Technology Strategy Board
Driving Innovation

Press Release

9 September 2009

£10m investment in innovative electrical systems for low carbon vehicles

Ten innovative research programmes that will lead to the development of cutting-edge ultra efficient electrical systems for electric and hybrid vehicles are to receive over £10 million support from the government-backed Technology Strategy Board.

This is the first competition run under the Integrated Delivery Programme, a £200m investment programme that will help to speed up the introduction of low carbon vehicles onto UK roads. Over 30 UK companies and seven universities will take part in the development projects, which have a total value, including contributions from the companies, of £20 million.

Explaining the background to the decision to invest in the development projects, John Laughlin, the Technology Strategy Board's Low Carbon Vehicles programme manager, said:

"We are investing to put the UK at the forefront of low carbon vehicle technology. A major barrier to the widespread acceptance of electric and hybrid vehicles is the difficulty in balancing the range of the vehicle against the available stored energy.

The work we are funding will focus on developing ultra-efficient electric and hybrid vehicle motive and ancillary systems that will make the best use of this energy. Increasing the market acceptance of low carbon vehicles will contribute to achieving UK and EU climate change targets, whilst creating significant market opportunities for UK-based companies."

This is the second major recent investment in electric vehicle technology by the Technology Strategy Board, which is sponsored by the Department for Business, Innovation and Skills (BIS). In June the organisation, which supports technological innovation across the UK, announced that it is to invest £25 million to enable over 340 low carbon vehicles to be road-tested across the UK over the next eighteen months.

The announcement about new research coincides with news that the Energy Technologies Institute (ETI) is today launching a new plan designed to make it easier for drivers to charge plug-in vehicles in a number of major UK cities. The Joined-Cities Plan aims to help cities across the UK to deploy a cost effective and compatible network of recharging points.

Ends

Notes to Editors

The Technology Strategy Board is a business-led executive non-departmental public body, established by the government. Its role is to promote and support research into, and development and exploitation of, technology and innovation for the benefit of UK business, in order to increase economic growth and improve the quality of life. It is sponsored by the Department for Business, Innovation and Skills (BIS). For further information please visit www.innovateuk.org.

The Energy Technologies Institute (ETI) is a UK based company formed from global industries and the UK Government. The ETI brings together projects and partnerships that create affordable, reliable, clean energy for heat, power and transport. For further information about the Joined Cities Plan please contact Richard Robinson (ETI Communications Department) on 01509 – 202026 or 07500 – 049626.

Two examples of successful projects:

1.HyBoost – Hybridised Boosted Optimised System with Turbocompound

Project description: A £3 million project led by Ricardo Ltd, aims to deliver a very cost-effective, ultra-efficient gasoline hybrid in a C-segment passenger car offering the performance of a 2.0 litre vehicle but with a 30-40% reduction in CO2 emissions, to below 100g/km.

Consortium members: Controlled Power Technologies, European Advanced Lead Acid Battery Consortium, Ford, Imperial College London, Ricardo UK Ltd, Valeo Engine Cooling UK Ltd

Total project cost: £3,009,000

Funding provided by the Technology Strategy Board: £1,505,000

Contact: Anthony Smith, Ricardo Media Office, Ricardo UK Ltd, 01273 382710; 07801 823423; media@ricardo.com

2. Advanced High Energy Density Pouch Cell Battery For Electric Vehicle Applications And Next Generation Battery Management System
Project description: Led by Axeon Technologies Ltd and costing nearly £1.4 million, this project will develop an innovative high energy density battery system for an emission-free electric small city car. The project aims to produce a lighter, smaller and more efficient battery with faster charging and a higher range than those currently available.

Names of consortium members: Axeon Technologies Ltd, Ricardo Ltd, Allied Vehicles Ltd

Total project cost: £1,374,000

Funding provided by the Technology Strategy Board: £687,000

Contact: Rebecca Trengove, Group Marketing and Communications Manager, Axeon, 01382 400040; 07814 865410; rtrengove@axeon.com

Other projects to be funded through this initiative include:

- ***KINERGY - Kinetic Energy Recovery and Storage System*** *–led by Ricardo UK Ltd and with partners: Crompton Technology Group Ltd, JCB Power Systems Ltd, Land Rover, SKF (UK) Ltd, Torotrak plc and Williams Hybrid Power Ltd.*
- ***Ultra Cost Efficient Hybrid Powertrain (UCEHP)*** *– led by Integral Powertrain Ltd and with partners Drive System Design Ltd, Land Rover, Smart Power Solutions LLP.*
- ***Integrated 'E' Van System*** *led by Smith Electric Vehicles (UK) and with partners - Newcastle University, Ricardo UK Ltd, Tirius Ltd, TRW Ltd, University of Bristol.*

- ***Ultra-efficient electrical machines and drives for EVs and HEVs*** *– led by Nissan Motor Manufacturing (UK) LTD and the University of Sheffield.*

- ***High efficiency digital hydraulic motor for kinetic energy recovery*** *– led by Artemis Intelligent Power Ltd with Lothian Buses plc as partners.*

Background information The funding competition is managed by the Technology Strategy Board's Low Carbon Vehicles Innovation Platform (LCVIP). The platform is the key delivery agent for the government's funding of low carbon vehicle research and development. The platform aims to promote low carbon vehicle research, design, development and demonstration in the UK in order to deliver:

- Carbon reduction in domestic and international vehicle markets
- Accelerated introduction of low carbon vehicle technology and vehicles
- A UK automotive sector benefiting from growing domestic and international demand for low carbon vehicles.

This competition is the first funding activity under the LCVIP's Integrated Delivery Programme (IDP). This is a five year programme which will integrate the innovation chain, from the science base, through collaborative R&D to fleet level demonstration.

The IDP has secured £100m of public sector funding – from the Technology Strategy Board, Department for Transport, Engineering and Physical Sciences Research Council (EPSRC), One North East (ONE) and Advantage West Midlands (AWM). Contributions from commercial partners will match the public funding, bringing the total amount available for investment to £200 million. This will support two further competitions in 2009, with further competitions anticipated thereafter.

Ultra-Low Carbon vehicles in the UK The Government published its strategy for **Ultra-Low Carbon vehicles in the UK** on 16 April 2009. The strategy is available at http://www.berr.gov.uk/files/file51017.pdf

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