



UK UAM CONSORTIUM

MAY 2022



NATS

Heathrow

LONDON CITY AIRPORT



THE LAUNCH OF ELECTRIC URBAN AVIATION

DELIVERING ENVIRONMENTAL, ECONOMIC, AND
MOBILITY BENEFITS TO THE UK THIS DECADE



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ABOUT THE UK UAM CONSORTIUM

We are a team of world-leading aviation organisations with expertise that spans the aviation industry. Together, we are working to support the growth of Urban Air Mobility (UAM) in the UK. With members from the UK, Germany, US, and Brazil, we have the insight, expertise, and innovative spirit to build an integrated and scalable UAM ecosystem. The UK Consortium members are Eve, NATS, Skyports, London City Airport, Heathrow Airport, Vertical Aerospace, Volocopter, and Atech.

Our experience is broad, and our vision is future oriented. Our collective expertise includes:

- Creating and testing airspace concepts
- Designing eVTOL aircraft
- Managing air traffic and designing airspace
- Planning airports and passenger facilities
- Developing vertiports
- Integrating air traffic management software systems

Learn more at www.UKAirMobility.com





Eve is dedicated to accelerating the UAM ecosystem. Benefitting from a start-up mindset, backed by Embraer's more than 50-year history of aerospace expertise, and with a singular focus, Eve is taking a holistic approach to progressing the UAM ecosystem, with an advanced eVTOL project, a comprehensive global services and support network, and a unique air traffic management solution.



NATS is the main Air Navigation Service Provider in the United Kingdom, providing services to more than 2.2M flights annually in the UK's oceanic, en route, and airport airspace.

NATS is involved in both ATM and UTM research projects nationally and in Europe. NATS has been involved in the integration of unmanned air vehicles for a number of years, including supporting its military customer in accommodating military RPAS platforms. As the UTM market grows, NATS is playing a critical role in helping industry to develop concepts of operation for future BVLOS operations and thereby evolve its UK operations to enable the full integration of crewed and uncrewed flights.



Heathrow Airport is the UK's only hub airport and one of the world's top international aviation hubs. The airport is Britain's largest cargo port, helping to drive UK trade growth. Heathrow's aim is to provide passengers with the best airport service in the world, and we're delighted to have been voted one of the world's top ten airports in 2021 Skytrax awards. Heathrow Airport was instrumental in the UK aviation sector's world leading commitment to Net Zero and called for the Jet Zero council to be established, which Heathrow's Chief Operating Officer now leads.



We are London's most central airport and known internationally for our punctuality, speed of service, our award-winning customer experience and our commitment to innovation. Recognising that it has never been more important for passengers to have confidence when they book, we offer them safe, careful, and speedy journeys through the capital's best connected airport, to Europe and beyond.

We are a carbon-neutral accredited airport and are committed to becoming net zero by 2050, in line with UK and global aspirations.



Skyports, established in 2017, is the leading owner and operator of vertiports for the emerging Advanced Air Mobility industry. Skyports designed and built the world's first passenger vertiport prototype in Singapore in 2019 and, in collaboration with its vehicle partner, Volocopter, conducted the first-ever urban flight trials in Marina Bay. Skyports are now focused on designing and building vehicle-agnostic vertiport networks in a number of cities around the world with commercial flights planned for 2023.

Skyports have ongoing projects in France, Germany, Singapore, Japan, Los Angeles, and Australia. They chair the EUROCAE and GAMA vertiport standards committees and actively contribute to EASA's and FAA's task forces shaping vertiport regulation.



Vertical Aerospace is a leading UK-headquartered engineering and aeronautical business founded in 2016 by energy tech entrepreneur Stephen Fitzpatrick to develop electric Vertical Take-Off and Landing aircraft. Vertical is pioneering electric aviation through designing, manufacturing, selling, and servicing one of the world's best eVTOL aircraft. The VA-X4 will travel at speeds of up to 200mph, be near silent in flight, produce zero operating emissions and operate at a low cost per passenger mile.



Volocopter brings UAM to megacities worldwide. For that, we create sustainable and scalable UAM ecosystems with partners in infrastructure and operations. Volocopter's family of eVTOL aircraft will offer passengers (VoloCity and VoloConnect) and goods (VoloDrone) swift, secure, and emission-free connections to their destinations, supported by VoloIQ, the UAM ecosystem's software platform that serves as its digital backbone for safe and efficient operations.

As a pioneer in the UAM industry, Volocopter will launch commercial services within the next few years. Founded in 2011, the company employs more than 500 people in Germany and Singapore and has completed over 1,000 successful public and private test flights, including several global cities such as Dubai, Singapore, Paris, Oshkosh, and Helsinki.



Atech is an Embraer Group company that specialises in the development of solutions for mission-critical applications and technologies that support decision making. Recognized as a Brazilian "System House", Atech has always been guided by innovation. It has developed a unique profile thanks to its strong presence in strategic Security and Defence projects in Brazil. It has created innovative solutions for air traffic control, command and control systems, instrumentation and control systems, embedded systems, and simulators.

SECTION 1

THE ARRIVAL OF ZERO-EMISSIONS URBAN FLIGHTS



INNOVATIONS IN AEROSPACE ENGINEERING, BATTERY ENGINEERING, AND AIRSPACE MANAGEMENT WILL LAUNCH THE ERA OF ZERO-EMISSIONS FLIGHTS.



Aerospace engineers are designing quieter electric aircraft, battery innovations are enabling longer range flights, and NATS is leading the way in modernising our airspace to enable quicker, quieter, and cleaner flights.

Decarbonising transportation is a key part of the UK's Net Zero strategy. The task of decarbonising the aviation industry is an enormous challenge, one that is recognised by the Department for Transport, which aims to achieve zero emissions on domestic flights by 2040 ^[5], and the Jet Zero Council, which aims to launch a long-range, trans-Atlantic zero-emissions aircraft by 2050 ^[33].

Significant investment has been directed to decarbonising aviation in the long term, through new technologies and more efficient airspace management. However, the first steps toward achieving sustainable flight without the use of fossil fuels needs to begin with innovations that enable zero-emissions trips across short distances. The knowledge and experience gained from enabling short-distance flights will aid the evolution toward sustainable long-range flights across oceans and continents.

Fortunately, the technologies needed to fly short-distance zero-emissions flights are already here. By 2025, we'll have the option of taking a new class of electric aircraft called an electric vertical take-off and landing vehicle (eVTOL) on short trips across a city or region. We'll walk to our local vertiport—a hub where eVTOLs will land and take off—to board our flight. A few minutes after take-off, we'll land at another vertiport near our destination. These aircraft will operate quietly (to enable community acceptance) and cleanly because eVTOLs will be powered by electric motors.

The shift from fossil fuel to electric-powered motors will make urban air mobility (UAM) a more accessible option to more people. Electric UAM can particularly benefit people in areas that are not well connected by surface transportation. It offers communities a sustainable new

way to quickly connect to transit systems and other parts of the city or region. While initially, the price of a flight on an eVTOL may be high, it will become more affordable over time as the route network and fleets expand and infrastructure scales.

Zero-emissions UAM will offer the UK an array of environmental, social, and economic benefits. This technology accelerates the adoption of zero-emissions mobility, attracts direct investment that create skilled jobs, and provides communities with a new green mobility option. The benefits to the UK fall under the following four pillars.



USE CASES

Electric UAM can complement existing transportation systems and offer a flexible mode of transport. Urban mobility will be unencumbered by natural barriers, such as waterways, nor be bound to terrestrial routes such as rail and road networks.



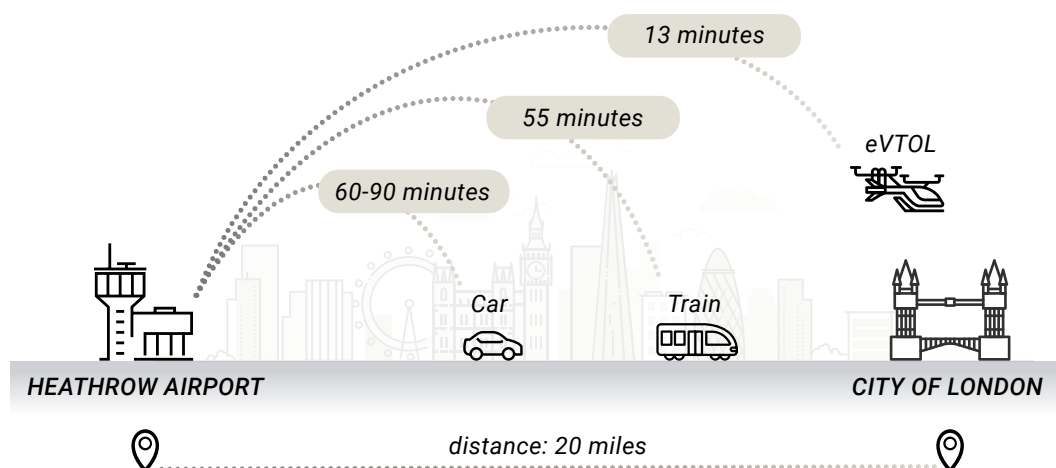
Some early eVTOL use cases are likely to include:

- **Airport Shuttles;**
- **Commuter Transport;**
- **Tourism Flights.**

Trips to and from airports will be quicker and arrive in a more predictable timeframe, mitigating the risks from missing flights due to traffic. Commuters could connect to major transit exchanges more quickly, simply, and directly. Tourists will be able to experience not only urban areas but also visit regional attractions more easily, and businesses could send and receive cargo more expeditiously. Other applications for UAM flights include emergency services and medical transport where missions can be accomplished quickly and sustainably.

AIRPORT SHUTTLE USE CASE

Trip Duration - A comparison of the time savings across three different transportation modes



TIME SAVINGS

eVTOL Time Saving Compared to Train 42 minutes

eVTOL Time Saving Compared to Car..... 47 -77 minutes

INVESTING IN THE UK UAM INFRASTRUCTURE

Given the more accessible price point and the time savings, electric UAM is expected to appeal to more people and generate market demand rapidly.



The UK is expected to be one of the world's first launch markets in a global UAM industry that is projected to be worth US\$510B ^[1] by 2040. The UK market is expected to scale quickly and forecast to generate £30B in revenue by 2050 ^[39].



The growth of electric UAM in the UK will require a complex ecosystem that integrates the air, ground, and digital infrastructure. Investments will be needed to ensure battery charging technologies, vertiports, passenger services, fleet operations, air traffic management, and more, are in place and ready to scale as demand grows. For example, vertiports are needed to provide a place for eVTOLs to take off, land, and recharge their batteries while digital infrastructure will be needed to manage traffic and ensure safety in the urban airspace. Electric UAM also provides an opportunity to revitalise infrastructure that may be currently underutilised. All of these infrastructure and services will attract significant amounts of investment and generate demand for a new skilled workforce.

A key consideration when introducing eVTOLs is airspace integration over urban areas. The UK UAM Consortium, a group of eight world-leading aviation organisations that includes Eve, NATS, Skyports, London City Airport, Heathrow Airport, Vertical Aerospace, Volocopter, and Atech, worked with the UK Civil Aviation Authority (CAA) to develop a concept of operations (CONOPS) to safely integrate eVTOLs into the UK's low-level urban airspace. Early results, as published by the CAA in CAP2272, highlight the key challenges to integrating electric

UAM flights with other airspace users ^[30]. The CONOPS offers solutions to address regulatory barriers. These proposed solutions were also tested in the context of the complex London airspace ^[39]. The results will assist the CAA to better understand how regulations could be adapted to safely accommodate the launch and growth of electric UAM across the UK.

The UK government recognises the potential of UAM and has committed £125M to fund research and development of electric and autonomous aircraft in the UK Research and Innovation (UKRI) Future Flight Challenge ^[37]. Industry is matching this investment by committing another £175M.

Beyond research and development, eVTOL and vertiport operators have commenced investing in the future of UAM in the UK. Skyports is developing at least two vertiport sites in London—in Canary Wharf and Brent Cross Town ^[26, 27]. In parallel to investments in ground infrastructure, UK fleet operators are investing in eVTOLs with plans to use them for passenger services. Halo has ordered a fleet of eVTOLs from Eve ^[11], while Virgin Atlantic is planning to operate a fleet of eVTOLs from Vertical Aerospace ^[42]. Bristow plans to operate a fleet of eVTOLs from at least two manufacturers: Eve and Vertical Aerospace ^[12, 39].

SECTION 2

WHAT IS AN eVTOL?



» QUIET

Engineered to minimise noise and enable community acceptance. eVTOLs are expected to be at least 80% quieter than helicopters.



» SAFE

Multiple rotors and advanced avionics provide peace of mind. eVTOL flights will be as safe as commercial aviation.



» ZERO CARBON

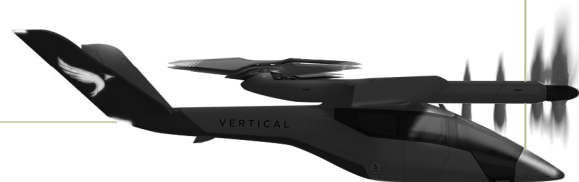
Electric motors emit no greenhouse gasses.

» READY TO EVOLVE

Initially piloted but capable of autonomy when regulations allow.

» QUICK

Trips across short distances take only minutes, providing more direct and simpler journeys.



SECTION 3

WHEN WILL eVTOLS ARRIVE?



THE FIRST eVTOLS ARE EXPECTED TO START OPERATIONS IN 2024.

The demand for electric UAM flights is expected to grow quickly. Route networks will expand as more eVTOLs enter the market and operators offer more commercial flights. By 2030, the UAM route network is expected to have grown significantly.

2020	UK UAM Consortium established.
2021	UK UAM Consortium completes Concept of Operations for CAA.
2022	Vertiport certification requirements released.
2023	Vertiport test beds open in UK.
2024	First commercial electric UAM operations begin.
2025	More eVTOLs enter the market and UAM route networks expand.
2026	UK UAM industry and route network scales.



SECTION 4

HOW THE UK CAN BENEFIT FROM ELECTRIC UAM



COMMUNITIES ARE POWERFUL. THEIR VOICES CAN WELCOME, REMOVE, OR BLOCK INNOVATIONS.

Listening to communities and delivering meaningful benefits will be critical for the long-term growth of zero-emissions UAM. This new transportation mode must align to communities' values, benefit a broad section of the population, and advance the long-term goals of the country.

In this section, we highlight the four major areas in which a sustainable UAM industry can benefit the UK.

1. SUSTAINABILITY.

Delivering Zero-Emissions Flights This Decade

2. COMMUNITY CONNECTIVITY.

Simplifying Access to Work, Education and Healthcare

3. INVESTMENT AND ECONOMIC GROWTH.

Delivering Green Jobs and Spurring Investment

4. GLOBAL LEADERSHIP.

Staying at the Forefront of Innovation and Competitiveness



SUSTAINABILITY:

DELIVERING ZERO-EMISSIONS FLIGHTS THIS DECADE

Sustainable, zero-emissions aircraft will offer clean, quiet, and quick flights that can simplify urban and regional mobility without emitting greenhouse gasses.

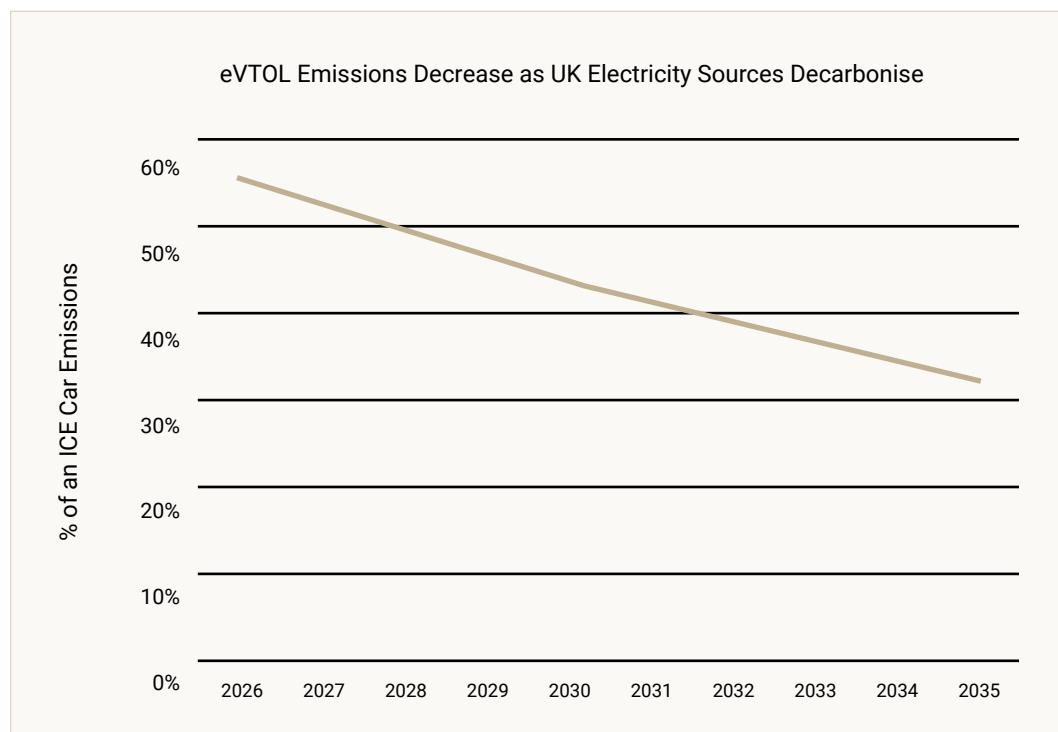
Urgency in tackling the climate crisis is at the core of the UK's Net Zero strategy, which includes plans to power Britain with clean electricity by 2035, decarbonise all forms of transportation, and attain a net zero economy by 2050 ^[5, 17]. Furthermore, the Net Zero strategy aims to invest almost £10B into green energy initiatives, launch infrastructure financing for regional and local economic growth, and create 2 million green jobs by 2030. Strategies to decarbonise our cities and transportation have rewards beyond the environmental and health benefits. It offers an enormous opportunity to rethink how cities move, people connect, and economies are shaped.

At a local level, the Mayor of London is addressing the climate crisis and driving economic recovery from COVID through several initiatives. One of these is the Green New Deal which aims to transform the city into a cleaner, healthier, and greener place to live and work ^[21]. Key priorities are achieving a zero-carbon economy, improving transportation and air quality, and developing green infrastructure.

The introduction of eVTOLs will accelerate the journey toward zero-emissions aviation. Although the UK aims to achieve zero-emissions domestic flights by 2040—a timeframe that is almost 20 years away, the launch of eVTOLs this decade will mark the start of zero-emissions flights in a much shorter timeframe. The knowledge gained about safety, battery life, infrastructural needs, and aircraft design will inform broader long-term efforts to decarbonise the greater aviation industry.



The environmental benefits from electric UAM flights will be evident from Day 1. Although during flight, eVTOLs do not emit greenhouse gasses, calculations also need to consider the emissions from the electricity generated to recharge batteries. At launch, typical eVTOLs are expected to reduce CO₂ emissions on a per passenger/km basis by at least 40% when compared to internal combustion engine (ICE) cars. These emission reductions will continually improve as the UK increasingly generates electricity using more sustainable sources. By 2035, when the UK is expected to be powered entirely by clean electricity, the emissions benefit from eVTOLs could further improve, reducing the CO₂ emission per passenger mile by almost 70% ^[14] when compared to ICE cars. That's equal to eliminating the CO₂ emissions from driving around the world 5,950 times.



Reduction in eVTOL emissions, measured as percentage of ICE car emissions, as the UK moves to cleaner energy sources.

Assumptions

Average eVTOL passenger load of 2.7

Average ICE car emits 166 g CO₂/passenger km

UK electricity emissions improve steadily toward sustainable sources by 2035

The growth of electric UAM will broaden the choice of clean technologies for urban mobility. Commuters will not need to make a choice between sustainable transportation and quick mobility. Electric UAM route networks can complement ground transit networks so that communities can use multimodal transport more directly and sustainably. A trip across a city or a region can start with a trip on an eVTOL that delivers passengers to a transit hub. From there, they can connect to a train or a bus, or simply walk the last mile to their destination.

COMMUNITY CONNECTIVITY: SIMPLIFYING ACCESS TO WORK, EDUCATION, AND HEALTHCARE



Electric UAM offers a mobility option that can simplify access to work, education, and healthcare, and bring people together more easily.

Improving mobility and access has long been a goal of the government, and for good reason. A dependable transport network is vital for improving access to work, education, and healthcare, especially for those communities that have historically had greater difficulty accessing diverse transportation options. Simplifying mobility will bring people together more easily, and strengthen social and community connections.



The UKRI Vision for 2050 envisions a transport system accessible to people of all ages, locations, and abilities through safe, clean, and reliable means ^[37]. Transport is vital to any community in its ability to provide access to work, education, and healthcare ^[3]. Yet the government rightfully asserts in its proposal for 'levelling up' that not everyone shares in the UK's success in meeting these goals ^[33]. Of striking disparity is the level of connectivity amongst the geographic regions of the UK, with many regions in the North and Midlands lagging behind that of London and the South East ^[35]. The government has pledged £5B of funding for buses and £96B for the Integrated Rail Plan to help ameliorate this disparity, but terrestrial transport infrastructure comes at a high price and has limitations and impracticalities when fulfilling a vision for a connected UK.



The UAM industry can play a critical role in fulfilling ambitious social goals with its ability to connect communities that are not served, or are underserved, by existing networks. This includes locations in the North, as well as islands and remote locations. To the All-Party Parliamentary Group for 'left behind' neighbourhoods, has 225 'left behind' communities, are home to 2.4 million people ^[2]. These locations include former mining communities and council estates on the outskirts of post-industrial towns and cities in the North and Midlands, and communities along the North Sea coast. Connecting traditionally underserved communities with UAM services can be done at a relatively low cost compared to ground-based alternatives and need not be reliant upon transiting through central hubs, thereby decreasing travel time and energy consumption.

Access to healthcare, education, and social services can be simpler. Communities at the periphery of major cities will be able to experience transportation that goes to city centres more directly. Those who live in places not well served by surface transportation could have the option of flying to major hubs where they can connect with transit systems.

UAM will also offer greater resiliency when mobility setbacks occur on the ground, whether caused by natural disaster or infrastructure improvements. Additional transportation options will also increase the resiliency of the overall network. When Flybe, Europe's largest regional airline, fell into administration in 2020, the UK lost more than 2,000 jobs ^[28]. UAM presents an opportunity to fortify the resiliency of the transportation network, create new jobs, and ensure that citizens of the UK are not left stranded in any adverse situation, manmade or natural, by virtue of the breadth of transport network available.

INVESTMENT AND ECONOMIC GROWTH:

GENERATING GREEN JOBS AND NEW INVESTMENT

The emerging UAM industry represents a significant opportunity to create new, green jobs and stoke economic growth across the UK.



Growth in the vertiport network and eVTOL fleets will drive demand for a skilled workforce in a variety of fields and functions. Moreover, the UAM sector will attract both direct and indirect foreign investment.

As the UK seeks to 'level up' communities across the country, more people will have the opportunity to train for new skills and access workforce development opportunities that align with the needs of 21st century green industries. The UAM industry will need eVTOL mechanics, manufacturers of aircraft parts, battery technicians, vertiport ground crew, and other supporting services. Training opportunities, spanning university and technical education, will arise, and prepare a new workforce with the knowledge and skills relevant to green careers. With the recent economic downturn due to COVID-19, the economic opportunity that the UAM sector represents is can be particularly beneficial to the well-being of the country.

In 2019, transportation and transport manufacturing generated over £109B in added value for the UK, or 5.5% of the total UK output ^[37]. In 2018, 1.6 million jobs were supported by the air transportation sector ^[18]. However, in 2021, the pandemic resulted in 2.2 billion fewer passengers on scheduled flights compared to 2019, equivalent to a 49% decrease and a revenue loss of US\$324B globally ^[19]. In the UK, this economic loss was not only felt in the aviation sector, but across the entire economy. As stated in the Build Back Better plan for growth, "the UK must return to growing employment and take action to address weak productivity in order to secure a sustainable increase in growth ^[31]." An increase in skilled labour is required to do so. The Skills Training for Londoners Capital Fund likewise aimed to transform the capital's skills provision by delivering 21st century, fit-for-purpose education and training facilities at further education colleges and other providers across the city ^[23].

In light of the setbacks that COVID-19 has created in the global economy, and specifically the transportation sector, UAM represents an opportunity to create jobs and invest in the future of the economy. Through an analysis with the sponsorship of the Department for International Trade, Aerospace Technology Institute, and UKRI, ADS projects the UAM industry will be worth \$510B by 2040 ^[1]. Seizing upon the economic boon that the UAM industry promises to bring represents a critical step in the recovery of the UK's economy. Nearly US\$1B was invested in the UAM industry in the first six months of 2020 alone ^[25].

In this vein, the UKRI Future Flight Challenge is sponsoring initiatives to gain insight into the social and economic benefits of UAM across the UK. Quantifying the economic benefits of UAM will help governments better understand the potential impact from this new industry. The UKRI Future Flight Challenge engaged Swanson Aviation Consultancy to undertake an analysis of 20 potential routes across the UK as a demonstration of the viability of UAM in the UK. Some routes addressed the Union Connectivity Review^[8] while a few others looked at the governments 'Levelling Up' and 'Northern Powerhouse' agendas ^[34, 35].

This preliminary study examined 14 routes for fixed-wing electric aircraft and 6 for eVTOLs. The study concludes that, in total, to service the demand on the 20 routes studied, the UK would need 160 eVTOLs and 64 19-seat fixed wing electric aircraft. Northern Ireland would require 44 eVTOLs for one route where 2,100 weekly flights would operate and generate over £1M in revenue per aircraft per year. It was estimated that the time savings alone would contribute over £125M annually to the economy through increased productivity on the 20 routes assessed. The full report is scheduled to be released in July 2022 at the Farnborough

International Airshow. As stated by The Rt Hon Kwasi Kwarteng MP, Secretary of State at the Department of Business, Energy and Industrial Strategy, "Investment in innovation will be critical to achieving [a robust and agile economy], and to building a greener, healthier and more prosperous future for the UK ^[33]".

Investment in the UAM ecosystem aligns with the goals of the UK Export Finance Climate Change Strategy ^[31] which embeds climate change and national decarbonisation goals into its investment strategy. Securing foreign direct investment for the growth of UAM supports both investment and decarbonisation goals. The growing demand for UAM over the next decade will require investment in eVTOL development, ground infrastructure, air traffic management technologies and other services that support the entire UAM ecosystem. These investments will generate jobs in a green industry that will contribute to the UK's decarbonisation goals.

UAM operations will also support the tourism, land development, and cargo industries, a goal of the UKRI's Vision for UK Transport in 2025 ^[37]. Development of the UAM industry in London will also bring an increase in workforce productivity, and attract foreign and direct investment in supporting green technologies and infrastructure. It will also help to fulfil the ambitious goals set out for the city ^[21], as well as the goals set by the national government for new jobs to be created outside of London ^[31]. The UK already boasts more than 3,000 aerospace companies, and the aerospace sector has the largest number of SME companies in Europe, providing over 282,000 jobs directly and indirectly ^[29]. The growing UAM industry promises to further augment the positive impact that the aerospace industry will have on jobs and the economic outlook of the country.



GLOBAL LEADERSHIP:

STAYING AT THE FOREFRONT OF INNOVATION AND GLOBAL COMPETITIVENESS

The UK is an established leader in the aerospace industry and is strongly positioned to continue in this role as aviation transitions to the era of zero-emissions flight.



Across the world, countries are positioning themselves to be among the first to market in adopting zero-emissions UAM. Demonstration flights are planned in France, where at the 2024 Paris Olympics, eVTOLs will highlight France's vision of the future. The Paris Olympics plans to offer eVTOL flights as air taxis between the airport and central Paris ^[15]. Similarly in Asia, to reflect Japan's commitment to innovation in sustainable mobility, the Osaka World Expo will showcase UAM using Volocopter eVTOL flights ^[43]. China and Indonesia are also progressing in their plans to operate autonomous eVTOLs for sightseeing flights ^[9, 10].

British companies are at the cutting edge of UAM. Vertical Aerospace, plans to certify its first eVTOL in 2025 ^[16], and Skyports plans to open its first vertiport in London in 2024, with others planned around the world in the next few years ^[27].



Electric UAM offers the UK an opportunity to solidify this leadership in the urban aviation arena. Efforts to proactively prepare the UK and gain insight into UAM are already underway. For example, the UKRI Future Flight Challenge has been funding a range of research while the CAA has been working with industry in the Regulatory Innovation Sandbox. Expertise and insight for successful UAM adoption are rapidly growing in the UK. However, gaps remain. A strategy is needed to apply this diverse body of knowledge into an integrated national UAM roadmap. Building the UAM ecosystem requires collaboration across industries and governments. An integrated national roadmap can ensure that efforts by government and industry are coordinated, early milestones pave the path for future successes, and expectations between governments and industry are shared.

The UK has the world's second largest aerospace industry, and it is well positioned to gain first-mover advantage in this competitive new market. First movers in this market will attract foreign direct investment in its infrastructure and technologies, generate jobs and create a workforce with 21st century skills. The UK could also become the template that demonstrates to the rest of the world how UAM could be successfully implemented and consequently, showcase the enormous rewards that can be realised through thoughtful, integrated planning.

The UK's aerospace expertise and capabilities are highly respected. Given these resources and intellectual capital, the UK should strive to maintain its position as a world-leader in zero emissions flight. This leadership can span the design of intelligent multimodal infrastructure to thought leadership in integrating UAM traffic into the urban low-level airspace. Innovations in the UK could be adopted globally, extending the country's influence in this next, exciting phase of aviation.

SECTION 5

GOING FORWARD



THE UAM INDUSTRY PRESENTS AN EXCITING OPPORTUNITY FOR THE UK ON MANY LEVELS

Connecting more people, creating jobs and increasing the resilience of the transportation network will improve the lives of citizens in a tangible way, all the while leveraging the power of clean energy. The UK has an opportunity to be a leader in this new and ambitious sector, but these benefits will only be fully realised by engaging local communities and national strategies that shape UAM services into what communities want. Preparing the UK for electric UAM will require engagement with communities that are most in need, securing investment for UAM infrastructure, and creating policies that promote a zero-emissions aviation sector that benefits everyone.

At the present juncture, the UK can lead the world in not only developing aviation technology, but also in local and national policies that create green jobs and usher in the social and economic benefits stemming from the growth of UAM. Clean air, a resilient and ubiquitous transport network, a vibrant economy, and global leadership represent a vision we all can agree upon. The time is now to work together to make UAM a part of the UK's future.

PROPOSED NEXT STEPS

GOVERNMENT



- » Create a government task force to champion and implement UAM Across the UK.
- » Create a national strategic roadmap for integrating UAM into the national transportation system.
- » Integrate UAM into the UK's plans for Net Zero, Jet Zero, and London's Green New Deal.

INDUSTRY



- » Invest in UAM infrastructure, such as vertiports, training schools, and maintenance facilities.
- » Partner with UAM companies to develop solutions that service local communities.
- » Explore how UAM could benefit businesses, serve customers more effectively, and offer innovative new services.

COMMUNITIES



- » Identify and advocate for parts of the country that would most benefit from UAM connectivity.
- » Engage with the UAM industry to pose questions, and discuss concerns and interests.
- » Learn more about how UAM could be tailored to meet community needs.

SECTION 6

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