A Greek-led consortium is looking for European partners for developing floating energy production and self-propelled floating units under the Eurostars call - September 2025.

Summary

Profile type	Company's country	POD reference
Research & Development Request	**Greece**	**RDRGR20250718007**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Research and development cooperation agreement**	**• World**
Contact Person	**Term of validity**	**Last update**
Enrico FRANZIN	**21 Jul 2025** **21 Jul 2026**	**21 Jul 2025**

General Information

Short summary

A Greek-led consortium is preparing a proposal under the Eurostars call for September 2025. The project aims to develop floating energy production and self-propelled floating units, with the energy either stored in batteries or used to power surrounding infrastructures. The consortium is looking for partners with expertise in floating PV systems, marine battery storage, IoT navigation, and advanced flotation materials.

Full description

The consortium consists of three Greek partners with complementary expertise. The lead partner is an innovative SME specializing in sustainability and circular economy services, including decarbonization strategies, renewable energy, ESG reporting, market feasibility study, and environmental engineering for both industry and public bodies. The second partner focuses on marine leisure innovation, offering floating units designed for hotels and marinas, and is responsible for the design, optimization, and construction of pilot units. Their product combines stability, comfort, and autonomous GPS-guided navigation, delivering a user-friendly experience on water without the need for boating skills. The third partner is an expert on environmental studies and LCA (Life Cycle Assessment), and will be responsible for the project's DNSH (Do No Significant Harm) compliance and environmental aspects, as well as pilot testing.

Together, they are developing FLO.S.EN (Floating Sustainable Energy) - a project aimed at creating modular floating units that generate renewable energy through thin-film photovoltaics (PVs). These platforms can operate individually or in clusters and either store energy in marine-grade batteries or power nearby infrastructure such as dams, ports, or hydrogen production units. The project has two main goals: a feasibility study to explore market potential for floating PVs in lakes, reservoirs, and open seas; and further R&D to develop floating structures, including octagonal or dodecagonal units, with advanced energy and navigation systems capable of operating in high-wave marine environments.

The consortium seeks partners - SMEs, research institutes, or industry players - with expertise in areas such as marine engineering, battery technologies for seawater environments, thin-film photovoltaics, IoT-based autonomous navigation, and advanced materials for floating structures and connectors. Experience in conducting market and feasibility studies, as well as environmental assessments (DNSH, LCA/LCE), is also important. Ideal partners will bring technical know-how and applied experience relevant to floating energy systems, renewable marine applications, and scalable clean-tech innovation.

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 4 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

The project introduces a novel concept of modular, self-propelled floating units for renewable energy production in both inland and open-sea environments. These units integrate thin-film photovoltaics and energy storage systems adapted for high-salinity conditions, enabling off-grid functionality. Designed to operate autonomously or in clusters, they can supply energy to nearby infrastructure or support applications such as green hydrogen production. A key innovation is the use of IoT-based navigation systems, allowing remote control and stability even in challenging sea states - an area not yet fully explored in floating PV applications. The combination of clean energy generation, autonomous operation, and adaptability to marine conditions offers strong potential for scalable and sustainable energy solutions beyond traditional inland water deployments.

Technical specification or expertise sought

The consortium is seeking a company with expertise in the development of floating structures, including the integration of thin-film photovoltaic (PV) systems and battery technologies suitable for energy storage on marine vessels. Additionally, a research organization is sought with a strong background in IoT-based autonomous navigation systems for floating units and in the development of advanced materials for flotation bodies and connection components.

The ideal partners should have hands-on experience in applied R&D, prototyping, or commercialization of clean-tech or marine energy solutions and could contribute to Research on flotation materials and components - flotation devices, Construction and optimization of a battery for operation in marine/saltwater conditions, Construction and optimization of navigation / autonomous navigation and data recording under real conditions (IoT, sensors, navigation systems, etc.), and Construction and optimization of thin-film photovoltaic systems (PVs).

Stage of development

Available for demonstration

Sustainable Development goals

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

IPR Status

IPR Notes

Partner Sought

Expected role of the partner

The company partner is expected to contribute to the design and development of floating platforms equipped with thin-film PVs and marine-grade battery storage systems, including integration and potential testing in simulated or real marine environments.

The research partner should lead or support the development of IoT-based autonomous navigation technology and contribute to the study and prototyping of advanced materials for flotation and mechanical connectors.

Both partners should be willing to collaborate within an R&D framework under the Eurostars program and actively participate in technical tasks, testing, and feasibility validation.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- **SME 11-49**
- **SME 50 - 249**
- **R&D Institution**
- **Big company**
- **SME <=10**
- **University**

Call Details

Framework program

Eureka

Call title and identifier

Eurostars call for projects - September 2025

Submission and evaluation scheme

Anticipated project budget

Coordinator required

No

Deadline for EoI

15 Aug 2025

Deadline of the call

4 Sep 2025

Project duration in weeks

156

Web link to the call

https://eurekanetwork.org/opencalls/eurostars-september-2025/

Project title and acronym

FLO.S.EN (Floating Sustainable Energy)

Dissemination

Technology keywords

Market keywords

- **06003002 - Photovoltaics**
- **06008 - Energy Storage**
- **06003004 - Marine energy**

Targeted countries

- **World**

Sector groups involved

- **Maritime Industries and Services**