

INNOVATION FUND

Deploying innovative net-zero technologies for climate neutrality

HERMES: Hybrid Electric Regional Aircraft Manufactured in Europe for Sustainable aviation

The Innovation Fund is 100% funded by the EU Emissions Trading System

| Project Factsheet

The project, located in France, aims to bring to the market the first Global hybrid electric regional 19-seater aircraft, ERA (hybrid Electric Regional Aircraft). It is expected to reduce energy and maintenance costs by approximately 50% and achieve a 51% relative greenhouse gas (GHG) emissions avoidance compared with the reference scenario of a conventional aircraft of a similar size.

HERMES's aircraft design develops a hybrid electric propulsion system where power generation and electric propulsion are decoupled. While propulsion is enabled by eight electric motors moving respective propellers distributed over the wing, power generation is hybrid, combining four battery packs and two turbogenerators compatible with Sustainable Aviation Fuel. Thanks to these features, ERA is designed to drastically reduce emissions in the most frequently adopted ranges while offering the flexibility to operate a wide set of ranges. Hybrid electric propulsion is a technological pathway that can be

COORDINATOR

AURA AERO SAS

LOCATION

France

CATEGORY

Mobility (MOB)

SECTOR

Aviation

AMOUNT OF INNOVATION FUND GRANT

EUR 95,000,000

EXPECTED GHG EMISSIONS AVOIDANCE

10,142,938 tonnes CO₂ equivalent

STARTING DATE

01 April, 2025

ENTRY INTO OPERATION DATE

31 December, 2029

FINANCIAL CLOSE DATE

30 April, 2027

**Calculated vs. the 2021-2025 ETS benchmark of 6.84 tCO₂e/tH₂, not taking into account additional carbon abatement due to substitution effects in the H₂ end use application, i.e. conservative estimate.*

scaled to larger aircraft with time, extending its positive impact. The aircraft will be electric in all its embedded systems, including flight controls - a first case for regional aviation, which also improves safety protections.

HERMES is expected to achieve an estimated total absolute GHG emission avoidance of 10 million tonnes of CO2 equivalent over its first ten years of

operation, supporting the European Green Deal's objectives.

The project will contribute to decarbonising and developing Europe's aviation sector, which accounts for 4.4% of its Gross Domestic Product (GDP) in European countries. It will also contribute to more sustainable regional air travel. HERMES is expected to create over 1 600 direct jobs by 2036 and up to 1 600 indirect jobs later.

| Participants

AURA AERO SAS

France