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A New Modular Hybrid Powertrain Concept

Engine and vehicle manufacturers are facing increasing pressure by legislation and economics to reduce vehicle emissions and deliver improved fuel economy. By 2025 significant reductions in carbon dioxide (CO₂) emissions will need to be achieved to meet these requirements whilst at the same time satisfying the more stringent forthcoming Euro 7 emissions regulations. This focus on techniques to reduce the tailpipe CO₂ is increasing the interest in hybrid and electric vehicle technologies.

This presentation Building on previous research projects, focused on the design of a dedicated range extender (REx), heavily downsized internal combustion engines and pre-chamber combustion system developments, MAHLE Powertrain propose a possible hybrid technology pathway for powertrains. This is optimised for the future global automotive market, designed to be scalable across a wide range of vehicles, and is targeted to meet emissions and CO₂ targets for 2030 and beyond.