Project ENERΔTIC: ECO-DESIGN FOR ENERGY SYSTEM IN PAPER MACHINES BASED ON RENEWABLE SOURCES

Summary

Profile type	Company's country	POD reference
Research & Development Request	**Spain**	**RDRES20261106012**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Research and development cooperation agreement**	**• All countries**
Contact Person	**Term of validity**	**Last update**
Enrico FRANZIN	**6 Nov 2026** **6 Nov 2027**	**6 Nov 2026**

General Information

Short summary

ENRATIC is developing the next generation of fully electrified paper machines through the seamless integration of renewable energy sources and hybrid energy storage technologies. By combining batteries and supercapacitors for short-term power management with green hydrogen for long-term energy storage, the project aims to create a flexible, resilient and carbon-neutral industrial energy ecosystem.

Full description

We are a Capital Goods Company focused on the Pulp and Paper Sector and working internationally. Our R&D projects pretends to create the technology for a New Paper Production Industrial Process, in particular a New Paper Drying Process. In this way, the process can be fully electrified, which will result in a substantial reduction of the Carbon Footprint of the Paper Machines, making this Industrial Process much more sustainable.

The final objective of the project is to create a sustainable Industrial Process, with lower production costs and with a lower need for investment.

It is intended to form a project to be presented to the Horizon Europe programme between September 2026 and February 2027.

The Control System is considered to be the basis, not only for controlling and automating the Energy Process, but its main objective is to optimize it by adapting to the variations required in Paper machines.

Advantages and innovations

The main innovation of the project consists of the definition of not only the equipment design parameters but also its Manufacturing characteristics.

As far as the advantages are concerned, the following can be cited:
1. Decarbonization of an Industrial Process that demands an intensive amount of fossil fuels
2. Reduction of production cost
3. Increased competitiveness of the product in the market

Technical specification or expertise sought

Partner must have experience in the design and manufacturing Hydrogen Equipment and Systems.

The aim is to understand the process very well so that the development of the technology can be as closely aligned with reality as possible, thus creating an added competitive advantage.

Stage of development

Sustainable Development goals

- **Goal 12: Responsible Consumption and Production**
- **Goal 9: Industry, Innovation and Infrastructure**

IPR Status

IPR Notes

Partner Sought

Expected role of the partner

Partner must have experience in the design and manufacturing Hydrogen Equipment and Systems.

The aim is to understand the process very well so that the development of the technology can be as closely aligned with reality as possible, thus creating an added competitive advantage.

Type of partnership

Type and size of the partner

Research and development cooperation agreement

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

Call Details

Framework program

Horizon Europe

Call title and identifier

Pillar 2 Cluster LC4

Submission and evaluation scheme

Anticipated project budget

>7,000,000-9,000,000

Coordinator required

Yes

Deadline for EoI

2 Feb 2027

Deadline of the call

2 Feb 2027

Project duration in weeks

192

Web link to the call

TBD

Project title and acronym

TBD

Dissemination

Technology keywords

Market keywords

- **08003005 - Other industrial machinery for textile, paper & other industries**

Targeted countries

- **All countries**

Sector groups involved