

Press release

Northampton, UK, May 26, 2023

MAHLE Powertrain and Clean Air Power Deepen Ties on Zero-Carbon Engines

- MAHLE Powertrain and Clean Air Power sign Memorandum of Understanding to develop solutions for zero-carbon internal combustion engines
- Longstanding relationship has already delivered exciting results with projects across a variety of sectors, such as heavy-duty and marine
- MAHLE Powertrain's flexible engine control unit combines with Clean Air Power's fuel delivery systems

MAHLE Powertrain and Clean Air Power have signed a Memorandum of Understanding to combine their efforts in providing rapid and cost-effective solutions for net-zero fuelled internal combustion engines. The two companies have a longstanding collaborative relationship that has shown excellent results across a number of important research projects. As part of these efforts, MAHLE Powertrain will continue to explore opportunities to use their flexible engine control unit in conjunction with Clean Air Power's fuel delivery systems.



MAHLE Powertrain and Clean Air Power have been working together on zero-carbon fuels such as hydrogen.

“The UK was the first country in the world to commit to phasing out new, non-zero emission heavy goods vehicles under 26 tonnes by 2035, with all new trucks to be zero emission by 2040,” said Dr. Mike Bassett, Engineering Director, MAHLE Powertrain. “These far-reaching legislative demands and their aggressive timescales mean there is strong industry interest in developing engines for heavy duty applications that can operate efficiently on zero-carbon fuels.”

MAHLE Powertrain has a long history in the development of internal combustion engines. The company's flexible engine controller, one of many innovative solutions, is particularly well suited to the development of demonstration units, as well as low volume production applications utilising alternative fuels or novel technologies.

Clean Air Power is developing injector technology aimed at supporting the use of zero-carbon and renewable fuels such as hydrogen or methanol. Clean Air Power has focussed on higher power transport solutions such as truck and bus, rail and marine applications, and is already supplying fuel injectors for dual- and single-fuel applications for both, retrofit and new engines.

Dr. Dan Skelton, CEO, Clean Air Power said: “Zero-carbon internal combustion engines offer a solution in difficult to decarbonise applications where battery and fuel cell technology may not be best suited. This agreement opens up the opportunity for us to collaborate further to accelerate development in this important and exciting area, assisting the transition to net-zero and helping establish a pathway for the roll-out of clean fuels.”

The two companies have recently collaborated on the development of retrofit sustainable propulsion solutions for high performance marine vessels for the Royal National Lifeboat Institution (RNLI), as well as the investigation of red diesel replacement technology for off-highway and agricultural sectors.

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About MAHLE

MAHLE is a leading international development partner and supplier to the automotive industry with customers in both passenger car and commercial vehicle sectors. Founded in 1920, the technology group is working on the climate-neutral mobility of tomorrow, with a focus on the strategic areas of electrification and thermal management as well as further technology fields to reduce CO₂ emissions, such as fuel cells or highly efficient combustion engines that also run on hydrogen or synthetic fuels. Today, one in every two vehicles globally is equipped with MAHLE components.

MAHLE generated sales of more than EUR 12 billion in 2022. The company is represented with approx. 72,000 employees at 152 production locations and 12 major research and development centers in more than 30 countries. (as of 31.12.2022)

About MAHLE Powertrain

MAHLE Powertrain is a specialist in providing engineering services for the design, development and integration of advanced internal combustion engines and electrified powertrain systems. As a recognised expert in these fields, MAHLE Powertrain is engaged in the extensive research, development and application of new traditional and advanced drivelines into cost-effective, production feasible solutions for enhanced efficiency, improved fuel economy and lower emissions.

As a services subsidiary of the MAHLE Group, MAHLE Powertrain has six technical centres strategically located in the UK, Germany, USA, and China and is well-placed to provide solutions around the globe. It operates independently of the main group when considering choice of components or technologies.

About Clean Air Power

Clean Air Power are a mid-volume manufacturer and licensor of injector and valve technology providing innovative fluid (gas and liquid) control solutions across multiple sectors including automotive, on highway, off highway, heavy duty, marine, construction and motorsport.

Now working to deliver the transition to decarbonised transport, Clean Air Power have developed a product range for the injection of net zero fuels such as hydrogen and ammonia into combustion engine and fuel cell applications.

The company has a base in both the US and UK, and combines manufacturing, engineering and technology capabilities.