

Embraer and GKN Aerospace to collaborate on potential hydrogen flight demonstrator

· *Partnership agreement focused on feasibility studies, hydrogen R&D programmes and exploring the potential development of a hydrogen flight demonstrator.*

· *The partnership is committed to expediting the implementation of hydrogen technologies in aviation and advancing decarbonisation of aerospace to zero emissions.*

Le Bourget, Paris, June 21, 2023 - Embraer and GKN Aerospace, both renowned leaders in the aerospace industry, today announced a collaboration agreement on cutting-edge hydrogen technological development programmes. The partnership aims to accelerate the implementation of hydrogen technologies in aviation, reducing emissions and paving the way for a more sustainable future. The collaboration will also explore the potential for a hydrogen flight demonstrator.

The agreement is part of Embraer's commitment to the global efforts to collaborate with the Air Transport industry's commitment to achieve net zero carbon by 2050. Together, both companies will leverage their extensive expertise and resources to actively support the development of innovative Hydrogen Fuel Cell technology, as well as optimize airframe systems integration. GKN Aerospace is at the forefront of ground-breaking collaborative hydrogen programs across the Netherlands, Sweden, and the UK.

"The imperativeness of sustainability drives research and development programmes at Embraer, and the potential development of a hydrogen flight demonstrator represents an important milestone in our technology roadmap toward the future of sustainable aviation. It is a pleasure to have GKN Aerospace as a partner in this technological journey with us," said Luís Carlos Affonso, Senior Vice President, Engineering & Technological Development at Embraer.

"Collaboration is key to exploring innovative solutions and accelerating disruptive technologies. That's why we are excited to work together with GKN Aerospace to enable the application of disruptive technologies in a shared vision for a greener future," said Daniel Moczydlower, Global Head of Innovation Ecosystems at Embraer.

John Pritchard, President Civil Airframe at GKN Aerospace said: "We are proud to partner with Embraer and explore the next steps in the adoption of hydrogen technologies in aviation. By joining forces and harnessing the power of hydrogen technologies, we are not only reducing carbon emissions but also creating a new generation of clean air travel. This partnership exemplifies our commitment to driving innovation and forging a path towards a greener future for the aerospace sector."

Russ Dunn, CTO GKN Aerospace added: "Hydrogen-powered aviation represents a tangible and compelling solution for achieving zero-emissions flight. Advancing this pioneering technology to the next level necessitates unparalleled collaboration within the industry, as exemplified by our partnership with Embraer as well as combining expertise of aerospace ecosystems in our countries and support across governments."

GKN Aerospace's flagship hydrogen exploration programme, H2Gear, is focused on developing a highly efficient liquid hydrogen propulsion system specifically designed for sub-regional aircraft. With the potential for scalability to larger aircraft, this system converts liquid hydrogen into electricity within a state-of-the-art fuel cell system. By efficiently utilizing this electricity, the aircraft operates with zero carbon emissions, revolutionizing the aviation industry and ushering in a new era of sustainable air travel.

Image: <https://embraer.bynder.com/share/A7A011C9-D97E-4F2B-BEB2D3D2BA641CF3/>

About Embraer

A global aerospace company headquartered in Brazil, Embraer has businesses in Commercial and Executive aviation, Defense & Security and Agricultural Aviation. The company designs, develops, manufactures and markets aircraft and systems, providing Services & Support to customers after-sales.

Since it was founded in 1969, Embraer has delivered more than 8,000 aircraft. On average, about every 10 seconds an aircraft manufactured by Embraer takes off somewhere in the world, transporting over 145 million passengers a year.

Embraer is the leading manufacturer of commercial jets up to 150 seats and the main exporter of high value-added goods in Brazil. The company maintains industrial units, offices, service and parts distribution centers, among other activities, across the Americas, Africa, Asia and Europe.

About GKN Aerospace

GKN Aerospace is the world's leading multi-technology tier 1 aerospace supplier, with a mission to be the most trusted and sustainable partner in the sky. As a global company serving the world's leading aircraft manufacturers, GKN Aerospace designs, manufactures and delivers an extensive range of advanced aerospace systems, components and technologies – for use in commercial and defense aircraft ranging from helicopters, business jets, passenger planes and advanced air mobility vehicles to the most advanced fighter aircraft.

In line with its mission, GKN Aerospace is committed to achieving net-zero emissions by 2050. Lightweight composites, additive manufacturing, electrical wiring interconnection systems and innovative engine systems help to reduce emissions and weight on today's aircraft, while it collaborates with global partners to accelerate the development of zero-emission aircraft technologies, including hydrogen-powered propulsion and all-electric flight. GKN Aerospace is market leading in aerostructures and engine systems, with 15,000 employees across its 38 manufacturing locations in 12 countries.