MAHLE

Press release

Stuttgart/Germany, Northampton/England, Plymouth, Michigan/USA, February 17, 2022

US government sponsors MAHLE project to reduce methane emissions

- Government agency Advanced Research Projects Agency-Energy (ARPA-E) supports MAHLE Powertrain with USD 3.2 million
- Technology project to reduce methane emissions in the oil and gas sector
- Close collaboration between MAHLE Powertrain, State University of New York (SUNY), and Oak Ridge National Laboratory (ORNL)

MAHLE Powertrain, the engineering business segment of the MAHLE Group, receives support from the US government for a technology project to reduce methane emissions in the oil and gas industry. The funding of the government agency Advanced Research Projects Agency-Energy (ARPA-E) amounts to USD 3.2 million. Project partners of MAHLE Powertrain are the State University of New York (SUNY) in Buffalo/New York and the Oak Ridge National Laboratory (ORNL) in Oak Ridge/Tennessee. The goal is to develop an advanced exhaust gas aftertreatment solution. The results are expected to be implemented in 2025.



MAHLE Powertrain helps reducing methane emissions.

"That's an exciting task for MAHLE and its partners. It is particularly important because we are focusing on an industrial sector where electrification poses technical and economic challenges," said Mike Bunce, Head of Research at MAHLE Powertrain USA. The research program is part of the Reducing Emissions of Methane Every Day of the Year (REMEDY) initiative, which aims to significantly reduce emissions of the potent greenhouse gas methane. The project aims to further reduce methane emissions from natural gas-powered lean burn engines in the megawatt range. These industrial engines are typically

used to power compressors and ships, and to generate electricity. The team of experienced engineers and technicians from all three organizations will start work shortly. The goal is to develop an advanced exhaust gas aftertreatment solution that fully meets the requirements of the REMEDY program. MAHLE Powertrain also plans to tackle the problem of nitrogen oxide (NO_x) emissions, which are often caused by these large natural gas engines. The MAHLE Powertrain branch in Plymouth/Michigan has successfully worked with the US Department of Energy



and ARPA-E for several years and participated in various important joint research and development projects to provide economically viable and energy-efficient solutions to support the US automotive industry. These included the development of advanced prechamber ignition technology and the application of ultraefficient microcombined heat and power generation. The reduction of greenhouse gas emissions is an important cornerstone of MAHLE's corporate strategy. The technology group is clearly committed to the Paris Agreement and aims to achieve carbon-neutral production by 2040, within the framework of companywide binding reduction targets. Last year, all MAHLE production locations in Germany already reached this goal. In addition, the use of self-generated energy from renewable sources will increase annually.

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About MAHLE

MAHLE is a leading international development partner and supplier to the automotive industry. The technology group is now broadly positioned in the areas of powertrain technology and thermal management with a clear focus on future topics relating to mobility. As part of its dual strategy, MAHLE is working both on the intelligent combustion engine for the use of hydrogen and other nonfossil fuels and on technologies that will help the fuel cell and e-mobility achieve broad acceptance in the markets. The product portfolio of the company, which was founded in 1920, addresses all the crucial aspects of the powertrain and air conditioning technology. Half of all vehicles in the world now contain MAHLE components. #weshapefuturemobility

In 2020, MAHLE generated sales of approximately EUR 9.8 billion and is represented in over 30 countries with more than 72,000 employees in 160 production locations and 12 major research and development centers. (Last revised: 2020-12-31)