

LIFE Waste2Coag Showcases Brine Recovery Innovations at International Conference

The LIFE Waste2Coag project, co-funded by the EU LIFE programme (LIFE20 ENV/ES/000430) and coordinated by Global Omnium, continues to advance sustainable wastewater treatment. This project is pioneering an innovative **Electrolytic System (ELS) technology** that produces **coagulants** for wastewater treatment, by treating **brines** and using **metal scraps** to produce electrodes, replacing non-renewable primary resources, in alignment with circular economy principles.



IWA Resource Recovery Conference Highlights

In May 2025, the International Water Association (IWA) Resource Recovery Conference, hosted by Wetsus in collaboration with Delft University of Technology and Wageningen University and Research, was held in Leeuwarden, the Netherlands. The event, marking over 15 years of progress in resource recovery, attracted over 450 professionals, including academics, industry leaders, investors, and policymakers to explore pathways for **transforming innovative recovery concepts into viable business opportunities**.

The LIFE Waste2Coag consortium, represented by Global Omnium, Aquafin and Isle Utilities, presented key advancements in the ELS technology. During the “**Salt and Brines**” session, the project coordinator Feliu Sempere delivered a keynote showcasing the technology’s potential. Conference attendees recognized brine recovery as a critical market interest area, driven by growing global demand for drinking water.

“It was very valuable to see different technologies and approaches that can be applied for resource valorisation in facilities of the complete water cycle, including wastewater treatment plants. Indeed, some of them could also be connected to the technology of our project to improve its further development. It was a good exchange of experiences with other researchers and entrepreneurs.” Feliu Sempere, R&D Engineer, Global Omnium



LIFE Waste2Coag Achievements

The project has successfully produced coagulants for both urban and industrial wastewater treatment. Respirometry tests confirmed that these coagulants are **non-toxic** to activated sludge. Validation in urban wastewater settings is ongoing, while results from the industrial site of project partner Creaciones Joviar in Spain **demonstrated the coagulants’ effectiveness in treating industrial wastewater with a reduced climate change impact compared to conventional alternatives.**

What’s Next?

The LIFE Waste2Coag project continues to explore opportunities for scaling and replicating its ELS technology. Plans are underway to further validate the technology’s application in **municipal wastewater treatment**, with a **second Innovation Workshop** planned in late 2025 or early 2026 to assess commercial viability and market interest for this sustainable solution.



WASTE2COAG

Brine and Metal Wastes Valorisation to Produce
Coagulants for Wastewater Treatment

About LIFE Waste2Coag

The LIFE Waste2Coag project, co-funded by the EU LIFE programme (LIFE20 ENV/ES/000430), aims to demonstrate an innovative and cost-efficient technology based on the electrolysis of brines to produce coagulants for the removal of pollutants in urban and industrial wastewater. LIFE Waste2Coag boosts the circular economy in wastewater treatment plants and creates synergies with other sectors, as industrial scrap metallic wastes and brines generated in different industries are valorised.

The partners of the project are: [Global Omnium Ambiente, SL](#) (Coordinator), [AIDIMME Technology Institute](#), [Aquafin NV](#), [Creaciones Joviar SL](#), [Isle Utilities Ltd.](#)

Links: [Website](#) | [LinkedIn](#) | [X](#) | [Youtube](#)