



AIRBUS SHOWCASES HYDROGEN AIRCRAFT TECHNOLOGIES DURING ITS 2025 AIRBUS SUMMIT

News / Manufacturer



During the 2025 Airbus Summit, Airbus provided an update on its roadmap to pioneer the future of commercial aviation in the decades to come, outlining plans to prepare a next-generation single-aisle aircraft that could enter service in the second half of the 2030s, as well as its revised [ZEROe](#) project roadmap to mature the technologies associated with hydrogen-powered flight.

At the Summit, Airbus reconfirmed its commitment to bring to market a commercially viable hydrogen aircraft and presented some of the key technology building blocks that will enable the advent of a fully electric, fuel-cell powered commercial aircraft – a pathway which stands out as the most promising, following years of research into [hydrogen](#) aviation.

Airbus Head of Future Programmes Bruno Fichfeux commented: “Hydrogen is at the heart of our commitment to decarbonise aviation. While we’ve adjusted our roadmap, our dedication to hydrogen-powered flight is unwavering. Just as we saw in the automotive sector, fully electric aircraft powered by hydrogen fuel cells have the potential in the longer term to revolutionise air transport for the better, complementing the [sustainable aviation fuel](#) pathway.”

These technologies were notably showcased as part of a new, notional concept of a hydrogen aircraft powered by four, 2-megawatt [electric propulsion](#) engines, each driven by a fuel cell system that converts hydrogen and oxygen into electrical energy. The four fuel cell systems would be

supplied via two liquid hydrogen tanks. This concept will continue to be refined over the coming years as additional tests will help mature the technologies associated with hydrogen storage and distribution, as well as with the propulsion systems.

Airbus Head of the ZEROe Project, Glenn Llewellyn added: “Over the last five years, we have explored multiple hydrogen-propulsion concepts, before down-selecting this fully electric concept. We are confident it could provide the necessary power density for a hydrogen-powered commercial aircraft and could evolve as we mature the technology. In the coming years, we will concentrate on advancing the storage, distribution and propulsion systems, while also advocating for the regulatory framework needed to ensure these aircraft can take flight.”

In 2023, Airbus successfully demonstrated a 1.2MW hydrogen-propulsion system, and in 2024, end-to-end testing of an integrated fuel cell stack, electric motors, gearboxes, inverters and heat exchangers was completed. To address liquid hydrogen handling and distribution challenges in flight, Airbus, in collaboration with Air Liquide Advanced Technologies, has developed the Liquid Hydrogen BreadBoard (LH2BB) in Grenoble, France. Integrated ground testing is planned for 2027 at the Electric Aircraft System Test House in Munich, combining the propulsive bench and hydrogen distribution system for comprehensive system validation.

Beyond the aircraft technologies, Airbus will continue to foster the emergence of a hydrogen aviation economy and the associated regulatory framework, which are also critical enablers to the advent of hydrogen-powered flight at scale.

25 MARCH 2025

ARTICLE LINK:

<https://50skyshades.com/news/manufacturer/airbus-showcases-hydrogen-aircraft-technologies-during-its-2025-airbus-summit>