

Press release: Over £109 million of funding for driverless and low carbon projects

- £109 million of government investment into cutting-edge automotive research and development (R&D) projects
- seven low carbon vehicle projects set to receive a share of £62 million funding, safeguarding 2,370 jobs
- first winners of connected and autonomous vehicles (CAV2) competition set to receive £31 million

Business Secretary Greg Clark and Transport Minister John Hayes have today (11 April 2017) awarded £109.7 million of government funding, alongside significant funding from industry, to help develop the next generation of driverless and low-carbon vehicles, as part of the Industrial Strategy and the government's Plan for Britain.

Seven innovative projects will share grants from the latest round of funding from the Advanced Propulsion Centre (APC), the joint industry-government programme to put the UK at the forefront of low carbon vehicle technology.

The projects, led by BMW, CNH Industrial, Ford Motor Company, Jaguar Land Rover, Penso Consulting, Westfield Sportscars and Williams Advanced Engineering, cover a wide range of new innovations which will help the UK to continue to build on its excellence and become a global leader in low-emissions technology, and safeguard 2,370 jobs in the UK.

Successful schemes include:

- the development of a high power battery suitable for high-performance vehicles
- a project to address gaps in and strengthen the UK supply chain
- the development of the fuelling system for a concept gas tractor
- technologies to reduce the weight and improve electrification in SUV vehicle platforms

A further 7 projects have won funding from the government's Office for Low Emissions Vehicles (OLEV) to advance the development of a range of ultra-low and zero emissions vehicle technologies in the UK. These projects will be led by Equipmake, Ford Motor Company, Great British Sports Cars, Jaguar Land Rover, Ricardo Innovations, Romax Technology and Wrightbus.

In a fresh commitment to supporting these innovative technologies, the government is also announcing today that people buying an electric vehicle will continue to benefit from up to £4,500 off the cost of an ultra-low emission car, up to £2,500 off a hybrid and receive £500 towards the installation of a charge point in their home.

Business and Energy Secretary Greg Clark said:

Low carbon and driverless cars are the future and as a Government we are determined through the Industrial Strategy to build on our strengths and put the UK at the forefront of this revolution. Investment in this technology is an integral part of this Government's efforts, to ensure the UK auto sector remains competitive and world-leading.

The projects being awarded funding today will help extend our excellence in these cutting edge research fields, helping to safeguard jobs while ensuring the UK remains the go-to destination for automotive excellence.

Transport Minister John Hayes said:

I am absolutely committed to improving air quality and reducing pollution in towns and cities, which is essential for people's health and the environment.

This government is investing £109 million to support British businesses in developing innovative, important technologies which will greatly reduce our emissions footprint.

The number of ultra-low emission vehicles on our roads is at record levels and our renewed support for these exciting technologies is yet another significant milestone.

Ian Constance, Chief Executive of the APC, said:

The APC funding demonstrates the depth of low carbon development that is now possible in the UK. From powertrain, to lightweighting, to energy storage, these new projects will not only lower emissions but secure thousands of jobs, address supply chain gaps, and help the UK become a true global leader in advanced vehicle technology.

The government also announced the first set of winners of the second round of its connected autonomous vehicles competition, CAV2, with projects set to receive a share of up to £31 million, match funded by industry. Twenty-four projects demonstrated clear commercial value and identified technical solutions for CAV technology, including how these vehicles will work within the UK transport system. Further successful projects from this competition round will be announced soon.

Funding is divided into four streams and ideas include projects using cars and pods platooning, or going in formation, to transport passengers from Stockport train station to Manchester Airport, create vehicles capable of

driving in a range of road environments and technology which could make any car operate autonomously.

The CAV2 competition includes funding from the UK's innovation agency, Innovate UK, for four one-year research and development projects supporting CAV vehicle developments, specifically in the areas of energy reduction and air quality improvements. The government will launch its third CAV competition, CAV3, to fund further industry-led research and development projects later in the year.

Innovate UK Chief Executive Ruth McKernan said:

These successful industry-led R&D projects will further spearhead UK development of low emission, and connected and autonomous vehicle technology, building on our world-leading research and innovation capability in this area and the significant strength of UK businesses large and small in this field.

Today's announcements follow the launch of the first phase of government's £100 million CAV test bed programme at the end of March with a competition worth £55 million. In a speech to the Society of Motor Manufacturers and Traders Connected Conference in London, the Business Secretary outlined plans to create a cluster of excellence in CAV testing along the M40 corridor between Birmingham and London.

The test bed programme forms part of the government's Industrial Strategy commitment to develop world-class CAV testing infrastructure. The programme will use some of the UK's existing CAV testing centres to create a concentrated cluster of testing facilities in the UK's automotive heartland in the West Midlands, including; Coventry, Birmingham, Milton Keynes as well as Oxford and London.

Through the launch of the Industrial Strategy green paper and the Plan for Britain, the government has significantly increased investment in research and development and reaffirmed its commitment to ensuring the UK remains a world-leader in science and innovation ahead of the UK leaving the EU. This year OLEV will be publishing its long term strategy for the UK's transition to zero emission vehicles.

Government support

- APC – 7 projects with support up to £62 million
- CAV2 – 24 projects with support up to £31 million
- OLEV – 7 projects with support up to £16.7 million

Total combined support is £109.7 million subject to due diligence

Further information

The Advanced Propulsion Centre (APC)

www.apcuk.co.uk

The APC is a £1 billion, 10-year programme to position the UK as a global centre of excellence for low carbon powertrain development and production. It was formed in 2013 in a joint commitment by government and the automotive industry, through the Automotive Council, and aims to save 50 million tonnes CO₂ by 2023.

APC facilitates partnerships between those who have good ideas and those who can bring them to market. The services provided by the APC enable projects which provide profitable growth and sustainable opportunities for the partners involved. Each programme enhances the UK's position as a propulsion nation and contributes to the country's economic prosperity.

So far, APC has launched and awarded 6 funding competitions to more than 100 organisations, with investment totalling £475 million. The awarded projects have safeguarded more than 14,000 automotive supply chain jobs and saved more than 20 million tonnes CO₂.

The activity in this £1 billion project is delivered through a small team working across the UK from a central Hub located at the University of Warwick and regional Spoke locations.

APC projects awarded funding will be led by:

- BMW – South East
- CNH Industrial – East of England
- Ford Motor Company Ltd – East of England
- Jaguar Land Rover – West Midlands
- Penso Consulting Ltd – West Midlands
- Westfield Sportscars Ltd – West Midlands
- Williams Advanced Engineering – South East

Centre for Connected and Autonomous Vehicles (CCAV)

www.gov.uk/government/collections/driverless-vehicles-connected-and-autonomous-technologies

The Centre for Connected and Autonomous Vehicles (CCAV) is a joint unit of the Department for Business, Energy and Industrial Strategy and the Department for Transport. CCAV is a single point of contact for those in industry, academia and internationally set up to keep the UK at the forefront of the development of connected and autonomous vehicle technology. For further information and to stay updated on the latest news and government activity on connected and autonomous vehicles visit www.gov.uk and follow us on twitter at [@ccavgovuk](https://twitter.com/ccavgovuk).

CAV2 projects awarded funding

- HumanDrive
- 5*StarS: Automotive Cyber Security through Assurance
- Smart ADAS Verification and Validation Methodology
- Multi-Car Collision Avoidance
- Self-organising Wide area Autonomous vehicle Real time Marshalling
- CAPRI
- Project Synergy
- Connected Fully Integrated Driver Ecosystem
- Anytime, Anywhere Low Cost Localisation
- Vote3Deep
- Non-Intrusive Vehicle Monitoring System (NiVMS)
- Connected Autonomous Sensing Service Delivery Vehicles
- Using Machine Learning and AI to explore systems for costing and managing Mobility as a Service
- Cambridge Autonomous Bus System Feasibility Study
- Advancing UK Autonomous Vehicle Radar Sensing Technology
- Secure CAN with Q-PUF
- 5G Millimetre-Wave Connectivity to Cars
- Quantum-based secure communication for CAVs
- Project Alloyed
- Requirement Evaluation of CAV Location Performance and Platform Development
- City-Compatible Commercial Automated Ride Sharing
- Real Time NOx calculation in LCV and HGV diesel vehicles using OBD real time engine data
- ESCIPODS
- Autonomous and Connected vehicles for Cleaner Air

The announcement of CAV2 winners builds on the £20 million allocated to projects in the first competition, CAV1, and the further £19 million invested by government in 2016 in three driverless car trials in Greenwich, Bristol, Milton Keynes and Coventry.