## PRESS RELEASE



24 August 2021

# Ricardo wins contract with LS Automotive Technologies to develop critical electric vehicle components

Ricardo's world-leading expertise in electrification engineering will support the South Korean manufacturer's objective to accelerate the development of critical power electronics for electric vehicles to help facilitate their wide-scale adoption

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 a contract with LS Automotive Technologies to develop a state-of-the-art high voltage DC-DC converter to power the low voltage network in electric vehicles.

LS Automotive Technologies is a leading manufacturer of automotive electronic components. Ricardo is contracted to develop the innovative DC-DC converters, which take energy from the direct current high voltage battery which powers the propulsion of the electric vehicle and converts it for use by the low voltage direct current which powers vehicle lights, fans, pumps, wipers, and electronic control units. The power conversion has to be performed at high efficiency to ensure that the equipment is cool and only occupies a small footprint in the vehicle. To achieve the high efficiency, high energy density and performance targets needed, Ricardo will be using silicon carbide and gallium nitride power electronics. Unique knowledge and experience in this advanced technology, gained from a series of R&D programmes, will enable Ricardo to produce a novel design for the converters which delivers game-changing efficiency and performance improvements compared with existing state-of-the art technology.

Teri Hawksworth, Managing Director of Ricardo Automotive and Industrial EMEA Division said: "We are delighted to have won this contract to support LS Automotive Technologies, a leading player in the South Korean power electronics industry. We are proud that our engineers' considerable expertise in innovative electrification technologies will provide the best knowledge transfer for the engineers of LS Automotive Technologies, helping them gain competitive advantage and accelerate their route to market."

Mr Chol Woo Lee, CEO of LS Automotive Technologies said: "After an extensive global selection process we established that Ricardo was the best electrification engineering partner in the world for LS Automotive Technologies. We are pleased to start the cooperation with Ricardo on the high voltage DC-DC converter which will help consolidate our position as a top-tier supplier in the automotive power electronics market."

As part of the contract, LS Automotive Technologies will embed engineers within the Ricardo engineering development team to facilitate knowledge transfer, helping to accelerate future new product design and manufacturing.

As on-highway European original equipment manufacturers face stringent European emissions regulations: a 30% improvement against 2019 CO<sub>2</sub> fleet average by 2030, and an expectation that this target will be raised, manufacturers are seeking to use wide bandgap devices Ricardo's heavy duty electrification solutions can help this transport sector progress towards achieving zero carbon emissions.

#### Ends



#### **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 cleaner and safer future. Our mission is clear — to create a world fit for the future. For more information visit www.ricardo.com

### **About LS Automotive Technologies**

LS Automotive Technologies is one of the market leaders for in-vehicle solutions (switches and electrical/electronic components in South Korea. We are focused on increasing our overall competitiveness in emobility, maintaining perfect quality, and providing world-class core technology as a global vehicle components company. For more information visit <a href="https://www.lsautomotive.com/en/main.do">https://www.lsautomotive.com/en/main.do</a>

#### Media contacts:

#### For Ricardo:

Kathryn Bellamy
Communications Manager
Ricardo Automotive & Industrial, and Performance Products
Email: kathryn.bellamy@ricardo.com

Tel: +44(0)7921 941824

Ricardo Media Office Gill Gibbons

Email: media@ricardo.com Telephone: +44 (0) 7795 342804