

Circular Living Lab for UAV and Light Mobility Systems (France Demonstrator for UAV) is seeking partners for the Horizon Europe call HORIZON-CL6-2026-01-CIRBIO-01 (two stage).

## Summary

Profile type

**Research & Development Request France**

Company's country

POD reference

**RDRFR20260323004**

Profile status

**PUBLISHED**

Type of partnership

**Research and development cooperation agreement**

Targeted countries

- Greece
- Latvia
- Italy
- Denmark
- Romania
- Germany
- Bulgaria
- Sweden
- Spain
- Ukraine
- Portugal
- Hungary
- Poland
- Estonia
- Lithuania

Contact Person

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Term of validity

**23 Mar 2026**

**23 Mar 2027**

Last update

**23 Mar 2026**

## General Information

Short summary

A French regional ecosystem (competitiveness cluster, local authority, industrial and economic development agency) is seeking European partners from the research, industry and public sectors as part of the Horizon Europe call

CIRCBIO 2026 project (in two phases) to establish a systemic 'Living Lab' focused on circular solutions in the UAV sector and on LMTs for the end-of-life management of batteries, components and materials.

#### Full description

The project aims to establish a Systemic Living Lab for Circular Advanced Materials, acting as a regional flagship demonstrator under the Circular Cities and Regions Initiative (CCRI). It will serve as an operational environment to design, test and deploy systemic circular solutions specifically targeting the End-of-Life (EoL) value chains of Unmanned Aerial Vehicles (UAVs) and Light Means of Transport (LMTs), such as e-bikes and e-scooters.

An initial core regional partnership in France has already been established, bringing together a competitiveness cluster, a regional innovation agency, the regional authority. This governance backbone ensures strong alignment with the Smart Specialisation Strategy (S3) and provides the institutional capacity to embed circularity within both industrial and mobility policies at regional level.

Building on this dual specialisation, the project will accelerate the transition from linear mobility systems to an integrated circular mobility ecosystem, fully aligned with the European Green Deal, the Circular Economy Action Plan, and the Critical Raw Materials agenda.

The Living Lab will address circularity challenges specific to UAV and LMT value chains, through integrated demonstration and systemic innovation across three main pillars:

- Advanced Materials and Components (UAV & LMT).
- Critical Raw Materials and Energy Systems.
- Systemic Circular Value Chain Integration.

A Systemic Innovation Approach: the project addresses circularity as a systemic transformation challenge rather than a purely technological one. It integrates:

- Governance innovation and CCRI alignment
- Regulatory experimentation (e.g. UAV dual-use and battery safety sandboxes)
- Industrial symbiosis between UAV and LMT value chains
- Skills development and stakeholder engagement

A Quadruple Helix approach ensures close collaboration between industry, research, public authorities and civil society. Solutions will be validated in real conditions, advancing from TRL 5/6 to TRL 7/8.

Scalability and European Added Value: the Living Lab is designed as a replicable model for circular advanced mobility systems across Europe. It will deliver:

- EPR-ready frameworks and circular business models for UAV and LMT sectors
- Replication toolkits for CCRI regions
- Policy and investment guidance for large-scale deployment

By structuring circularity at the level of entire mobility value chains, the project provides a scalable European blueprint, supporting both resource security and climate objectives.

### Advantages and innovations

The innovation of the project lies in its systemic and sector-focused approach to circular advanced mobility, addressing the full value chains of UAVs and LMTs:

- Moving beyond isolated recycling solutions towards integrated circular value chains covering collection, dismantling, reuse, and high-value material recovery for UAV and LMT systems
- Combining real-life industrial and urban pilot demonstrations with governance innovation and regulatory alignment, including dedicated sandboxes for UAV dual-use components and battery safety
- Structuring cross-sector synergies between aerial and urban mobility ecosystems, enabling new forms of industrial symbiosis and shared circular infrastructures
- Integrating material recovery, battery second-life, digital traceability, skills development, and regional policy frameworks within a single Living Lab model
- Delivering a replication blueprint tailored to circular advanced mobility, adaptable to other European regions facing similar challenges in electrified transport systems

The project bridges technology validation, operational deployment, and policy innovation within one coordinated ecosystem, enabling a scalable transition to circular mobility systems in Europe.

### Technical specification or expertise sought

The consortium is seeking partners with expertise in one or more of the following areas:

- Dismantling and End-of-Life processing of UAVs and LMTs, including safe handling of lithium-ion and LiPo batteries
- Advanced materials recovery, notably:
  - o Carbon fiber composites (UAV structures)
  - o Lightweight materials and embedded electronics (LMTs)
- Critical Raw Materials (CRM) recovery, including rare earth elements (e.g. Neo-dymium, Dysprosium) and strategic metals from motors and electronic components
- Battery diagnostics and second-life applications, including testing, repurposing and recycling of mobility batteries
- Circular design and eco-design, including Design for Disassembly for UAVs and LMT products
- Reverse logistics and collection systems for diffuse and decentralized mobility as-sets
- Material Flow Analysis (MFA) and circular value chain modelling specific to ad-vanced mobility systems
- Digital traceability and product passports, enabling monitoring of components and materials across the lifecycle

### Stage of development

**Lab tested**

### IPR Status

**IPR applied but not yet granted**

### IPR Notes

### Sustainable Development goals

- **Goal 11: Sustainable Cities and Communities**
- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 12: Responsible Consumption and Production**

## IPR Notes

## Partner Sought

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### Expected role of the partner

The consortium is seeking complementary European partners to develop a network of regional Living Labs focused on circular UAV and Light Mobility (LMT) value chains.

Priority countries: Germany, Italy, Spain, Sweden, Denmark and Widening countries: Portugal, Bulgaria, Romania, Poland, Estonia, Hungary, Latvia, Lithuania, Greece and Ukraine. Open to other member states or associated countries if relevance is justified.

The consortium is primarily looking for partners embedded in strong regional ecosystems, capable of mobilising a full Quadruple Helix (industry, public authorities, research, civil society):

- Regional Orchestrators (key role) – clusters, innovation agencies or similar, able to coordinate a Living Lab and ensure S3 alignment
- Industry (UAV/LMT) – OEMs, operators, recyclers ready to validate circular solutions
- RTOs / Universities – expertise in circular mobility, materials, batteries, CRM
- Public Authorities / Regions – engaged in circular economy and mobility policies
- SMEs / Tech providers – solutions in recycling, batteries, traceability or logistics

The project will establish 5 Living Labs (2 demonstrators, 3 replicators), each:

- Anchored in a regional ecosystem (S3 aligned)
- Mobilising a Quadruple Helix
- Contributing to replication across Europe

Additional info :

- Horizon Europe experience is a plus, not mandatory
- Strong capacity to engage regional stakeholders is essential

### Type of partnership

**Research and development cooperation agreement**

### Type and size of the partner

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

## Call Details

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Framework program

**Horizon Europe**

Call title and identifier

**Deploying circular systemic solutions through living labs in cities and regions (Circular Cities and Regions Initiative topic)  
Call 01 - two stage (2026) (HORIZON-CL6-2026-01-two-stage)**

Submission and evaluation scheme

Anticipated project budget

Coordinator required

**No**

Deadline for EoI

**31 Mar 2026**

Deadline of the call

**16 Apr 2026**

Project duration in weeks

Web link to the call

Project title and acronym

## Dissemination

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Technology keywords

- **10002007 - Environmental Engineering / Technology**
- **02011001 - Aeronautical technology / Avionics**
- **10002015 - Life Cycle Assessment**

Market keywords

- **09001007 - Other transportation**
- **08004004 - Other pollution and recycling related**
- **03002 - Batteries**

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Sector groups involved