



PRESS RELEASE

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Ricardo supports CNH Industrial with development of biomethane-powered tractor

Work for CNH Industrial by Ricardo forms part of the APC UK funded Low Carbon Tractor (LoCT) project, which aims to develop a commercially viable agricultural tractor capable of operation on sustainable locally sourced biomethane

The diesel tractor is the backbone of many farming operations worldwide. With its requirements for high power and torque, as well as versatility, it is understandable that diesel is currently the fuel of choice for this ubiquitous agricultural workhorse.

Biomethane, however, is a fuel source that is increasingly being harnessed by many medium- to large-scale farming operations, through the process of anaerobic bio-digestion of waste vegetation. While much of the biomethane produced by such units is used in renewable energy generation schemes, a clear potential pathway exists to produce sustainable fuel for tractors and other powered agricultural equipment, thus displacing at source the mineral diesel that would otherwise be used.

In the APC UK funded LoCT project, CNH Industrial – one of the world's leading capital goods companies – is partnering with exhaust aftertreatment technology specialist Eminox and thermal management and ceramic coating specialist Zircotec. The project aims to design and demonstrate a commercially viable tractor capable of operation on biomethane while conforming to the latest European & US emissions standards.

CNH Industrial has contracted Ricardo to support its contribution to the LoCT project, specifically for some of the design and development of the vehicle, working alongside CNH Industrial's in-house team as the vehicle approaches readiness for commercial production implementation. Key challenges include managing the heat rejection and tuning of the engine to be able to operate successfully in an agricultural environment, and the optimization of vehicle-based compressed natural gas storage to fulfil operational needs while also meeting all necessary safety and visibility requirements.



“Ricardo is pleased to be supporting CNH Industrial on this important project,” commented Ricardo project director, Steve Pendrey. “Biomethane offers an attractive alternative and sustainable fuel pathway to mineral diesel, for the decarbonization of farm-based operation of tractors and other equipment in the off-highway and commercial vehicle areas. By bringing our automotive and off-highway engines expertise to this exciting project, we hope to play our part in pulling forward this promising technology.”

“CNH Industrial is a global leader in the development and commercialisation of alternative propulsion technologies through its powertrain brand FPT Industrial,” added Alistair Walshaw, engineering project manager, CNH Industrial. “The Company’s commercial vehicle brand IVECO is the market leader in on-highway natural gas commercial vehicles, and CNH Industrial’s New Holland Agriculture and CASE Construction Equipment brands are pioneering the use of natural gas in off-road applications.”

The first examples of the pre-development LoCT project tractors will be on display at the LCV Show, to be held at Millbrook, 4-5 September 2019.

Ends

NOTES TO EDITORS:



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