Award-winning Spanish startup specialized in green H2 requires Eurostars partners to develop and test H2 storage, last-mile distribution, and plug-and-play refueling capsules for mobility and logistics (Eurostars Call September 2025).

Summary

Profile type	Company's country	POD reference
Research & Development Request	**Spain**	**RDRES20250620011**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Research and development cooperation agreement**	**• World**
Contact Person	**Term of validity**	**Last update**
Enrico FRANZIN	**20 Jun 2025** **20 Jun 2026**	**20 Jun 2025**

General Information

Short summary

A pioneering project aims to tackle green hydrogen storage and distribution challenges within the Eurostars Funding Programme 2025. The company is developing a hybrid fuel cell system for logistics vehicles and refrigerated containers, targeting TRL 6-7. A new initiative focuses on pressurised refueling capsules to optimise supply chains. Seeking Eurostars SMEs for a consortium, the project promotes collaborative R&D in hydrogen technology. The proposal deadline is 12 September 2025.

Full description

In the rapidly evolving domain of renewable energy, a groundbreaking project by an innovative team seeks to address the pivotal challenge of green hydrogen storage and distribution. The company's technology offer is set within the broader context of Eurostars Funding Programme 2025, which aims to foster R&D collaboration across borders to catalyze the transition to sustainable energy solutions.

This company focuses on testing an innovative green hydrogen storage, supply and consumption technology in niches where batteries do not offer a scalable solution: urban mobility, logistics environments, aerial vehicles, etc.

Currently, we are developing a hybrid fuel cell system for a logistics vehicle and a refrigerated container semi-trailer, with the expected outcome of reaching TRL 6-7. The previous project seeks to implement a green hydrogen plan for sustainable mobility and logistics in the Valencia port environment, contributing to emissions reduction. Fundación ValenciaPort selected our company through its OpenTop program as the best startup for carbon neutrality goals in 2030.

In the present call, we plan the development of plug-and-play pressurized hydrogen capsules with improved volumetric energy density. These capsules are designed to revolutionize the current hydrogen supply chain by offering a rapid supply, as well as a scalable, efficient, and cost-effective solution for hydrogen storage and last-mile distribution. The initiative not only promises to enhance the viability of green hydrogen as a key player in the energy sector but also paves the way for its widespread adoption across various industries.

Central to this project is the Eurostars programme, which provides the ideal framework for collaborative innovation among SMEs in Eurostars countries. By leveraging the programme’s support, the project aims to harness collective expertise in material science, engineering, and renewable technologies, ensuring a multidisciplinary approach to tackling the complexities of hydrogen energy.

We are seeking Eurostar's companies interested in forming a consortium, where we can offer our expertise in the development of hydrogen storage, distribution, and supply systems. We look for enthusiastic SMEs specializing in green hydrogen-based renewable energy solutions with deep technical knowledge in H2 vehicles, FC stacks or systems, Compression or Electrolysis.

The partners shall be SMEs based in Eurostars countries and be funding beneficiaries according to the requirements of the call for proposals in their own country.

With the estimated call deadline of 12 September 2025 and a project duration yet to be defined (less than 36 months), the team invites expressions of interest from potential partners ready to contribute to and benefit from this innovative endeavour.

Advantages and innovations

This innovative R&D project introduces a solution for green hydrogen storage and distribution leveraging advanced material sciences and engineering. It aims to develop plug-and-play pressurized capsules, distinct from current market offerings. These capsules promise significant reductions in hydrogen supply chain costs, potentially decreasing distribution expenses by up to 27%.

Unlike existing solutions that often involve complex and costly infrastructure, the company's technology enables a more scalable, efficient, and environmentally friendly approach. The societal benefits are substantial, offering a pathway to decarbonize various sectors, from industrial manufacturing to transportation, aligning with global sustainability goals.

The environmental impact is profound, potentially slashing millions of tons of CO2 emissions annually as industries transition to cleaner energy sources. Specifically, this technology helps meet our impact objectives set for 2030: avoiding the emission of 1.5 million tons of CO2 associated with transportation (equivalent to planting 12 million trees), reducing atmospheric pollutants such as NOx by 1.5% in large cities and industrial environments, and preventing the need to extract more than 650 tons of lithium. In this way, the project lays the technical foundations that will ensure an effective contribution to achieving the SDGs 7 (Affordable and Clean Energy), 9 (Industry, Innovation, and Infrastructure), 11 (Sustainable Cities and Communities), and 13 (Climate Action).

Market-wise, the adoption of this technology could disrupt the current hydrogen economy, opening new markets and opportunities for green hydrogen applications. Our company, therefore, stands not just as a technical innovation but as a catalyst for economic and environmental transformation.

Technical specification or expertise sought

Stage of development

Available for demonstration

Sustainable Development goals

- **Goal 15: Life on Land**
- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 12: Responsible Consumption and Production**
- **Goal 13: Climate Action**
- **Goal 11: Sustainable Cities and Communities**
- **Goal 7: Affordable and Clean Energy**
- **Goal 17: Partnerships to achieve the Goal**

IPR Status

IPR applied but not yet granted

IPR Notes

Secret Know-how, Trademarks, Design Rights, Exclusive Rights, and other protection of IPR.

Partner Sought

Expected role of the partner

The company is seeking Eurostars companies to participate in an already existing consortium for the Eurostars Funding Programme 2025 (Call 9).

The Spanish company seeks SMEs with expertise in hydrogen-related technologies to establish strategic partnerships. Ideal partners should be specialized in electrolyzers, advanced compression systems, power electronics, fuel cell stacks, innovative materials for Type 5 hydrogen tanks, hydrogen-electric vehicles, or hydrogen powertrains. These technologies would complement and integrate into our innovative hydrogen storage capsule and station infrastructure. Collaboration will focus on technology integration, joint demonstration projects, and enhancing mutual commercial opportunities to collectively address the challenges associated with hydrogen production, storage, distribution, and mobility applications.

The objective of the cooperation is to further develop the Spanish company's technology moving from TRL 4-5 to TRL 6-7 or beyond.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

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

Call Details

Framework program

Eureka

Call title and identifier

Eurostars Funding Programme 2025 – CoD9 (Call 9)

Submission and evaluation scheme

Anticipated project budget

1 Mn €

Coordinator required

No

Deadline for EoI

14 Sep 2025

Deadline of the call

30 Sep 2025

Project duration in weeks

104

Web link to the call

Project title and acronym

Dissemination

Technology keywords

- **04002002 - Hydrogen production**
- **04001006 - Transport and storage of hydrogen**

Market keywords

- **06009 - Energy Distribution**
- **06007001 - Other energy production**
- **06011 - Energy for Transport**
- **06008 - Energy Storage**

Targeted countries

- **World**

Sector groups involved