

PRESS RELEASE

16 November 2020

Free webinar: developing hydrogen powertrains for heavy-duty applications

In a free one-hour webinar to be hosted by Automotive World at 11.00 GMT (12.00 CET) on 24 November, Ricardo will present its perspectives on the development of hydrogen engine and fuel cell systems for heavy-duty truck and off-highway applications

With high energy requirements and constraints of payload and package, heavy-duty, long-haul truck and off-highway applications pose a particular challenge for electrification using conventional battery-based approaches. For such applications, hydrogen – either as a combustion engine fuel or for use in a fuel cell hybrid powertrain – offers the potential of significantly reducing or eliminating emissions at point of use.

In this free, one-hour webinar, Ricardo's Andrea Trevisan, Trevor Downes and Dr Cedric Rouaud will present the company's approach to developing hydrogen fuel cell and internal combustion engine (ICE) powertrain systems for heavy-duty applications. This approach focuses on the use of virtual product development (VPD), advanced control technology and testing. The webinar will also cover the use of total cost of ownership analysis for commercial vehicles and off-highway machines based on hydrogen fuel cell and ICE powertrains. On fuel cell powertrains, the presentation will provide details of multiple stack optimization using 0D and 1D plant modelling, which has been shown to improve overall system efficiency by up to 15 percent, as well as advanced control architectures based on a combined approach linking fuel cell modelling with vehicle electronic horizon monitoring.

Creating a world fit for the future

Overall, the webinar will show that Ricardo's VPD-centred approach can reduce hydrogen propulsion system cost and development time by up to 30 percent while also improving the efficiency of the overall system to be competitive with diesel powertrains before 2030.



To register for this free webinar visit: <u>https://mobex.io/webinars/developing-heavy-duty-</u> hydrogen-powertrains-for-2025/

Ends



NOTES TO EDITORS:

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