

Government backs cleaner planes, ships and automobiles with £37 million boost

- new cutting-edge network of industrial centres to help UK lead the charge to net zero by 2050
- 4 centres of excellence will help electrify planes, ships and cars
- comes as Prime Minister chairs new Cabinet committee meeting focusing on climate change

Business Secretary and COP26 President Alok Sharma today (Wednesday 4 March) announced a £36.7 million investment to design, test and manufacture electric machines in some of the UK's most polluting industries.

The announcement comes as the Prime Minister holds the first meeting of a new Cabinet committee focused on tackling climate change, discussing how the government can go further and faster towards net zero.

£30 million will be used to create 4 new, cutting-edge centres of excellence – based in Newport, Nottingham, Strathclyde and Sunderland – which will bring together climate change pioneers to research and develop green electric machines including planes, ships and cars.

Using state of the art equipment, the network will specialise in researching and developing technologies to electrify transport. Each centre will propel UK manufacturing to the forefront of global efforts to tackle climate change and ensure the UK can reach net zero emissions by 2050.

A further £6.7 million will be awarded to 14 projects that will help ensure the final buyer in supply chains – such as large automotive manufacturers – can access the parts and components they need to develop electric machines with ease.

This investment will have applications for electric vehicles, as well as other industries including rail, marine, aerospace and energy – all with the aim of switching away from fossil fuel technologies.

Business Secretary and COP26 President Alok Sharma said:

The electric revolution is an opportunity for our transport sectors to reduce the dependence on fossil fuels.

The UK is leading the way in developing cleaner technologies to help us reach our target of zero emissions by 2050 and these new centres will play an important part in that.

The £30 million industrialisation centres will provide a home for virtual product development, digital manufacturing and advanced assembly techniques, that could drive world-leading improvements in the testing and manufacturing

of electric machines.

This includes power electronics, electric machines and drives – all of which are crucial to controlling electricity in electric vehicles and ultimately to their widespread rollout on our streets.

More than 30 partner research and technology organisations will be a part of the industrialisation centres. The network will be headed up by lead partner Newcastle University, along with 21 other universities from around the UK, plus 13 research and technology organisations – and will be essential in attracting both foreign direct investment and new, innovative entrants into this space.

Driving the Electric Revolution challenge

The Business Secretary also today announced the winning projects for the government's [Driving the Electric Revolution challenge](#).

The 14 winning projects will help boost supply chain efficiencies in industries affected by electrification, from aerospace to automotive, to energy and rail.

A total of £6.7 million will be shared by the 14 projects, which comprise 38 major businesses from around the UK, including GKN, Jaguar Land Rover and Rolls-Royce.

Transport Minister Rachel Maclean said:

Funding and increased support for state-of-the-art electric manufacturing centres will help people, goods and services move across the nation, in a greener, safer and more reliable way than ever before.

By investing in world-leading science and engineering institutions, we are creating a modern transport system, bringing communities closer together while reducing the UK's contribution to climate change.

Notes to editors

New era of green fuel

[Drivers across the UK could soon be filling up their cars with a greener, lower emission fuel](#), the Department for Transport also announced today (Wednesday 4 March).

The [government is consulting on plans for E10](#) – a lower carbon fuel made with 10% ethanol – to become the standard grade of petrol at UK filling stations from next year.

Made from any plant that contains sugar, E10 has the potential to cut CO₂ from transport by 750,000 tonnes per year, equivalent to taking around 350,000 cars off the road.

Driving the Electric Revolution

Examples of the winning Driving the Electric Revolution challenge projects include:

- Electric machines – led by Belcan Engineering Services, this project will develop and help scale up UK manufacturing capability for electric machines that can be used in planes and cars
- Power electronics – run by the Compound Semiconductor Centre in Cardiff, this project will ensure that semiconductor materials – an essential building block for the next generation of electrification technologies – can reach the final buyer in a supply chain more quickly and efficiently
- Drives – this will enable project partners to increase their productivity in manufacturing drives and enable the lead partner – Magtec of Sheffield – to increase its supply of electric drivelines for large electric vehicles, such as bin lorries

Both the new centres and the winning projects are part of the government's Driving the Electric Revolution challenge, which aims to help the UK seize the economic opportunities from the global transition to clean technologies and electrification.

The Driving the Electric Revolution centres and the Driving the Electric Revolution challenge together aim to position the UK to seize the economic opportunities from the global transition to clean technologies and electrification. They will help businesses across numerous sectors including transport, energy, construction and agriculture to invest and work together to capitalise on the UK's strengths in this technology.

Driving the Electric Revolution centres – locations

- DER Centre North East – CESAM (Centre for Sustainable Advanced Manufacturing), International Advanced Manufacturing Park, Sunderland
- DER Centre Scotland – University of Strathclyde – located in NMIS (The National Manufacturing Institute Scotland) and PNDC (Power Networks Demonstration Centre)
- DER Centre Midlands – Distributed facilities, with a focus on the Power Electronics & Machines Centre, Jubilee Campus, University of Nottingham
- DER Centre South Wales & South West – Distributed facilities, coordinated by the Compound Semiconductor Application Catapult Innovation Centre, Newport

Driving the Electric Revolution competition

Further winning consortia include:

- Paragraf of Cambridge, working with Compound Semiconductor Applications Catapult, Rolls-Royce, Semelab and Aero Stanrew.

- Magway of Wembley, London working with Force Engineering, Aecom and Space Syntax
- Search for the Next of Nottingham, working with Semefab
- Dynex Semiconductor of Lincoln, working with City University of London
- Yasa of Oxford, working with Compound Semiconductor Applications Catapult
- TRW of Pontypool working with Romax Technology
- Lentus Composites of Eynsham, Oxfordshire, working with NCC Operations
- WMG at the University of Warwick, Voltalogic, Ashwoods Automotive and Hydr Aluminium Rolled Products
- API Capacitors of Great Yarmouth working with Compound Semiconductor Applications Catapult and Integral Powertrain Limited
- Cogent Power working with Compound Semiconductor Centre, Microsemi Semiconductor and Advanced Hall Sensors
- C. Brandauer & Co of Birmingham working with WMG at the University of Warwick and Jaguar Land Rover

Year of Climate Action

In 2019 the UK became the first major economy to introduce a new law to end our contribution to climate change by 2050. Reaching net zero will grow our economy, create thousands of new jobs in greener industries and protect our natural environment and planet for future generations.

2020 is the Year of Climate Action and everyone has a role to play. Together we can all make a difference. To find out more [visit the Year of Climate Action website](#).