Electric motorbikes and off-road trucks to unlock growth and jobs across the UK

- Projects could secure more than 550 jobs, spur growth across the country and save nearly 27.6 million tonnes of carbon emissions
- Further 19 studies receiving funding could one day secure UK lithium production, fast charging technology and a UK-based battery recycling facility

Electric motorcycles and an all-terrain, 4×4 electric delivery truck designed for emerging markets are among the projects benefiting from more than £43 million of government and industry funding to help develop the latest green automotive technology, while seizing on the economic opportunities of the global transition to cleaner transport.

The 2 projects have been awarded funding through the <u>Advanced Propulsion</u> <u>Centre (APC)</u> Collaborative Research and Development competition, which supports the development of innovative low carbon automotive technology and will help propel the UK in the global race to secure electric vehicle supply chains. The projects are:

- **Project Zero Emission Norton**, Solihull, West Midlands £17.2 million (£8.5m funding through the APC) to develop an electric motorbike that delivers a high level of race performance and touring range, not only enhancing workforce capabilities and securing local jobs, but helping to strengthen the UK's competitive supply chain
- OX Delivers CLEAN (Clean Logistics for Emerging African Nations), Leamington Spa, Warwickshire — £17.1 million (£8.5m funding through the APC) to develop an all-terrain electric delivery truck designed for emerging markets and manufactured in the UK that can withstand tough off-road conditions by using long-life, lower cost batteries

The projects are set to secure more than 550 jobs and save 27.6 million tonnes of C02 — the equivalent of removing the lifetime emissions of 1.1 million cars from the road.

Minister for Investment Lord Grimstone said:

This funding, delivered through the government-backed Advanced Propulsion Centre, will support UK businesses at the cutting edge of the automotive industry to trial the very latest tech, from the development of electric motorbikes to off-road trucks.

Supporting these strategically important technologies lays the path for our electric vehicle sector to compete on a global scale, driving jobs and growth nationwide whilst also creating cleaner, more sustainable modes of transport.

In addition, 19 early-stage proposals that could bolster the UK electric vehicle supply chain have also been awarded funding to research, prove or enhance the case for their scale up, with the potential to create further jobs throughout the country.

The feasibility studies will be backed with £9.4 million in matched government-industry money through the <u>Automotive Transformation Fund (ATF)</u>. Areas to be investigated include the development of EV battery components and the viability of using UK-sourced critical minerals.

Studies awarded funding today include:

- Livista Energy Limited, London Investigating building Europe's first standalone lithium refining facility capable of producing battery grade lithium
- Nyobolt Ltd, Cambridge Assessing scale up of the manufacture of highpower battery technology that enables ultra-fast charging without sacrificing the battery's lifetime or safety
- LTS Transport Solutions, Queenborough Exploring the potential of opening a brand-new electric vehicle battery recycling plant in the UK by 2024

The ATF was created to accelerate the development of an electric vehicle supply chain, enabling UK-based manufacturers to scale up production in strategically important technologies. The ATF is delivered by the APC to support capital and late-stage R&D investments.

Ian Constance Chief Executive at the APC says:

The projects receiving today's investment highlight the breadth of technologies needed to help the UK accelerate to net zero emissions. They're reimagining not just vehicles, but transport in general.

This is the nineteenth round of funding 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.

ATF funding awards for 6-month projects

It also includes 19 ATF funding awards for 6-month projects that will look to research, prove or enhance the business case for scaling up automotive manufacturing or identify where the UK may have a gap to guide a commercial investment strategy. These projects include:

Batteries Anode

Deregallera Ltd — Cardiff, Wales: The APC forecast a significant deficit in locally manufactured anode material over the next decade and Deregallera stand poised to exploit this opportunity by moving to manufacture their sodium-ion anode material at scale in the UK. Large scale investment in chemical plant comes with a high level of risk, that this project reduces by exploring ways to expand the top-down and bottom-up parameters on production quantities, identifying the optimum size of the chemical plant and extending the existing techno-economic study out to 10,000 tonnes-per-annum production.

Echion Technologies — Cambridge, England: Project SHARP (Sprinting towards High-value Anode Roadmap for large-scale UK Production) feasibility study will inform Echion's high volume anode manufacturing strategy and prepare a roadmap and business case to grow the UK battery manufacturing supply chain and secure the UK's international competitiveness in the field of advanced battery materials production.

Nyobolt Ltd — Cambridge, England: In this project Nyobolt are defining the requirements for a large-scale manufacturing facility to produce their high-power battery technology for the automotive sector which enables ultra-fast charging without sacrificing lifetime or safety.

Talga Anode — Cambridge, England: This project will look to develop a business case based on feasibility of setting up a downstream graphitesilicon refining plant in the UK.

Batteries - Cathode

Geothermal Engineering — Redruth, England: The project will develop the business case for funding Direct Lithium Extraction (DLE) units to extract lithium from deep geothermal water in Cornwall.

Livista Energy Limited — London, England: Livista Energy is bringing localised, scalable lithium refining capability to Europe. The Livista lithium hub will produce battery grade lithium carbonate and lithium hydroxide both critical to accelerating the energy storage transition in line with global demand.

Northern Lithium Ltd - County Durham, England: Northern Lithium (NLi) wants to prove the economic case to invest more than £120 million over the next 5 to 8 years to establish large-scale, sustainable lithium extraction from brines, processing and supply in the North East of England.

Weardale Lithium Ltd — County Durham, England: The project will identify an investment ready business case for the extraction of lithium from geothermal brines taken from boreholes located at Eastgate, Weardale, County Durham.

Batteries — Cell Assembly

AMTE Power — Dundee, Scotland: AMTE Power — The feasibility study will produce the technical and commercial business case for a high-capacity battery factory.

Industrial Tomography Systems Ltd and University of Birmingham — Manchester, England: ITS's patented tomography technology has helped improve the manufacturing efficiency in many industrial sectors. At the end of the project, ITS will have a proven tomography system design that can support battery manufacturing processes, aiming to enhance product quality and overall yields. This project will benefit UK gigafactories in developing an efficient production process.

Nanotech Energy, Inc. — US-based battery manufacturer Nanotech Energy (NE) will investigate the viability of expanding its battery production facilities of their patented, high-performing, non-flammable Graphene batteries and other graphene-powered products in the UK.

Ilika Technologies Ltd — Romsey, England: Ilika and the UK Battery Industrialisation Centre are collaborating on this project to carry out an economic feasibility study to assess the costs of creating a dedicated 100 MWh solid-state battery production line within the UKBIC's facilities.

Batteries - Recycling

Altilium Metals Ltd — Tiptree, England: This feasibility study will accelerate and support the investment decision regarding Altilium Metals developing a new UK greenfield site capable of processing 10,000 MT of end-of-life lithium-ion electric vehicle batteries, gigafactory scrap and electronic waste, enabling 4750 MT of critical cathode metals to be recovered and supplied back into the EV battery industry by 2025. This site is the first of four planned to meet UK demand until 2050.

Talga Anode UK Ltd — Cambridge, England: This feasibility study will evaluate the reuse of spent graphite anode material to produce high surface area graphite and graphene-like materials and develop a business case for further investment in the concept.

LTS Transport Solutions — Queenborough, England: LTS Transport Solutions is exploring the commercial viability of opening a brand-new electric battery recycling plant in the United Kingdom by 2024.

Fuel Cell - MEA and Stack Assembly

Bramble Energy Ltd — Crawley, England: The PCBFC $^{\text{m}}$ Range Extender feasibility study will develop a robust and detailed business case to manufacture the printed circuit board fuel cell (PCBFC $^{\text{m}}$) for the automotive sector in the UK.

Jaguar Land Rover Ltd and Johnson Matthey Hydrogen Technologies Ltd — Coventry, England: The ARES feasibility study project is investigating the potential for a UK automotive supply chain to scale-up and manufacture competitive high value on-vehicle hydrogen and fuel cell technologies, including the use of semi-finished electrochemical parts produced in the UK.

Adelan Ltd, Ant Industries Ltd and the Manufacturing Technology Centre — Birmingham, England: The feasibility study examines the practicalities and cost-benefits of scaled manufacturing of a fuel cell in the UK.

Power Electronics

INEX Microtechnologies Ltd — Newcastle-upon-Tyne, England: This project will allow Inex to fully investigate and develop plans for the business that maximise the opportunity available in the automotive sector for a UK based supplier of Compound Semiconductor devices particularly focused on gallium nitride.

Ouotes from the APC19 winners

Simon Davis, Managing Director, OX Delivers said:

Developing a truck for Pay-As-You-Go service requires a completely different approach compared to a traditional vehicle. The Advanced Propulsion Centre have been brilliant champions of OX Delivers as we progressed our first electric truck.

As a UK business we are delighted to be awarded further support to work in partnership with large and small-scale businesses and lead the decarbonisation of emerging market transport using the latest Industry 4.0 technology and UK EV expertise. This award reinforces OX's game-changing vision for emerging markets and is more exciting momentum for our innovative and dynamic automotive start-up.

Robert Hentschel, CEO Norton Motorcycles said:

Over the last year and a half, we have invested in rebuilding Norton to its innovative, challenging and pioneering heyday. That spirit of innovation will ensure our future electric models provide riders with unparalleled performance that closes the gap between ICE and EV motorcycles by making them comparable in every respect.

But we want to lead, not follow and by assembling this team of partners that share our pioneering spirit, we will expand Norton's capability while gaining knowledge and experience to produce industry leading electric motorcycles that are designed and manufactured in the UK.

About the Advanced Propulsion Centre UK

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 172 low-carbon projects involving 410 partners, working with companies of all sizes, and has helped to create or safeguard nearly 50,000 jobs in the UK. The technologies developed in these projects are projected to save over 297 million tonnes of

CO2, the equivalent of removing the lifetime emissions from 12 million cars.

With its deep sector expertise and cutting-edge knowledge of new propulsion technologies, APC's role in building and advising project consortia helps projects start more quickly and deliver increased value. In the longer term, its work to drive innovation and encourage collaboration is building the foundations for a successful and sustainable UK automotive industry.

In 2019 the UK government committed the Automotive Transformation Fund (ATF) to accelerate the development of a net-zero vehicle supply chain, enabling UK-based manufacturers to serve global markets. ATF investments are awarded through the APC to support strategically important UK capital and R&D investments that will enable companies involved in batteries, motors and drives, power electronics, fuel cells, recycling, and associated supply chains to anchor their future.

Supporting a Haitian-led solution to complex security, health and economic challenges

Thank you President.

I would like to thank SRSG La Lime for her briefing and her team's work in an increasingly challenging context.

I welcome hearing from our civil society briefer today and His Excellency joining us today.

President, allow me to make three points.

Firstly, the international community must remain committed to supporting a Haitian-led solution to the complex security, health and economic challenges faced by the Haitian people. The United Kingdom firmly believes that the work of United Nations Integrated Office in Haiti is fundamental in facilitating a unitied approach to resolving these multifaceted challenges. By strengthening the Haitian National Police and facilitating dialogue between Haitian political stakeholders, BINUH's efforts lay the groundwork for stability in Haiti. It is therefore critical that BINUH continues this work and we look forward to discussions on the renewal.

Secondly, while we support Haitian-led solutions, we understand there has been limited progress by Haitian stakeholders in resolving the political gridlock. We are disappointed that this continues to obstruct potential solutions for securing the welfare of the Haitian people.

We call on all actors to resume negotiations, and agree to form a government capable of ensuring the necessary security environment within which free and fair elections can be held as soon as possible.

Furthermore, it is extremely regrettable that the perpetrators of the assassination of President Moïse have not yet been brought to justice. This abhorrent act undermined the Haitian people's right to determine their own future democratically.

Thirdly, as this Council discussed in February, the security and human rights situation continues to deteriorate, notably with the increase in kidnappings, indiscriminate criminal violence, and instances of human trafficking. These kidnappings are increasingly targeting members of the international community who are often supporting the efforts of the Haitian government to overcome these crises.

Women and girls in Haiti experience myriad human rights abuses, including sexual and gender-based violence. The United Kingdom urges the Haitian authorities to improve access to medical and psychosocial services for survivors, and to hold perpetrators to account.

We continue to support BINUH's work with the Government of Haiti and the international community to tackle these challenges. We look forward to renewed efforts by BINUH to help restore human rights and the rule of law in its next mandate.

President, we remain deeply worried by the humanitarian situation in Haiti. Existing economic and health crises have been compounded by the devastating earthquake in southern Haiti last year, and by the rise in global food prices exacerbated by Russia's invasion of Ukraine. The United Kingdom encourages all actors to work constructively to find solutions to the root causes of these crises, and to support recovery and progress for the Haitian people.

The role of European Union in supporting international peace and security

Thank you, President and I join others in thanking the High Representative for his briefing and in wishing him a speedy recovery and return to in-person meetings.

This, as so many colleagues have said, has been one of the most challenging years for Europe since the Second World War, with Russia's illegal and unprovoked invasion of Ukraine causing death and devastation, and forcing millions of refugees into neighbouring states.

It has been a challenging year for the international community, with Russia's actions and other conflicts exacerbating existing problems in a world ravaged by the Covid-19 pandemic and climate change.

And it has been a challenging year for the UN, the multilateral system, and the rules-based international norms that we value.

We therefore welcome the positive role played by the EU and other regional organisations in promoting diplomacy and multilateralism, and supporting the Security Council on international peace and security.

First, we welcome the incredible support to Ukrainians, and the assistance provided to Ukraine to defend itself. The UK supports an outward-looking EU and values our cooperation on responding to this latest breach of Ukraine's sovereignty and territorial integrity. This includes coordinating on measures to limit Russia's ability to finance and wage its war; and on the Atrocity Crimes Advisory Group to support the Ukrainian Prosecutor-General.

We are also working together on matters of food security. I would like to welcome in particular the High-Representative's words rebutting disinformation on sanctions.

Second, we welcome the EU's important contribution to the Council's work. This includes EU efforts on restoring the JCPoA; its renewed partnership with the African Union; and its contribution to UN peace operations and peacebuilding, including for example, its contribution on Somalia.

In Europe, we strongly support the EU's efforts in the Western Balkans, where we are coordinating to support the region's European orientation; to secure progress in the EU-facilitated Serbia-Kosovo Dialogue; and working towards the renewal of the EUFOR Althea Mandate in November.

Finally, we welcome the EU's work on global systemic challenges. Seven months since COP26, the EU and the UK are coordinating to pick up the pace on delivering a net zero, climate-resilient transition. At a time of global instability, with growing challenges of inflation, debt and food insecurity, we are united in our determination to deliver on the Glasgow Climate Pact and ensure the successful legacy of COP26.

UN Human Rights Council 50: UK statement on Mariupol

Señor presidente

Hospitals, schools, theatres reduced to rubble. Mass graves, illegal abductions, torture, sexual violence. Women, children, the elderly left

sheltering in bunkers. Deprived of food, water and medicine. The brutal reality of Putin's war.

A total disregard for human rights, international humanitarian law, and the principles of the Charter.

These war crimes must be investigated and those responsible held to account.

Madam High Commissioner, we fully share your concerns on the death penalty sentences imposed against Aiden Aslin, Shaun Pinner and Brahim Saaudun. All Prisoners of War must be treated in accordance with international humanitarian law. Once again, we call on Russia to respect international law.

The UK has led efforts to refer the situation in Ukraine to the International Criminal Court. We will make every effort to assist that investigation. We will work with international partners, including through the EU-US-UK Atrocity Crimes Advisory Group, to support the Ukrainian Prosecutor General and assist Ukraine's domestic investigation.

And we will continue to stand by the Ukrainian people in their hour of need, committing three billion pounds of humanitarian aid, economic assistance and military aid.

Madam High Commissioner,

What more can the international community do to support civilians bearing the brunt of Russia's aggression in Mariupol, and other areas currently under Russia's control?

<u>Delivering change for disabled people</u> <u>through economic empowerment: COSP15</u> <u>roundtable</u>

Thank you Madam Chair,

The aim of the United Kingdom government is clear: to deliver long term change through practical actions and wide ranging policies across government, which enable disabled people to live full and independent lives. I'm therefore delighted to take part in this very important roundtable discussion.

We are delivering on this ambition in terms of economic empowerment. We've seen 1.3 million more disabled people in work than in 2017, delivering a government commitment five years early. The general trend in disability employment has been positive, with strong growth in the number and rate of

disabled people in employment and a narrowing of the disability employment gap.

Over the next three years, our government will invest £1.3 billion in employment support for disabled people and people with health conditions. For example, the Access to Work Scheme provides employees with grants of up to up to £62,900 per year to cover workplace adaptations such as special equipment, support workers and travel to and from work.

More and more employers are recognising the value that disabled people can bring to their business as talent and indeed, as customers. But many employers still lack the confidence, the knowledge, the processes and skills they need to support disabled staff effectively and be inclusive and fully accessible. And that's why through the Disability Confidence Scheme, we're working with employers to change attitudes and create employment opportunities through the recruitment and retention of disabled people in the workplace.

I want to take this opportunity to agree with the representative of the World Blind Union who spoke so powerfully of dignity and simple desire, but also of the interlocking other challenges. Josh Wintersgill's story from the panel told us this as well.

So our goal therefore is to improve disabled people's everyday lives in the United Kingdom. And together with all of you at this conference, we want disabled people to be economically empowered and part of economic growth as we build back better after the pandemic. Thank you.