EMERGO

Funded by the European Union

Press Release

# A new European platform will step up the detection and removal of persistent and emerging pollutants in the food industry

- The EmerGO project has a budget of nearly €6.8 million from the Horizon Europe programme and expects to achieve reductions of between 40 and 80 per cent in pollutants at the pilot plants where the innovations will be validated.
- The initiative will focus on the pollutants released into water during the sector's cleaning operations, such as microplastics and nanoplastics, per- and polyfluoroalkyl substances (PFAS), endocrine disruptors, antibiotic residues, and disinfectants and detergents.
- Multimodal sensors will be combined with artificial intelligence models to detect the pollutants in real time, alongside circular treatment technologies that recover the water.

**Barcelona, 16 September 2026-** The European EmerGO consortium, coordinated by the technology centre Eurecat, will create a European platform to identify, monitor and reduce the persistent and emerging pollutants (PEPs) in the food and beverage industry that are released during production and, above all, during cleaning processes.

Cleaning is the most water-intensive process in a food and beverage plant, accounting for as much as 70 per cent of its demand, and it is the main route by which pollutants enter water. Many of them survive conventional treatment and build up in rivers and soils, with consequences for biodiversity and health.

The project will combine multimodal sensors and artificial intelligence models to detect the pollutants in real time, alongside circular treatment technologies. The solutions will be validated under real industrial conditions in three key sectors: meat, fruit juice and confectionery.

With a budget of nearly €6.8 million from the Horizon Europe programme, the consortium expects to achieve reductions of between 40 and 80 per cent in pollutants at the pilot plants where the innovations will be validated. The initiative is also seeking to achieve a removal efficiency of more than 75 per cent, as well as to reuse over 50 per cent of the treated water and recover more than 30 per cent of salts and reagents.

One of the project's scientific cornerstones "is what is known as the 'cocktail effect'", explains the project's principal investigator, Andrea Naves, of Eurecat's Water, Air and Soil Unit — that is, "simultaneous exposure to a range of pollutants which, once mixed, can amplify their impact on the environment and on health. EmerGO therefore takes

these cumulative effects and human exposure into account to steer the most efficient treatment strategies".

The solutions developed in the project aim to inform the future European rules governing pollution in the sector and will include transparency tools for consumers. "We want EmerGO to have a real impact, with technologies for industry, knowledge for regulators and clear information for consumers", says the project coordinator at Eurecat, Óscar Rodríguez.

The consortium, coordinated by Eurecat, is made up of 18 partners from 10 countries. It comprises research centres (Berlin Centre of Competence for Water, Abertay University, the Agricultural University of Athens, Korea Institute of Civil Engineering and Building Technology KICT, Helmholtz UFZ and Sciensano), technology companies (IRIS Technology, Nijhuis Saur Industries, CESCO and QSAR Lab), outreach bodies and clusters (Office International de l'Eau, EUFIC, EIT Food and the Catalan cluster INNOVACC), and the companies that will host the three pilot plants: Casademont (meat), Cold Pressok (fruit juice) and Jotis (confectionery).

## Project information

**Full Project Title:** EmerGO – A platform for tracking and reducing persistent and emerging pollutants towards zero pollution in food and drink systems.

**Website:** www.emergo-project.eu

**Project Acronym:** EmerGO

**Start date:** 1 June 2026

**End date:** 31 May 2030

**Coordinator:** Eurecat Technology Centre

## Project coordinators

**Andrea Naves and Óscar Alberto Rodríguez**

*Eurecat Technology Centre*

Project Coordinators

**Email:** info@emergo-project.eu

Funded by the European Union

This project has received funding from the Horizon Europe programme under grant agreement No. 101291654. Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.