

New aerospace innovation to propel UK to growth and greener skies backed by £273 million

- Solar-powered aircraft and NHS treatment carrying drones are among latest innovations backed by £273 million of government and industry funding
- package to help UK aerospace sector seize jobs and growth opportunities from the global green flight revolution and other emerging sectors like drone technology
- announcement comes on first day of the Farnborough International Airshow, where the Business Secretary will deliver a keynote speech today

Solar powered aircraft, ultra-efficient wings and medical treatment carrying drones are just some of the technologies backed by £273 million to advance low-carbon aerospace innovation, economic growth and jobs, Business Secretary Kwasi Kwarteng will announce at the Farnborough International Airshow today (Monday 18 July).

The Aerospace Technology Institute estimates ATI Programme projects are set to secure 81,000 jobs, while contributing £97 billion of economic value to the UK. Today £155 million of joint government-industry funding has been announced to support new projects unlocking the latest in green aerospace innovation, such as hydrogen and battery technology, and ultra-efficient manufacturing processes and technologies, such as digital and additive manufacturing – generating further job opportunities and leads in emerging technologies and sectors.

A further £105.5 million of government-industry funding will be shared by projects focused on developing air transport systems and enabling new vehicle technologies through the Future Flight Challenge. The projects could create more than 8,800 jobs and include making motorways safer and improving journey times by using electric drones to survey hazards, to using electric drones to distribute medical treatments across Scotland, including to cancer patients.

The Business Secretary will also announce up to £12 million is to be made available through the Regulators' Pioneer Fund to back initiatives that could unlock industries of the future through regulation – from flying cars to vaccine-carrying drones. Finally, a [Drone Ambition Statement](#) has been published today, outlining how government and industry can work together to seize on drones' potential £45 billion of benefit to the economy by 2030.

Business Secretary Kwasi Kwarteng said:

The return of the Farnborough International Airshow after a four-year absence is a clear example of the aerospace and aviation

sector's recovery. Today's package of support will further this recovery and help the sector seize on the enormous opportunities for growth that exist as the world transitions to cleaner forms of flight.

Through funding for the latest in green technology, such as solar and hydrogen powered aircraft, and setting out our vision for the fast-growing market for commercial drones, we are once again placing the aerospace sector directly at the centre of our plans to deliver jobs and grow the economy.

Among 31 Aerospace Technology Institute Programme competition winners, backed by £155 million of government-industry funding, are:

- High Density Aerospace Solar Power led by Microlink Devices UK – £6.7 million to secure a high-volume, highly automated manufacturing capability in solar cells for the UK that could be used on electric aircraft
- UToPEA led by Yasa – £11.1 million to transfer knowledge of high-power, high-torque, super low weight electric motors and power electronics from premium automotive sector into the urban air mobility (electric air taxi) market. YASA's aerospace division was spun-out as Evolito Ltd in 2021
- eXtra High Performance Wing led by Airbus – £19.9 million to develop ultra-wide span wings, providing significant performance benefits through weight reduction
- NGC3 led by Crompton Technology Group – £5.3 million to develop weight reduction components aimed at facilitating carbon composite wings

Through the Future Flight Challenge led by UK Research and Innovation, 17 projects will share £105.5 million in funding to develop and demonstrate integrated aviation systems and new vehicle technologies. The projects will work with the Civil Aviation Authority to ensure they are delivered safely and effectively. They include:

- Project HEART, based in Orkney and Bedford – £10 million to explore using aircraft powered by hydrogen or electricity to open up greener regional connectivity across the UK
- Open Skies Cornwall – £2.4 million to work with Royal Mail and NHS Kernow to use drones to provide residents on the Isles of Scilly with regular, reliable deliveries of mail and medical supplies
- CAELUS 2, based across Scotland – £10.1 million to use electric drones to support the distribution of medical products and medicines across Scotland, including helping to treat cancer patients in their local community, rather than requiring them to travel
- Skyway, based in Reading – £12.9 million to use drones to quickly and efficiently survey infrastructure, such as motorways and ports, reducing the need for costly transport system closures and improving delivery times

A new £12 million funding pot will be made available through the Regulators'

Pioneer Fund to support bold initiatives by regulators and local authorities that enable the UK's regulatory environment to keep pace with cutting-edge innovation. Bids for up to £1 million per project will open on 21 July.

Previous funding has supported development of a world-first regime for crash-protected containers that drones can use to carry sensitive goods such as vaccines and a project to unlock regulatory barriers to flying taxis.

Transport Minister Robert Courts said:

The steps we have set out today will ensure our aviation sector remains world-leading and fit for the future, helping to deliver on our ambitious climate change goals and boost high-skilled job opportunities.

Integrating drones into our transport system will play a huge part in better connecting communities, from potentially delivering vital NHS treatments in isolated communities to capturing high quality aerial imaging for rescue teams.

A Drone Ambition Statement has been produced in collaboration with the Drone Industry Action Group, outlining how the UK will embed a business environment that supports the development of drone technologies and can deliver 650,000 jobs in the sector by 2030. This will be achieved through government investments like those made today through the Future Flight Challenge, effective regulation, a consultation on enabling 5G connected drones for commercial use and improving public communications to underline the potential benefits of commercial drones.

The ATI Programme and Future Flight Challenge are key components of the government's Jet Zero policy, which includes the Jet Zero Council, established to convene government, industry and academia, and jointly chaired by the Business Secretary and Transport Secretary. A final Jet Zero Strategy will be published this summer.

Government will also work with industry through the Aerospace Growth Partnership, which launches a new strategy "Destination Net Zero" tomorrow, to deliver the sector's transition to greener forms of aviation.

The ATI Programme is a joint government and industry investment. Its purpose is to competitively offer funding for research and technology development in the UK, to maintain and grow the UK's competitive position in civil aerospace. It is open to UK businesses of any size for research funding. Alongside the main Strategic Programme, it will also run 2 funding streams targeted at delivering tailored support and mentoring to SMEs.

Spending Review 2021 increased government funding for the ATI programme to £685 million.

Estimates of jobs secured and economic value by the ATI Programme are estimated and published independently by the ATI.

The Future Flight Challenge is investing up to £125 million to develop greener ways to fly, such as all-electric aircraft and deliveries by drone, by advancing electric and autonomous flight technologies. The investment is matched by £175 million from industry. The challenge aims to bring together technologies in electrification, aviation systems and autonomy to create new modes of air travel and capability

The [Drone Ambition Statement](#) outlines the following core components for delivery of a successful sector, including:

- government's Future of Flight Plan and Future of Flight Industry Group in developing a pathway to new uses and users of aviation and airspace
- funding to ensure the UK supports and builds on the best of British drone technology, including through the Future Flight challenge, investing in and demonstrating new operating models and developing new frameworks to enable drone capabilities to thrive
- implementation of sector-specific skills and CPD programmes to support effective end-user drone adoption and integration
- supporting drone innovators in their ambitions to start-up and grow their businesses in the UK, and convening the Drone Industry Action Group to support collaboration between government and the drone community
- wider regulatory support to enable routine drone operations, including a well-resourced CAA and refreshed Airspace Modernisation Strategy, and an Ofcom consultation to deliver robust drone communications and connectivity aiming to enable 4G and, in time, 5G for commercial use
- active public outreach and communications underlining the positive potential uses for and benefits of commercial drones