»A new self-image«

In the midst of transformation, making good decisions in the face of diverse technology options requires not only courage but also a profound depth of knowledge. Five voices from our member companies on the new FVV claim >**Science** for a moving society<.



Science for a moving society

Building bridges to a climate-neutral society

Natalia Cochin,

Powertrain Specialist, Toyota Motor Europe

More than anything, we all want to achieve the goal of a climate-neutral society. That's why the world of industry, led by the automotive sector, has initiated an unprecedented transformation process. Public policy and civil society have used numerous activities to help drive this process forwards. But individual measures don't always clearly reveal the full picture. FVV is an important forum for cooperation in the automotive industry this is where optimised, comprehensive solutions can be found through reciprocal exchange which are always based on scientific facts and intensive research. FVV, initially founded as a research association for combustion engines, has itself undergone a considerable transformation in recent years to be able to meet the need for basic research as we strive to become a society free of reliance on fossil fuels. In fuel studies, in particular, we were able to clearly work out that the climateneutral transportation solutions we want cannot be achieved with a single technology. I see FVV as an opportunity to continuously expand our knowledge regarding the bridges and pathways towards a climate-neutral society.



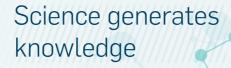
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Demonstrating the potential of technology

Mats Hultman,

Head of OEM Partnerships, R&D, Products and Applications, Neste

It is important always to keep the goal of reducing greenhouse gases with a technologyneutral approach in mind. None of the alternatives such as electrification or renewable fuels will be sufficient on their own, especially given the limited time we have to achieve this goal. Focusing on just a single solution would be a grave error. The technical solutions already exist or are at least on the verge of a breakthrough. All we need to do is create a working environment and a culture that allows us to make the best use of climate change technologies. FVV and its member companies play an important role in demonstrating the potential of both existing and future technologies such as renewable fuels. For us at Neste, creating something new means developing solutions that enable us to replace fossil fuels and energy sources by combining them with efficient powertrains. FVV is a fantastic forum for this, as it brings together knowledge from many different sectors to create new potential.



Marc Sens.

Senior Vice President, Research & Technology, Sustainable Mobility, Future Powertrains, IAV

>Knowledge is power.< This statement is as true now as it was in Francis Bacon's time.

It may be even more relevant today than it was then, especially when far-reaching decisions have to be made in the context of complex issues such as climate change. There are so many influencing factors and different things interacting that it is almost impossible to make the right decisions without in-depth knowledge. And what generates knowledge? Science! This is precisely where FVV enters the limelight. Since it was founded in 1956, a huge wealth of knowledge has been generated and made available to all interested parties in the field of energy converters and, for some years now, energy systems in the mobility sector. If this knowledge is now used to make decisions on the energy and mobility transition, for example, rather than making them based solely on gut feeling and ideology, the value of FVV's pre-competitive research for society cannot be overestimated.

Photo: IAV 21



Prof. Dr. Gunnar Stiesch, Senior Vice President Research and Development/Engineering, MAN Energy Solutions

Our society is facing its greatest challenge: by 2050 at the latest, almost all areas of our lives must become climate-neutral. But this also opens up opportunities. A global market for climate-neutral energy conversion and powertrain systems will emerge - with promising economic and industrial policy prospects. We are already at a good starting point. However, in order to consolidate this, we need innovation drivers like FVV who are researching sustainable and climate-neutral technologies in a sciencebased, politically neutral and technology-neutral manner. These crucially important innovations can only emerge with the help of cross-sector networking of industrial companies and technology providers with universities and research institutions. With its consistent promotion of academic research and thus also of prospective top engineers, FVV plays a key role in securing both Germany's and Europe's technological leadership in the future and positioning mechanical engineering as an attractive employer.

Technology as lever for climate protection

Dr. Marco Warth, Vice President Development, Engine Systems and Components, MAHLE

Without question, the transport sector has to contribute to climate protection and this is the goal for all of us - until we have achieved carbon neutrality. Further market penetration with battery-powered electric powertrains and the establishment of hydrogen technology and infrastructure, especially for heavy goods transport, are therefore extremely important. From a global perspective, however, internal combustion engines will continue to play a major role for quite some time. And that's why expertise, as collated and developed within FVV, continues to be crucial in making these engines even cleaner and more efficient. For us at MAHLE, an important key to globally sustainable mobility - and therefore to the necessary contribution to climate protection – lies not in moving away from internal combustion engines, but in switching from fossil fuels to climate-neutral e-fuels. Depending on regional market specifics and infrastructure conditions, as well as vehicle class and intended use, they can be an extremely effective approach within the framework of real-life technology neutrality. //



Photo: MAHLE

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