainable e-mobility that is 'made in Germany'. While other countries may currently be ahead in electric cars sales, our goal is to be the first to bring electric cars onto the roads with a green footprint," says Hinz on behalf of the roundtable participants.

## **The need for a quality seal for sustainable and responsible production**

The experts called for the establishment of important criteria to ensure the quality, safety and sustainability of energy storage systems throughout the entire value chain. At least for the next two decades, lithium-ion battery technology will dominate global markets. “If we can demonstrate that we act in an ecologically responsible manner, we can convince the buyers. This starts with the environmentally friendly extraction of important raw materials such as cobalt and lithium. Today, cobalt is largely extracted exploitatively, often under unacceptable working conditions and sometimes using child labor,” explains Hinz.

It is important to find a balance in costs. A sustainable and responsibly manufactured car should not cost more than a conventional one. The industry proposed the introduction of a statutory quality seal, issued by an independent party - in the course of which VDE was named as a neutral, scientific and non-profit technology organization - to ensure compliance with the defined criteria throughout the entire value chain. In addition, the participants called on experts, especially those in German research institutes, to continue to work with high priority on supplementing or on replacing the use of cobalt.

## **Repowering and ecologically sustainable recycling processes**

Another core topic was the further use of batteries in “Second Life” applications and the development of ecologically and economically groundbreaking recycling processes. Even at the end of the value chain of batteries and e-mobility there is still a lot of work to do. “In Germany, there are excellent ideas and initial pilot projects for effective battery diagnostics. This allows very quick and qualified decisions to be made - for example, at the end of operation in an electric car - as to whether the batteries can be reused and for which application, or if they need to be disposed of. The first approaches for the proper recycling of batteries using renewable energies are already in place: another milestone on the way to a sustainable e-car ‘made in Germany,’” stated Burkhard Holder, Managing Director of VDE Renewables.

The Roundtable experts complain that in countries where electric cars have been on the road for years, discarded batteries with high energy consumption are not disposed of and recycled properly. Apart from the high costs of the disposal process for manufacturers and consumers, this does not fit in with the goals of environmental and climate protection and the associated energy transformation. They therefore call on all market participants and

politicians to consistently further develop and implement the sustainability of batteries. Through the increased use of batteries in Second Life and with a corresponding recycling strategy, resources can be conserved to a considerable extent. However, this requires the development of standards.

## **A critical topic and market barrier: Charging infrastructure**

The current numbers of electric cars on Germany's roads are disappointing. The experts admit that one reason is the lack of development of a sufficient portfolio of electric vehicle models, as well as the limited ranges of these vehicles. However, the decisive obstacle is the far too small number of charging stations and the complexity of the charging ecosystem, with multiple charging networks and their proprietary billing systems. "At eMove360°, numerous medium-sized companies and start-ups present promising solutions and business models that offer significant improvements in this area, such as 'Plug & Charge' technology which eliminates the need for having cards by having the car automatically communicate with the charging station. A decisive factor for rapid joint implementation, in which manufacturers and suppliers can profit economically, is close coordination and standardization of important components, such as charging cables, connectors and billing systems," concludes Holder.

For the editorial team: In cooperation with the Roundtable participants, VDE will publish a white paper to support industry, politics, as well as the finance and insurance sectors in the further development of electromobility. The white paper is planned for the end of this year.

## **About the VDE:**

VDE, one of the largest technology organizations in Europe has been a byword for knowledge, progress and safety for 125 years. Its main focuses cover the energy transition, Industry 4.0, digital technologies, Future Mobility, Smart Living, and digital security. VDE is the only organization in the world to combine science, standardization, testing & certification, and application consulting under one roof. VDE puts its heart and soul into research funding, promotion of young talent, and consumer protection in particular. The VDE mark, known by around 70 percent of Germans, is considered to be a synonym for the highest safety standards. 2,000 employees, more than 100,000 honorary experts, and almost 1,500 companies are working in the VDE network to shape a future that is worth living: digitally and electrically interconnected. We are building the e-dialistic future.

The headquarters of VDE (Verband der Elektrotechnik, Elektronik und Informationstechnik e.V. – Association for Electrical, Electronic & Information Technologies) are in Frankfurt am Main.

[www.vde.com](http://www.vde.com)

## **About VDE Renewables GmbH:**

VDE Renewables GmbH is a company that 100% belongs to the VDE. Key responsibilities of the Alzenau-based company include marketing, business development and project management for certifications and other services in the field of quality assurance for the global renewable energy market. VDE Renewables GmbH closely collaborates with all structures of the VDE Group, particularly the VDE Testing and Certification Institute. As part of an international network consisting of partners such as the Fraunhofer Institute for Solar Energy Systems ISE, it tests and certifies components and systems according to the highest quality standards. [www.vde.com/renewables](http://www.vde.com/renewables)



**The automotive industry discusses the future of electric mobility at the VDE Roundtable Workshop. (Source: VDE / Anja Rottke)**

**Press contact:** Melanie Unseld, Tel. 069 6308461, [melanie.unseld@vde.com](mailto:melanie.unseld@vde.com)