Airbus elevates hybrid-electric integration with LEIA Project

Farnborough, United Kingdom, 22 July 2026 – Airbus, with partners from across the European Union, the UK and the US, is pursuing its ambition to pioneer a hybrid-electric non-propulsive energy architecture for the next generation of commercial aircraft with LEIA - Large Scale Integration Demonstrator of Hybrid Electrical Architecture.

LEIA, a project supported by the European Union Clean Aviation Joint Undertaking, will be fundamental to advancing high-voltage generation and distribution for innovative electrical aircraft systems for short-to-medium range aircraft. By bridging the gap between component-level innovation and aircraft-level maturity, the project aims to prepare these technologies for future integration and certification.

"Our progress in developing hybrid-electric technologies and our move into the LEIA demonstrator marks a pivotal shift in how we design the future of flight," said Karim Mokaddem, Head of aircraft of tomorrow Research and Technology at Airbus. "By moving to integrated, intelligent hybrid-electric architectures, we are actively laying the physical and digital foundation for the next generation of aircraft. This evolution demonstrates that the future of aviation is about more than just new power sources; it is also about the new ecosystems that will manage them."

LEIA builds on the successful completion of the SWITCH project, which focused on hybrid-electric powertrain subsystems and reached a key milestone in July when Collins Aerospace completed integrated laboratory testing. This achievement is a result of a strong collaborative effort by the project partners, including Pratt & Whitney, GKN Aerospace, and MTU Aero Engines.

These subsystems, which operate in tandem with simulated aircraft and engine systems, are now transitioning to the Airbus Sustainable Technology and Engineering Projects (STEP) laboratory in Ottobrun, Germany. There, Airbus teams will conduct critical aircraft-level integration testing, including design, battery interfacing and energy-management systems.

Airbus is leading the integration of a suite of advanced electrical components, including scalable motor/generators, next-generation electronic controllers, power distribution equipment, alongside various other aircraft systems. These systems will be validated through a comprehensive testing programme, culminating in a pivotal ground demonstration by 2027.

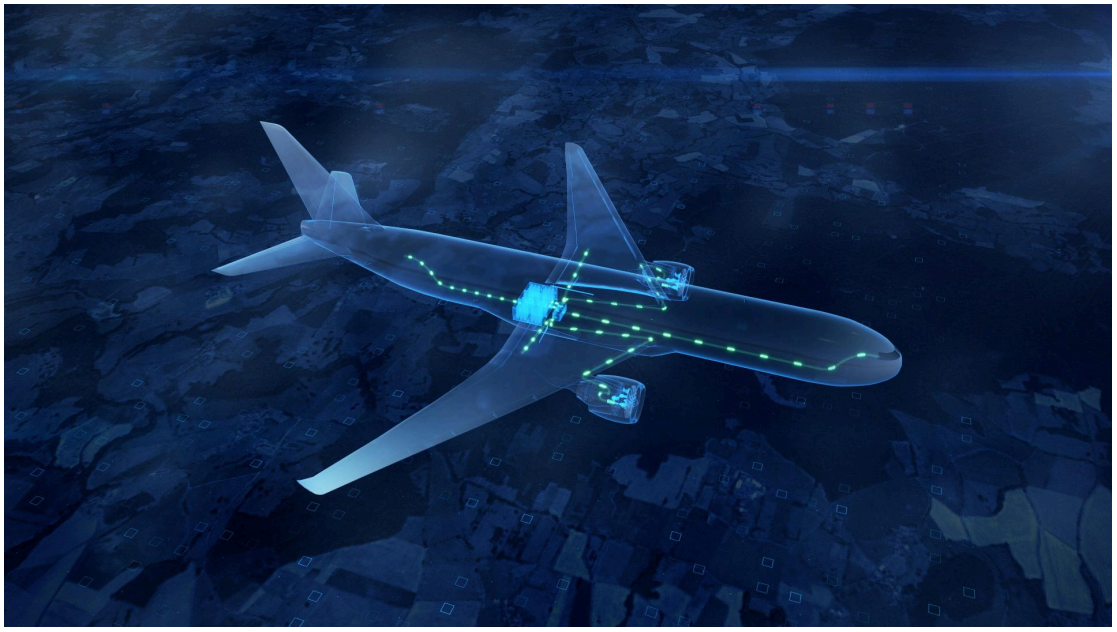
Both SWITCH and LEIA build on Airbus' ongoing collaboration across multiple Clean Aviation projects, which target electrification technologies for regional and short-to-medium range aircraft. By managing cross-border supply chain integration and rigorous technical

requirements, Airbus continues to drive the transformation of the aviation industry toward a more electric future with the ultimate goal of reducing greenhouse gas emissions in aviation.

Airbus collaborates with several partners on the LEIA project: AVL, Collins Aerospace, the European Aerospace Science Network (EASN), Fraunhofer-Gesellschaft, Liebherr Aerospace, Lynxeo, the Netherlands Aerospace Centre (NLR), Safran, SAFT, the University of Warwick, and Wroclaw University of Science and Technology.

Click here to read more about the LEIA project.

@Clean Aviation #Electrification #Decarbonisation



Newsroom

Contacts for the media

Philippe GMEREK
AIRBUS

+33 6 13 19 37 27
philippe.gmerek@gmail.com