Renault | Valeo | **Cooperation on E-motors**

Renault Group, Valeo and Valeo Siemens eAutomotive intend to jointly develop new synchronous electric motors that do not require rare earths and provide more power while requiring less energy. Renault will develop and manufacture the rotor technology for the synchronous motor and will be responsible for the overall motor architecture. Valeo and Valeo Siemens eAutomotive will develop and manufacture the stator. By increasing the copper density in the stator, the power output is to be increased while the energy requirement remains the same. From 2027, the partners plan to start series production of a 200-kW electric motor manufactured without rare earths at the Renault Group site in Cléon in northern France.

Cummins | **Acquisition of Jacobs Vehicle Systems**

Cummins has signed an agreement to acquire Jacobs Vehicle Systems (JVS). The acquisition of the Altra Industrial Motion subsidiary will allow the US company to take advantage of new technologies for its current and future diesel engine platforms – among others, in the areas of engine braking and cylinder deactivation. It also helps secure critical USMCA-qualified engine components. Cummins plans to maintain JVS’ customer relationships; business stemming from the acquisition will be incorporated into the Cummins Turbo Technologies division.

Edag | **New Business Unit**

Edag is pooling its expertise in the areas of electrification, fuel cells and batteries and is establishing the new Energy Systems and Powertrain business unit. In this way, the development service provider intends to position itself as an engineering expert and provider of solutions for new drive concepts for the mobility transition and to include the entire energy infrastructure value chain. According to the Head of the new business unit, Roberto Diesel, the company’s Mobility and Logistics business deals with all modes of transport, from passenger cars and two-wheelers to commercial vehicles, work machines, buses, ships, trains and aircraft.

Porsche | **Kirsch New CEO for China, Hong Kong and Macao**

Michael Kirsch will take over the position of Managing Director Porsche China, Porsche Hong Kong and Macao on June 1, 2022. The current Managing Director of Porsche Japan (since 2019) already filled the role of Chief Operating Officer for Porsche China from 2012 to 2016, after which he took over as Managing Director of Porsche Korea for three years. According to the company, Kirsch has successfully developed Porsche in Asia working in various positions and is therefore the ideal person for China. His predecessor Jens Puttfarken is moving to Audi after almost 25 years at Porsche, where he will be appointed Head of Sales Europe. Under his leadership, China became the brand’s largest single market in 2015.
Blue World Technologies | Factory Expansion

Blue World Technologies is significantly expanding its site in Aalborg in the coming months. One of the world’s largest production facilities for methanol fuel cells for generators, ships and heavy-duty vehicles is being built in the Danish port city. The membranes, electrodes and bipolar plates will also be produced there. From 2023, around 20,000 to 25,000 fuel cell units are to be assembled there each year. The capacity could be expanded from an initial 500 MW to up to 1.6 GW/year. The financial resources for this are provided by a partnership with Deutz and an investment from the Danish sovereign wealth fund Vaekstfonden.

BASF | Heraeus | Precious Metal Recycling

BASF and Heraeus are establishing a joint venture in China to provide a circular economy for precious metals by recycling used catalysts. The 50:50 joint venture, named BASF Heraeus Metal Resource Co., Ltd., will be located in Pinghu (China). Construction is scheduled to begin in 2022, with operations starting in 2023. The recovered precious metals can be used to manufacture new products in the automotive, chemical, electronics and green hydrogen industries. They also have a carbon footprint up to 90 % lower than primary metals from a mine.

Joint Industrial Research

An evaluation study published by the German Federal Ministry for Economic Affairs and Climate Action in early 2022 describes the model of joint industrial research that has been in place in Germany since 1954 as an effective instrument for funding innovation which offers unique, long-term advantages. The pre-competitive, cross-sectoral collaborations between businesses and research institutions that have largely been funded by public bodies have been coordinated and managed by research associations, with a clear focus on a wide-ranging technology transfer, in particular for SMEs. Among the Top Ten is the FVV, the German Research Association for Combustion Engines, which for 65 years has successfully run pre-competitive projects via industry committees with the aim of increasing the basic level of knowledge about thermal energy conversion systems for mobile and stationary applications. Alongside the technology and knowledge transfer, this also provides training for the next generation of researchers.

Future research and innovation projects concerning the leading technologies for energy conversion and transport must take a more comprehensive solution-based approach as well as meeting higher standards of sustainability and CO₂ neutrality. During the transformation that the FVV is currently undergoing to take it in this direction, orientation studies and projects with a systemic, integrated methodology and a cross-sectoral, global network will be carried out to complement the association’s successful model. The increased focus on joint, comparative evaluations of alternative fuels and energy converters, with the involvement of AI methods, is enhancing the traditional set-up and orientation. Japan in particular has not only taken on board the German model by establishing the Research Association of Automotive Internal Combustion Engines (AICE) in 2014, but is also cooperating successfully with the FVV. This highlights the importance of joint research.