

# PRESS RELEASE



28 September 2021

## Ricardo wins Government funding to develop future electric trucks

*Ricardo will apply its expertise in battery, power electronics and motor R&D to deliver technologies for electric trucks which will drive down the cost and increase the range of future commercial vehicles*

As part of its mission to support the decarbonisation of the global transport and energy sectors Ricardo, a world-class environmental, engineering and strategic consulting company, has announced that it has won two UK Government-backed innovation competitions to develop novel solutions for heavy duty vehicles focusing on improving efficiency and performance and reducing the cost of future electric trucks.

Ricardo will be partnering with the University of Bath for both projects. For the first project, which is funded by the Faraday Battery Challenge, supported by Innovate UK, Ricardo will be investigating the efficacy of integrating power electronics – a modular, series-connectable inverter and charger – into a battery pack, and understanding whether this novel approach can help to reduce the total cost of ownership. The project is targeting to deliver efficiency improvements and reduce the powertrain mass, leading to savings of around 1,000GBP per vehicle. This will help to accelerate the wider-scale adoption of electrified commercial vehicles.

In parallel, for the second project, which is funded by the UK Government's Department for Transport and delivered by Innovate UK, Ricardo is developing technologies for future higher voltage (1400V) electric trucks to enable greater efficiency and faster charging. This includes the development of a modular battery pack, advanced power electronics and an electrified drive unit optimised for high voltage use, building on Ricardo's previous Future Truck research. The benefits of these technologies will be assessed through the development and use of advanced desktop tools, which will also support us to optimise the technology configuration and control while focusing on minimising total cost of ownership.

Teri Hawsworth President of Ricardo Automotive and Industrial EMEA Division said: "Heavy duty vehicle CO<sub>2</sub> regulations will require manufacturers to reduce their fleet average CO<sub>2</sub> emissions significantly. These targets will not be achieved just by improving current technology but will need new powertrain technologies. Fleet operators have incurred considerable costs through the accelerated fleet renewal. Ricardo is committed to supporting manufacturers and fleet operators by driving cost out of electrification, leveraging our world-renowned expertise in battery, electronics and motor innovation to help achieve net zero ambitions."

Currently, there are just over half a million trucks on the road in the UK, but only 0.2% of these are using cleaner propulsion. In Britain, vans and trucks make up 13.1% of all vehicles on the road but account for around 35% of CO<sub>2</sub> road transport emissions. The UK Government is proposing to end the sale of all new non-zero emission heavy goods vehicles by 2040, so manufacturers and fleet operators have a pressing urgent requirement for novel technology advances which will help accelerate the take-up of electric trucks while reducing cost, risk and time to market.

In April 2021, Ricardo announced that it had received Government funding to assess the commercial viability of a facility to assemble battery packs for UK manufacturers which currently produce fewer



than 10,000 electrified vehicles per year. This latest funding award therefore is a further enhancement to Ricardo's capability in advanced batteries, power electronics and motors for electric vehicles.

Ends

#### **About Innovate UK**

Innovate UK drives productivity and economic growth by supporting businesses to develop and realise the potential of new ideas. We connect businesses to the partners, customers and investors that can help them turn ideas into commercially successful products and services and business growth. We fund business and research collaborations to accelerate innovation and drive business investment into R&D. Our support is available to businesses across all economic sectors, value chains and UK regions. Innovate UK is part of UK Research and Innovation. For more information visit [www.innovateuk.ukri.org](http://www.innovateuk.ukri.org)

#### **About Ricardo**

Ricardo plc is a world-class environmental, engineering and strategic consulting company listed on the London Stock Exchange. With over 100 years of engineering excellence, we provide exceptional levels of expertise in delivering leading edge and innovative cross sector sustainable products and solutions, helping our global customers increase efficiencies, achieve growth and create a clear and safer future. Our mission is clear -- to create a world fit for the future. For more information visit [www.ricardo.com](http://www.ricardo.com)

#### **Media contacts:**

##### **For Ricardo:**

Kathryn Bellamy  
Senior Communications Manager  
Ricardo Automotive & Industrial, and Performance Products  
Email: [kathryn.bellamy@ricardo.com](mailto:kathryn.bellamy@ricardo.com)  
Tel: +44(0)7921 941824

Ricardo Media Office  
Gill Gibbons  
Email: [media@ricardo.com](mailto:media@ricardo.com)  
Telephone: +44 (0) 7795 342804