

HORIZON-CL6-2025-01-ZEROPOLLUTION-08: Industrial and research partners sought for the development of a mobile ultrasonic cleaning and disinfection system for high-hygiene industrial environments

Summary

Profile type	Company's country	POD reference
Research & Development Request	Spain	RDRES20250422001
Profile status	Type of partnership	Targeted countries
PUBLISHED	Research and development cooperation agreement	• World
Contact Person	Term of validity	Last update
Enrico FRANZIN	22 Apr 2025 22 Apr 2026	22 Apr 2025

General Information

Short summary

A Spanish SME in the dairy industry is preparing a proposal for the upcoming call HORIZON-CL6-2025-01-ZEROPOLLUTION-08: Reducing pollution from the food and drink industries. The project will develop a mobile, autonomous cleaning and disinfection system using projected ultrasound and AI, aimed at food, pharmaceutical and healthcare industries. They seek partners with expertise in ultrasonic engineering, robotics, and pilot development.

Full description

LIMPUQ is an innovation-driven R&D project aimed at designing and developing a robot-assisted, autonomous, non-immersive ultrasonic cleaning system. The system will apply projected ultrasound over a fine water film and incorporate sensors for real-time hygiene verification. The solution targets high-sanitation environments including food processing, pharma and healthcare, reducing water and chemical use while ensuring validated decontamination. The project builds on the insights of the LOWTEV FP7 project, but introduces mobility, AI, hygiene monitoring, and surface-adaptive design. They aim to submit the project under Horizon Europe in the upcoming call HORIZON-CL6-2025-01-ZEROPOLLUTION-08. The project is currently supported by Spanish partners in technology, cleaning and food industry, and is looking for new international partners from all EU and Horizon Europe

associated countries.
EOI deadline: 31/07/2025
Call deadline: 04/09/2025

Advantages and innovations

Combines projected ultrasonic cavitation with intelligent hygiene monitoring. Mobile and adaptable design for non-immersive cleaning of complex industrial surfaces. Reduces water and chemical consumption. Scalable to diverse sectors. High replicability. Inspired by proven EU-funded project LOWTEV, but expands into mobility, robotics and AI.

Technical specification or expertise sought

Partners are sought with expertise in:

- Ultrasonic cleaning and cavitation systems
- Robotic design and mobile mechatronic platforms
- Hygiene verification technologies and biosensor integration
- Pilot manufacturing and industrial system prototyping

Stage of development

Under development

Sustainable Development goals

- **Goal 6: Clean Water and Sanitation**
- **Goal 12: Responsible Consumption and Production**
- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 3: Good Health and Well-being**
- **Goal 13: Climate Action**

IPR Status

Secret know-how

IPR Notes

Partner Sought

Expected role of the partner

R&D collaboration for technological contributions including ultrasonic transducers, robotic platforms, hygiene sensor development, and pilot deployment in relevant environments.

Type of partnership

Type and size of the partner

Research and development cooperation agreement

- SME 11-49
- SME 50 - 249
- R&D Institution
- University

Call Details

Framework program

Horizon Europe

Call title and identifier

HORIZON-CL6-2025-01-ZEROPOLLUTION-08 – Reducing pollution from the food and drink industries

Submission and evaluation scheme

Single stage, Innovation Action (IA)

Anticipated project budget

6 M€

Coordinator required

No

Deadline for EoI

31 Jul 2025

Deadline of the call

4 Sep 2025

Project duration in weeks

156

Web link to the call

[Not yet published on the Funding and Tenders portal](#)

Project title and acronym

LIMPUQ – Localized Intelligent Mobile Projected Ultrasound for Cleaning and Hygiene

Dissemination

Technology keywords

- **01001001 - Automation, Robotics Control Systems**
- **01003003 - Artificial Intelligence (AI)**
- **03001001 - Cleaning Technology**

Targeted countries

- **World**

Market keywords

- **05007002 - Pharmaceuticals/fine chemicals**
- **07003001 - Wine and liquors**
- **07003002 - Health food**
- **07003003 - Soft drinks and bottling plants**
- **05007007 - Other medical/health related (not elsewhere classified)**

Sector groups involved

Media

Images

[LIMPUQ challenges](#)