# About

HERFUSE (Hybrid-Electric Regional FUSelage & Empennages) aims to design innovative fuselage and empennages for future Hybrid-Electric Regional aircraft (HER) to reduce Green House Gases (GHG) emissions. It addresses challenges in layout, materials, components, manufacturing, and assembly, integrating features for hybrid-electric propulsion and comple-mentary systems to improve weight, durability, aerodynamics, and operations. The project aligns with the HERA project, focusing on regional aircraft, and aims to achieve performance gains through technologies such as low GHG energy sources, storage, distribution, operational features, and thermal management. HERFUSE's technical solutions will contribute to reducing emissions at the aircraft level, in tandem with HERA's objectives.

> Hybrid Electric Regional FUSelage & Empennages

Objectives



**Fuselage & Empennage design** Providing a groundbreaking fuselage and

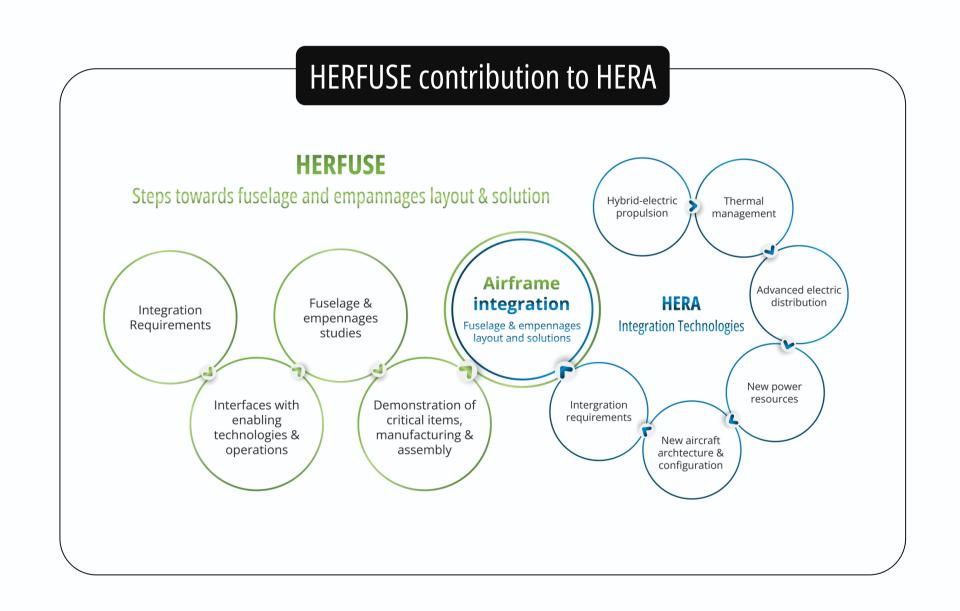


### **On ground demonstration**

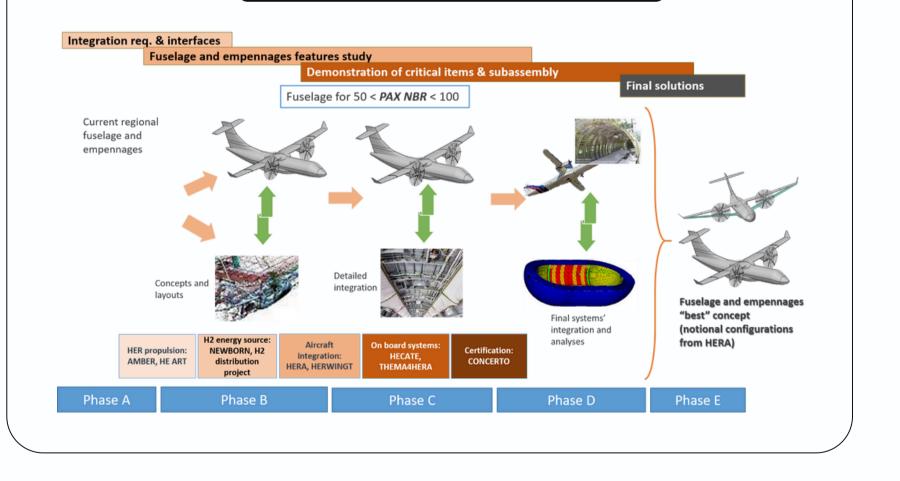
Showcasing on-ground compo-nents or sub-

empennage, along with integrated solutions, designed to align with Hybrid-Electric Regional concepts at significant component, assembly, or system levels, aiming to meet the environmental target set by SRIA for 2035 regional aircraft.

systems relevant to Hybrid-Electrical Regional, providing quantitative data to aircraft-level studies in HERA project, and validating hybrid-electric technologies at a high Technology Readiness Level (TRL), in anticipation of the subsequent development of an operational regional aircraft.



## HERFUSE methodology to conceive 2035 fuselage and empennages







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of the author(s) only and do not necessarily reflect those of the European Union or Clean Aviation Joint

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