



A Turkish company looks for a partner for the "EUROGIA project" about the Electrification of Lighter Aircrafts via Hydrogen-based Propulsion Systems

Summary

Profile type Research & Development Request	Company's country Türkiye	POD reference RDRTR20250325001
Profile status	Type of partnership	Targeted countries
PUBLISHED	Research and development cooperation agreement	Austria
		• Spain
		Canada
		• Chile
		 United Kingdom
		Singapore
		• France
		Germany
		• Israel
		Croatia
		 Switzerland
		• Ireland
		Czechia
		• Poland
		• Latvia
		 Portugal
		• Denmark
		Belgium
		 South Korea
		 South Africa
		• Hungary





Luxembourg

Lithuania

Contact Person

Term of validity

Last update

Enrico FRANZIN

25 Mar 2025 25 Mar 2026 25 Mar 2025

General Information

Short summary

The project focuses on the Hydrogen and battery technologies for the Aviation sector. Electrification of aircrafts requires immense study of aircraft powerplant systems. In order to produce a light weight and long endurance electrical aircraft, a combination of battery and hydrogen fuel cell-based power system is proposed along with the energy management and storage subsystems.

Full description

Clean Aviation aircraft concepts are based on advanced design features that affect powerplant and the energy storage units. The project aims to develop and commercialize compact and energy efficient Hydrogen-based propulsion system for light aircrafts.

Project WBS can be depicted in seven parts:

- 1. Propulsion subsystem,
- 2. Fuel cell subsystem,
- 3. Hydrogen storage subsystem,
- 4. Energy management subsystem,
- 5. Structural and thermal management subsystem,
- 6. Health management subsystem,
- 7. Electrical and mechanical ground support subsystems.







Advantages and innovations

Project results are expected to demonstrate an electric propulsion system for light aircraft concept by 2028. Additionally, the propulsion system will be compliant to CS-23 and CS-E certification requirements. A route towards certification and exploitation shall be outlined, including the identification of operational requirements. Outcomes of the project, such as energy management and storage, are applicable to other hydrogen fuel cell and/or battery based electrical system architectures other than aircrafts.

Technical specification or expertise sought

The team will conduct the research, product development, assembly, integration and tests of the main system, and is eager to collaborate with technologically competitive partners on fuel cell and hydrogen storage subsystems. Within this context, the team is looking for partnership from the EUROGIA2030 supporting countries on battery, fuel cell and Hydrogen storage solutions (The project shall identify and implement synergies with activities funded under innovation and research programmes at National and European level).

Stage of development

Under development

IPR Status

No IPR applied

IPR Notes

Sustainable Development goals

- Goal 13: Climate Action
- Goal 17: Partnerships to achieve the Goal
- Goal 9: Industry, Innovation and Infrastructure

Partner Sought

Expected role of the partner

The Turkish team will conduct the research, product development, assembly, integration and tests of the main system, and is eager to collaborate with technologically competitive partners on fuel cell and hydrogen storage subsystems. Within this framework, partners from the EUROGIA2030 supporting countries on battery, fuel cell and Hydrogen storage solutions are sought.

Type of partnership

Type and size of the partner





Research and development cooperation agreement

- SME <=10
- Big company
- SME 50 249
- SME 11-49

Call Details

Framework program

Eureka

Call title and identifier

Euragia 2030 program Call 28

Submission and evaluation scheme

2 stage call.

Anticipated project budget Coordinator required

No

Deadline for Eol Deadline of the call

31 Mar 2025 24 Apr 2025

Project duration in weeks Web link to the call

https://eurogia.eu/eurogia-calls/

Project title and acronym

Electrification of Lighter Aircrafts via Hydrogen-based Propulsion Systems

Dissemination







Technology keywords

- 04002012 Other energy related machinery
- 04007001 Energy management
- 04002002 Hydrogen production

Targeted countries

- Austria
- Spain
- Canada
- Chile
- United Kingdom
- Singapore
- France
- Germany
- Israel
- Croatia
- Switzerland
- Ireland
- Czechia
- Poland
- Latvia
- Portugal
- Denmark
- Belgium
- South Korea
- South Africa
- Hungary
- Luxembourg
- Lithuania

Market keywords

- 06010003 Energy for Industry
- 09001006 Airfield and other transportation services

Sector groups involved

- Renewable Energy
- Aerospace and Defence
- Mobility Transport Automotive
- Energy-Intensive Industries