

Italian regional airport is looking for a technology provider of innovative batteries with a sustainable production cycle and gradual energy discharge, to implement an experimental project

Summary

Profile type

Technology request

Company's country

Italy

POD reference

TRIT20250306012

Profile status

PUBLISHED

Type of partnership

**Research and development
cooperation agreement**

**Commercial agreement with
technical assistance**

Targeted countries

• **World**

Contact Person

[Enrico FRANZIN](#)

Term of validity

10 Mar 2025

10 Mar 2026

Last update

10 Mar 2025

General Information

Short summary

A regional airport in Northern Italy is looking for partners interested to the development and deployment of batteries with a sustainable production cycle having gradual and flexible energy discharge: the airport will offer its premises to perform field tests and act as a final user, under a research and development agreement or commercial agreement with technical assistance

Full description

An Italian company manages a regional airport engaged in sustainable development that has already invested towards the creation of an infrastructure that will prepare the entry into commercial service of hydrogen-powered and electric aircraft.

Together with University they have created an energetic "digital twin" of the airport in order to analyse the drivers that influence the energy demand and select the best solutions for the future scenarios: the plan is to become a Smart Energy Hub. The master planning of future airports will in fact be designed from the modelling of the green energy and the technological solutions required to power infrastructure, transport systems, GSEs (ground support equipments) and provide the energy required by aircrafts.

The airport is engaged in the creation of a sustainable infrastructure including a photovoltaic system connected to a hydrogen production facility, that will be able to optimize the energy consumption cycle by leveling demand and production peaks.

The airport already put in place a small pilot plant consisting of an electrolyzer that converts the energy produced by the photovoltaic system into green hydrogen, in order to balance and optimize the renewable energy consumption of the airport.

The problem to be solved.

The plan is now to increase the production capacity by installing a larger PV plant; but increasing the installed capacity for photovoltaic electricity production will require large energy storage systems to reduce the energy exported to the grid and at the same time to sustain the increased energy load due to the electrification of systems running inside the airport.

The airport is looking for partners interested in experimental projects for the development and deployment of batteries with a sustainable production cycle having gradual and flexible energy discharge: the airport will offer its premises to perform field tests and act as a final user.

Advantages and innovations

The creation of a sustainable infrastructure including a photovoltaic system connected to a hydrogen production facility will permit the optimization of the energy consumption cycle by leveling demand and production peaks. The project would need the development of innovative batteries with a sustainable production cycle and gradual energy discharge.

Technical specification or expertise sought

The partner sought is a technology provider of innovative batteries with a sustainable production cycle and gradual energy discharge

Stage of development

Under development

Sustainable Development goals

• **Goal 7: Affordable and Clean Energy**

IPR Status

IPR Notes

Partner Sought

Expected role of the partner

The partner sought is a technology provider of innovative batteries with a sustainable production cycle and gradual energy discharge, to develop and test the solution in the airport premises

Type of partnership

Research and development cooperation agreement

Commercial agreement with technical assistance

Type and size of the partner

• **SME 50 - 249**

• **Big company**

• **SME 11-49**

• **SME <=10**

• **R&D Institution**

Dissemination

Technology keywords

• **04001003 - Storage of electricity, batteries**

Targeted countries

• **World**

Market keywords

• **06008 - Energy Storage**

• **06010003 - Energy for Industry**

• **06002003 - Power grid and distribution**

Sector groups involved

• **Aerospace and Defence**

• **Renewable Energy**