

LIFE Call Partner Search: End Users for the Demonstration and Validation of Autonomous Agricultural Technologies

Summary

Profile type

Research & Development Request Spain

Company's country

POD reference

RDRES20260805004

Profile status

PUBLISHED

Type of partnership

**Research and development
cooperation agreement**

Targeted countries

- **Belgium**
- **Bulgaria**
- **Austria**
- **Poland**
- **North Macedonia**
- **Greece**
- **Moldova**
- **Slovenia**
- **Italy**
- **Montenegro**
- **Denmark**
- **Portugal**
- **Luxembourg**
- **Lithuania**
- **Ireland**
- **Netherlands**
- **Finland**
- **Ukraine**
- **Cyprus**
- **Hungary**
- **Iceland**
- **Malta**
- **France**
- **Sweden**

- Latvia
- Czechia
- Germany
- Slovakia
- Croatia
- Estonia
- Romania

Contact Person

[Enrico FRANZIN](#)

Term of validity

5 Aug 2026**5 Aug 2027**

Last update

5 Aug 2026

General Information

Short summary

An European SME specialized in agricultural robotics is seeking research, industrial and demonstration partners to develop and validate an autonomous zero-emission robotic platform for permanent crops. The project aims to demonstrate measurable environmental benefits, including reduced greenhouse gas emissions, air pollution, soil compaction and agricultural inputs, accelerating the transition towards more sustainable and climate-resilient farming systems

Full description

European agriculture is under increasing pressure to reduce greenhouse gas emissions, improve resource efficiency and adapt to increasingly demanding environmental regulations, while facing labour shortages and rising production costs. Permanent crops such as orchards, vineyards, olive groves and nut plantations continue to rely heavily on diesel-powered machinery, creating significant environmental impacts through greenhouse gas emissions, air pollution, soil compaction and fossil fuel consumption.

A European SME specialised in autonomous agricultural robotics is preparing a LIFE Programme demonstration project aimed at validating a new generation of autonomous zero-emission robotic platforms for permanent crops under real farming conditions. The project will demonstrate how autonomous electric machinery can reduce environmental impacts while maintaining or improving operational efficiency and farm productivity.

The consortium is currently seeking end users willing to participate as demonstration sites. Farms, cooperatives, producer organisations and agricultural companies managing permanent crops will have the opportunity to validate the technology during real production campaigns and contribute directly to the development of future sustainable agricultural machinery.

Demonstration partners will participate in field trials carried out under normal farming conditions, allowing the project consortium to assess technical performance, environmental benefits and operational suitability across different crops, climatic conditions and farming practices. The project will quantify indicators such as greenhouse gas emissions, energy consumption, air pollutant emissions, soil compaction, noise reduction and optimisation of agricultural inputs through standardised monitoring and Life Cycle Assessment methodologies.

The consortium welcomes end users operating orchards, vineyards, olive groves, citrus plantations and other permanent crops across Europe. Demonstration sites representing different environmental conditions, farming systems and geographical regions are particularly sought in order to maximise the project's environmental impact, replicability and long-term adoption throughout Europe.

Advantages and innovations

The proposed project goes beyond existing agricultural machinery by demonstrating an integrated, solution that combines full electrification, autonomous operation and precision agriculture within a single platform specifically designed for permanent crops. Unlike conventional diesel tractors or existing autonomous solutions, the project focuses on delivering measurable environmental improvements while maintaining compatibility with standard agricultural implements and existing farming practices.

The project's main innovation lies not only in the robotic platform itself but also in its demonstration under real operational conditions across multiple representative European agricultural environments. This approach will generate independently verifiable evidence of environmental and operational performance, reducing one of the main barriers to market uptake: the lack of large-scale validation of autonomous zero-emission agricultural machinery.

Expected innovations include:

- Demonstration of a zero-direct-emission alternative to conventional diesel machinery for permanent crops.
- Integration of autonomous navigation, artificial intelligence and precision implement management into a single operational platform.
- Reduced greenhouse gas emissions, air pollutants, soil compaction, noise and resource consumption through precision farming technologies.
- Validation under real farming conditions across different crops, climates and operational environments.
- Generation of robust environmental evidence through standardised monitoring and Life Cycle Assessment (LCA).
- High replication potential across European orchards, vineyards, olive groves and other permanent crops, facilitating future large-scale deployment and supporting EU climate and environmental objectives

Technical specification or expertise sought

The consortium is seeking end users and demonstration partners with experience in the management of permanent crops, willing to participate in the validation of innovative autonomous agricultural technologies under real farming conditions.

Relevant expertise and capabilities include:

- Commercial orchards, vineyards, olive groves, citrus or other permanent crop plantations suitable for demonstration activities.
- Experience in sustainable farming practices and precision agriculture.
- Capacity to host field demonstrations throughout complete agricultural campaigns.
- Availability to support operational testing, environmental monitoring and data collection.
- Interest in evaluating innovative technologies that contribute to reducing emissions, improving resource efficiency and increasing farm sustainability.
- Willingness to collaborate with research organisations, technology developers and other industrial partners within a European innovation project.
- Ability to provide technical feedback and operational requirements to support the validation and future deployment of autonomous agricultural machinery

Preference will be given to organisations representing different climatic regions, crop types and farming systems across Europe in order to maximise the project's demonstration value and replication potential.

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 2: Zero Hunger**
- **Goal 13: Climate Action**
- **Goal 7: Affordable and Clean Energy**

IPR Status

IPR Notes

Partner Sought

Expected role of the partner

The consortium is seeking end users willing to actively participate in the demonstration and validation of innovative autonomous agricultural technologies under real farming conditions

within a European LIFE project.

Partners will provide representative demonstration sites where the proposed solution can be tested throughout complete agricultural campaigns under normal commercial operations. Their participation will be essential to validate the technical, environmental and operational performance of the technology across different crop types, climatic conditions and farming practices.

Expected activities include:

- Providing access to orchards, vineyards, olive groves or other permanent crop plantations suitable for demonstration activities.
- Supporting the planning and execution of field demonstrations during normal farming operations.
- Collaborating in the collection of operational and environmental data required for project evaluation.
- Providing technical and practical feedback on usability, operational performance and integration into existing farming practices.
- Participating in project meetings, technical workshops and dissemination activities where appropriate.
- Supporting the evaluation of the environmental, economic and operational benefits of the demonstrated solution.
- Contributing to the assessment of the technology's replication potential across different European agricultural regions.

Partners will work closely with technology developers, research organisations and environmental experts to ensure that the proposed solution is validated under representative operational conditions and generates robust evidence supporting future large-scale deployment across Europe.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

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

Call Details

Framework program

Climate action, environment, resource efficiency and raw materials

Call title and identifier

LIFE-2026 -CLIMA-SAP-CCM

Submission and evaluation scheme

Single-stage

Anticipated project budget

2-4M€

Coordinator required

No

Deadline for EoI

21 Aug 2026

Deadline of the call

22 Sep 2026

Project duration in weeks

208

Web link to the call

Project title and acronym

Dissemination

Technology keywords

Market keywords

- **09005 - Agriculture, Forestry, Fishing, Animal Husbandry & Related Products**
- **08003005 - Other industrial machinery for textile, paper & other industries**
- **08002004 - Robotics**

Targeted countries

- Belgium
- Bulgaria
- Austria
- Poland
- North Macedonia
- Greece
- Moldova
- Slovenia
- Italy
- Montenegro
- Denmark
- Portugal
- Luxembourg
- Lithuania
- Ireland
- Netherlands
- Finland
- Ukraine
- Cyprus
- Hungary
- Iceland
- Malta
- France
- Sweden
- Latvia
- Czechia
- Germany
- Slovakia
- Croatia
- Estonia
- Romania

Sector groups involved

- Agri-Food