



PLANS FOR A FIRST 100% ELECTRIC AIRCRAFT - VOLOTEA, AIR NOSTRUM & DANTE AERONAUTICAL

News / Airlines, Manufacturer



The consortium expects their first aircraft with this technology to be certified for flights in 2024

The 100% electric aircraft project led by Volotea, Air Nostrum and Dante Aeronautical will mean an important step towards a future with emission-free aviation. This aircraft will play a crucial role in establishing zero-emission regional air transport, enabling connections to be made between small population centres, thanks to its reduced operating costs compared to much larger aircraft.

Initial plans and images of what will be the first prototype of a 100% electric aircraft show that more sustainable aircraft are getting closer to becoming a reality. In fact, the consortium expects this initial prototype to be certified for flight in three years time, representing a major milestone for the aviation industry.

The collaboration involves the two major aircraft operators, Dante Aeronautical, artificial intelligence companies such as DataBeaco, engineering and technology innovation companies in the aviation sector, including the Spanish multinational CT, as well as public research organisations such as CIDAUT (the Foundation for Transport and Energy Research and

Development - Fundación para la Investigación y Desarrollo en Transporte y Energía) and CIDETEC (The Specialised Energy-Storage Research Centre - Centro de Investigación Especializado en el Almacenamiento de Energía). The project is a clear example of commitment to technological innovation and sustainability.

“We started our collaboration with Dante Aeronautical back in 2019 and are very proud to see how the project has grown and gained momentum with the support of new partners, including several Spanish technology companies. The development of an electric aircraft using hydrogen battery technology will reduce carbon emissions. It makes complete sense for Volotea to support this project since it's completely in line with our goal of connecting underserved cities and doing so in ways that are more sustainable,” stated Carlos Muñoz, Volotea's founder and CEO.

Carlos Bertomeu, Air Nostrum's CEO, emphasised that the Valencian airline is experienced in working with SMEs and institutions. “The benefits of Air Nostrum's collaborations with technology start-ups and universities to improve efficiency and passenger services are proven,” he stated. “As a leading regional airline, Air Nostrum clearly had much to contribute to this exciting project, especially in regards to sustainability, which is something that we have been working on for many years,” he concluded.

Miguel Madinabeitia, Dante Aeronautical's co-founder, highlighted the agreement reached: “For Dante Aeronautical, expanding the consortium to include other innovative technology companies can only strengthen our plan to develop a 100% electric aircraft, which will revolutionise current thinking and move us towards cleaner and more sustainable transportation”. “This project also sits perfectly with our efforts in other parts of the world, such as our initiative in Australia to electrify hydroplanes,” stated Madinabeitia.

ZERO EMISSIONS MISSION

Development of smart propulsion technology for zero-emission regional air transport.

VOLOTEA

AIR NOSTRUM

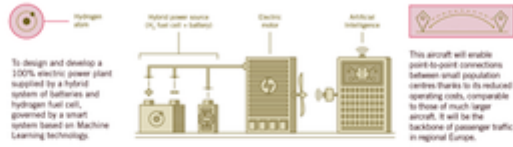
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Infographics: wipacelco - Data: Volotea + Dante

Objectives

- 01. To reduce emissions
- 02. 100% electric aircraft
- 03. Sustainable regional aviation
- 04. To provide innovative solutions

Primary objective:



Secondary objectives:

- 1. Conversion of existing aircraft: Replace conventional powerplants with fully electric ones.
- 2. Paradigm shift: Cleaner, more sustainable and efficient air transport with a high technology component developed in Spain.

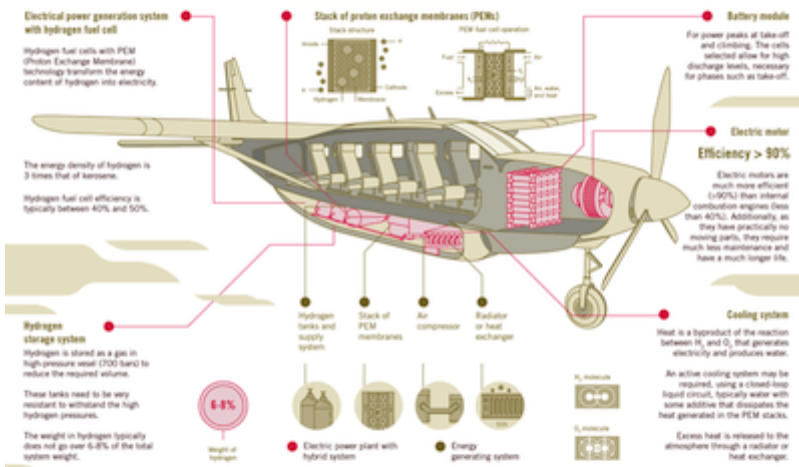
Technological challenge

Demonstrate that retrofitting existing aircraft into full electric by replacing their internal combustion engines with zero emission powerplants is technically and financially feasible.

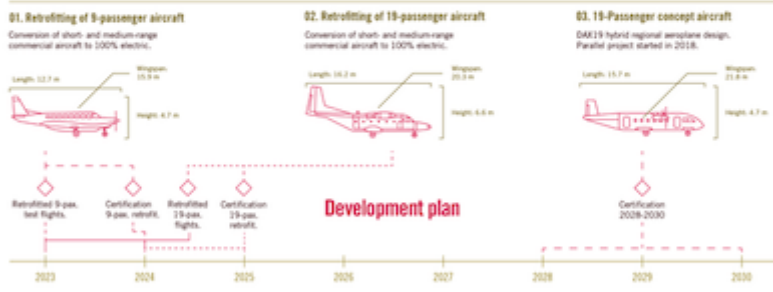
Phases:

- 01. Design: Transformation of existing model.
- 02. Prototype: Production of the first pilot unit.
- 03. Flight Tests: Flight and ground testing to generate and gather data.
- 04. Iteration: Analysis of results and implementation of improvements.
- 05. Production / Scaling: Future move from single-engine to two-engine aircraft.

Aircraft electrification



Sustainable aircraft



The consortium

A group of six entities involved in the development of the first prototype of a 100% electric regional aircraft: 9-passenger retrofit.



26 SEPTEMBER 2021

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