

SUSTAINABLE INNOVATIONS JOINS HYPERWIN, A NEW EUROPEAN PROJECT TO ADVANCE THE FUTURE OF ELECTRIC AVIATION

- **HYPERWIN WILL DEVELOP NEW TECHNOLOGIES FOR LIGHTER, MORE POWERFUL AND MORE EFFICIENT ELECTRIC MOTORS FOR FUTURE HYDROGEN-POWERED AIRCRAFT**

- **ELEVEN EUROPEAN ORGANISATIONS WILL WORK TOGETHER OVER 24 MONTHS TO VALIDATE THIS TECHNOLOGY UNDER CONDITIONS CLOSE TO REAL AVIATION USE**

Madrid, 4 November 2026 – **SUSTAINABLE INNOVATIONS** is participating in **HYPERWIN**, a new European project aimed at advancing a key technology for the future of electric aviation: superconducting windings for high-power electric motors. Coordinated by **The University of Edinburgh**, the project brings together eleven organisations from five European countries and will run for 24 months. HYPERWIN aims to develop and validate a new generation of winding for aircraft electric motors capable of operating at very high-power levels while maintaining high efficiency.

The project will use a **2-megawatt motor**, equivalent to two million watts, as its reference for future hydrogen-electric propulsion applications. The technology is based on superconducting materials, which can carry large amounts of electricity when maintained at very low temperatures. This could help make motors more compact and lighter, two factors that are particularly important in aviation. HYPERWIN will address the full process needed to bring this technology closer to real-world application, from winding design and cooling to manufacturing, protection and testing. A dedicated test facility will also be developed to reproduce the operating conditions of an aircraft motor and assess its performance before moving towards larger-scale demonstrations.

SUSTAINABLE INNOVATIONS will lead the project's communication, dissemination and exploitation activities. The consultancy will coordinate the communication strategy, website, information materials, engagement with key stakeholders, and the project's presence at events and through communication channels. It will also work to identify the applications with the greatest market potential and define how the project results can continue to be developed after HYPERWIN ends. In addition, SUSTAINABLE INNOVATIONS will coordinate activities related to intellectual property, business models and future funding opportunities.

"At Sustainable Innovations, we already have experience in aviation projects such as ALFAFUELS, where new sustainable fuel solutions are being researched, but HYPERWIN focuses on a technology that could help make aircraft electric motors lighter and more efficient. We will help ensure that the project results reach industry, institutions and society, while preparing the ground for their future market application," says Mariana Fernández, Head of Operations at Sustainable Innovations.

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The electrification of aviation presents a clear challenge: motors need to deliver high levels of power without becoming too heavy. In this context, superconducting materials offer significant potential because they can carry large electrical currents with very low losses when operating at cryogenic temperatures. However, their use in aircraft still requires progress in areas such as manufacturing, cooling, reliability and safety. HYPERWIN will address these challenges together to demonstrate that this type of winding can operate under conditions representative of a future aircraft motor.

Towards lower-emission aviation

HYPERWIN forms part of European efforts to develop new propulsion solutions for more sustainable aviation. Future hydrogen-powered aircraft will require electrical systems capable of delivering high power while keeping weight and energy consumption low. The project will not build a complete aircraft or motor but will instead focus on improving one of its key components. The aim is to reduce technological risks and generate the knowledge needed so that, at a later stage, this solution can be integrated into complete motors and next-generation propulsion systems.

About HYPERWIN

HYPERWIN (HYdrogen-powered suPErconducting motoR Windings for zero-emission aIrcraft propulsioN) is coordinated by The University of Edinburgh and brings together the following partners: SUPRASYS SL, Université de Lorraine, The University of Nottingham, Politecnico di Milano, Sustainable Innovations, and HPDRIVE Technologies, together with associated partners SAFRAN, GKN Aerospace Fokker Elmo, Futura Composites and Airbus UpNext. Airbus UpNext will contribute to the top-level requirements cascade and the certification-readiness roadmap, and will take part in the project's Technical Advisory Board.

The project will run for 24 months and is being developed under Horizon Europe and the Clean Aviation Joint Undertaking. The proposal has received almost 5 million euros, out of which €218,750 correspond to Sustainable Innovations.

About SUSTAINABLE INNOVATIONS

SUSTAINABLE INNOVATIONS is a Spanish consultancy offering innovative services across a wide range of sectors throughout Europe. Its core competencies are structured around three main pillars bridging the gap between ideas and the market: Innovation Management, Business Development and Training. Key sectors in SUSTAINABLE INNOVATIONS' portfolio include the Bioindustry, Advanced Materials, Energy, Circular Economy and Industry 5.0, among others.

More information at: www.sustainableinnovations.eu

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