

Dietmar Goericke Managing Director, FVV e. V.

## **Research With an Open Mind**

From exploding energy costs and raw material shortages to collapsing supply chains and political crises - the difficult issues we currently face demonstrate just how unpredictable the future is. In light of this, surely the most foresighted approach is to pursue different paths toward climate neutrality and further lowering emissions, rather than putting all our faith in one concept? Being open to different powertrain technologies provides the flexibility required to find the right solutions for a future that is still uncertain. FVV pursues an open approach in all its activities, in which all technologies are considered equally. Instead of ruling out promising options, the focus is on solving problems pragmatically. The pre-competitive collective research organized by FVV creates the foundation for developing even more environmentally friendly and resource-saving engines, hybrid powertrains, turbines, compressors and fuel cells. This mix provides a portfolio of different concepts that offer ideal solutions for the respective use cases and operating conditions. A wide-ranging study on the energy sources of the future highlights the necessity - but also the potential - of this approach. In a nutshell, it comes to the conclusion that banning combustion engines from 2035 would lead to higher greenhouse gas emissions than necessary, that a mix of different concepts would accelerate the transition to climateneutral mobility, and that e-fuels are indispensable for the climate-neutral operation of existing vehicle fleets.

To meet the demands of research both now and in the future, FVV has restructured its research portfolio and planning over the last few months. The process began with technical and macroeconomic questions on how to achieve a carbon-neutral and secure energy supply. Research objectives derived from this deliver additional findings about the potential of new, renewables-based energy converters – whether prime movers, turbomachinery, fuel cells or electric machines – and energy sources. The work on electric machines is part of the E-Motive program, which is carried out in collaboration with VDMA and FVA. This unique cooperation will once again significantly strengthen pre-competitive collective research in the field of electromobility. Here, too, the research is carried out with a completely open mind. After all, the customer should be free to choose whichever powertrain concept they want.