Emissions-cutting trucks and next-gen hydrogen buses closer to hitting the road with £54 million government-led funding

- £54 million for projects including motorsport technology in car motors, hydrogen fuel cells for buses, and lightweight structures for electric heavy goods vehicles
- projects in England, Wales and Northern Ireland will secure nearly 10,000 jobs and save 45 million tonnes of CO_2
- investment will help drive energy-saving technology across a wide range of vehicles and propel forward a green economy recovery

Innovative green projects creating the next generation of electric trucks and hydrogen-powered buses are set to secure nearly 10,000 UK jobs and save millions of tonnes of carbon emissions, thanks to over £54 million funding announced today (22 March) by Business Secretary Kwasi Kwarteng.

The 3 projects in Cwmbran, Warwickshire and Ballymena will receive more than £54 million of funding from UK government and industry and are forecast to secure nearly 10,000 jobs across the UK. They could also save 45 million tonnes of carbon emissions, equal to the total amount of emissions produced by 1.8 million cars over their lifetimes.

Investment in new technologies, including hydrogen fuel cells, will help cement the UK's position as a global leader in automotive technology and support the country to build back better and greener from the pandemic by helping to meet the UK's climate goals.

The 3 projects being funded today are:

- £31.9 million to develop electric propulsion systems for heavy goods vehicles in Cwmbran, Wales. This technology could be applied in a range of ways, such as giving lorries greater travel range and better energy efficiency for coaches and construction vehicles
- £11.3 million to develop and manufacture energy-saving technology from motorsport for use in cars and vans from a centre in Warwickshire
- £11.2 million to develop and manufacture low-cost hydrogen fuel cell technology for buses and create a hydrogen centre of excellence with Wrightbus in Ballymena, Northern Ireland

Business Secretary Kwasi Kwarteng said:

> The UK is leading the world by developing cutting edge technology that will help to tackle climate change and lead to a green, competitive future for our automotive supply chain.

> These projects will not only help accelerate the wider application of greener technology in lorries and buses, but will also help generate the high-skilled jobs to level up communities across the UK while ensuring we build back greener from the pandemic.

This funding announcement builds on the recent launch of the government's national Bus Back Better strategy and the Prime Minister's 10 Point Plan for a Green Industrial Revolution, both of which aim to accelerate the shift to zero emission vehicles and decarbonise the UK's transport networks.

Transport Minister Rachel Maclean said:

> As we look to reduce our carbon emissions, strive towards our net-zero goals and level up right across the UK, the whole transport sector will need to embrace new innovative technology such as green hydrogen and these projects are a fantastic example of doing just that.
>
> I'm proud to see the UK leading the way in the global transition to zero-emission vehicles. In the next decade, we'll continue to be at the forefront of their design, manufacture and use as we build back greener.

Secretary of State for Northern Ireland, Brandon Lewis said:

> Northern Ireland and the local economy thrives on innovation, manufacturing and technological advancements, leading the charge in allowing us to reach our ambitious goal of a net zero future by 2050.
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> With a landmark investment of £11.2 million this will enable Wrightbus to become a centre of excellence for zero-emission technology in the heart of Ballymena.
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> This is outstanding news for the people of Northern Ireland, protecting more than 1,000 skilled jobs and creating more than 3,000 additional jobs over the next 10 years. This will continue to level up our local economy, allowing Wrightbus to continue producing the next generation of world-leading hydrogen buses.

Secretary of State for Wales, Simon Hart said:

> As we work towards net zero by 2050, South Wales will be a hub of innovation and green technology as we transform the UK economy over the coming years.
>
> The investment in electric propulsion systems in Cwmbran will create more than 1,000 skilled jobs. It follows recent UK

> government backing for the Global Centre of Rail Excellence and to develop a net zero industrial zone across South Wales as we ensure that the region's proud heritage is continued with the industries of the future.

CEO at the Advanced Propulsion Centre Ian Constance said:

> We are delighted to have guided the latest investment of more than £54 million in the development and production of innovative powertrains to further accelerate the transition of the automotive sector to a net-zero future. The funding will enable the UK to apply its world-class innovation and experience in electrification of vehicles across the supply chain in Great Britain and Northern Ireland.
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> From fuel cell technology for buses, designed and built in Ballymena, a lightweight electric powertrain for commercial vehicles developed and manufactured in Wales and an integrated motor and energy recovery systems system for cars and vans based on motorsport technology in Warwickshire, today's announcement secures and creates nearly 10,000 jobs and will cut CO2 emissions equivalent to removing the lifetime emissions of nearly 1.8 million cars.

By investing in new, greener technology for the UK automotive sector, funding of this kind will help realise the government's ambition for the UK to end its contribution to climate change by 2050.

The funding is being coordinated by the Advanced Propulsion Centre (APC) which supports the development of low carbon emission technologies for cars, buses, heavy goods vehicles, and vans. These projects will help further the UK's ongoing efforts to develop a sustainable supply chain for manufacturing electric vehicles by 2026.

About the Advanced Propulsion Centre

The Advanced Propulsion Centre (APC) collaborates with UK government, the automotive industry and academia to accelerate the industrialisation of technologies, supporting the transition to deliver net-zero emission vehicles.

Since its foundation in 2013, APC has funded 150 low-carbon projects involving 375 partners, working with companies of all sizes, and has helped to create or safeguard over 50,000 jobs in the UK. The technologies developed in these projects are projected to save over 260 million tonnes of CO2, the equivalent of removing the lifetime emissions from 10.2 million cars.

About the winners

Find further information about the projects which will be funded through this

round of investment.

Projects to receive funding from the latest Advanced Propulsion Centre funding competition APC17 include:

1. Next Gen FCEV (Fuel Cell Vehicle) [Ballymena, Northern Ireland] – The UK is a global leader in bus design and manufacturing. Wrightbus in Ballymena is developing hydrogen-powered fuel cell electric vehicle single and double-deck buses. This programme will enable higher volume production at lower cost and create a centre of excellence for zero emissions hydrogen technology to upskill and share knowledge in the UK.

2. EPIC (Electric Powertrain Integration for Heavy Commercial Vehicles) [Cwmbran, Wales] – The next generation of zero emissions heavy commercial vehicles need lightweight 'smart' powertrains to manage extreme levels of electrical power. The EPIC project led by Meritor in Cwmbran integrates the key elements of motor, inverter, gearbox, differential and brakes in a single lightweight system for vehicles up to 44 tonnes and includes coaches, off-highway and construction vehicles. The funding would also go towards the construction of a new technology centre in Scotland.

3. e-MOTIF (e-axle with MOT or Inverter and Flywheel) [Southam, Warwickshire, England] – Weight saving and reducing energy consumption are key to winning in motor racing. The e-MOTIF project led by Shield Manufacturing Technologies in Warwickshire combines lightweight energy recovery technology from motorsport with a new motor and inverter for cars and vans to cut energy consumption and CO2 emissions. The e-MOTIF project is scalable and cost effective for global manufacturers and will lead to three new manufacturing centres opening across the UK.

Quotes from the winners

Vice President and Chief Technology Officer at Meritor, John Bennett, said:

> With this award, our consortium will develop a game-changing electric powertrain for heavy-duty 4×2 and 6×2 vehicles up to 44 tonnes. This technology will provide commercial vehicle OEMs with the optimal solution to meet EU 2025 CO2 reduction targets, in addition to a host of other product benefits including greater efficiency, reduced weight, longer-range capability, and far greater application flexibility when compared to existing systems.

Vice President, Truck, Europe, China, Japan and ASEAN Meritor, Ken Hogan, said:

> This grant will put Meritor’s highly-skilled Welsh-based engineering team at the forefront of advanced commercial vehicle technologies, positioning South East Wales as the premier location for companies developing clean transportation and technologies. Meritor’s existing air disc brake facility in Cwmbran will house a new European eMobility Centre of Excellence with expanded laboratory and R&D facilities.

Managing Director of the Shield Group, Chris Shield, said:

> Shield Manufacturing Technologies is delighted to be working with APC and our partners to accelerate the development and production readiness of cutting-edge engineered technologies. The evolving market opportunity for this family of power-dense electric drive modules will generate significant numbers of skilled roles with associated investment across Shield’s facilities in the Midlands and opportunities for the region’s supplier base.

Executive Chairman of Wrightbus, Jo Bamford, said:

> The funding will allow us to realise our ambitions of creating a centre of excellence for zero-emission technology in Ballymena, enabling us to produce the next generation of world-leading hydrogen buses at a higher volume and a lower cost than ever before. It will safeguard more than 1,000 skilled jobs and will allow us to create more than 3,000 additional jobs over the next 10 years, giving a significant boost to the wider economy in Northern Ireland.