



## **LIFE Waste2Coag: Championing the circular economy**

*New strides made in LIFE Waste2Coag project that turns waste into a resource using an innovative electrolysis technology*

**BRUSSELS, 22 March 2023.**

LIFE Waste2Coag recently announced that the innovative Electrolytic Technology (ELS technology) prototype that will convert brines into sustainable coagulants, has been installed at the Wastewater Treatment Plant (WWTP) in Gandia, Spain. The news was announced at the project's 3<sup>rd</sup> Coordination Meeting, held on 15<sup>th</sup> February this year, during which project partners from Spain, the UK and Belgium provided updates.

LIFE Programme projects like the LIFE Waste2Coag involve several European partners, in this case 5 partners from across the continent, who work together to achieve the project aims in a collaborative way, each bringing their own expertise. At the 3<sup>rd</sup> project Coordination Meeting, Global Omnium (Valencia) provided an update on the status of the construction and commissioning of the ELS prototype at Gandia WWTP. Later this year, the project partners will review the data generated by the operation of the ELS in this first demo site to assess the efficacy of the technology to produce coagulants onsite. After testing the technology in Gandia WWTP, the ELS will be tested in two more demo sites a urban WWTP (Wulpen, Belgium) and an industrial WWTP (Joviar, Spain)

AIDIMME (Valencia) provided an update on the methodology and data required for the Life Cycle Analysis (LCA) that they are conducting to analyse the economic, social and environmental sustainability of the ELS technology and the coagulants produced. ISLE, the partner leading the Exploitation, Dissemination and Communication strategy of the project, provided an update on the work done, including an overview of the main outcomes of the market and competitor landscape analysis conducted.

**Tatiana Montoya, of Global Omnium and the project coordinator for LIFE Waste2Coag said: "With this project we aim to valorise brines, promoting self-production of coagulants to treat wastewater. This concept will aid to secure supply of coagulants, which is important in a context that is characterized by instability of reactants in terms of supply and price".**

LIFE Waste2Coag has been presented at two events in October last year (ECOFIRA and EFIAQUA) and two further events in November. These were the IWA Young Water Professionals (YWP) and FEMEVAL. A project poster was presented at IWA YWP which is available to download from the project resources section of the website. A short video from the same event is available to view via the project YouTube channel. A poster of the project was also previously presented at the Mesa Española de Tratamiento de Aguas (META) at the XIV Spanish Water Treatment Congress, in June 2022 which is also available to download from the project website.

### **About LIFE Waste2Coag:**

LIFE Waste2Coag has received funding from the LIFE programme of the European Union under the Grant Agreement no LIFE20 ENV/ES/000430. LIFE Waste2Coag boosts the circular economy in water treatment plants and uses industrial scrap metallic wastes and brines generated in different industries, including WWTP and desalination plants (DP), to create sustainable coagulants for treating wastewater in-situ.

The main expected results of the project are:

- Design, build and operate an electrolytic pilot system, using wastes to produce coagulants,
- Create coagulants with an adjustable metal concentration
- Valorise up to 5,000 m<sup>3</sup> brines during the project
- Achieve a 50% decrease in current coagulant treatment costs per m<sup>3</sup> of treated wastewater
- Achieve an energy consumption of around 9 kWh per kg of metal in the coagulants that are produced
- An 80% reduction of CO<sub>2</sub> emissions by using scrap metal as a raw material
- Demonstrate that the technology is applicable to wastewater treatment plants in the EU where over 4 million tons per year of coagulant are consumed

The project partners are: **Global Omnium (GOMSL)** lead the management and monitoring of the project, as well as the part related to the permits for the electrolytic technology prototype, and also validating the technology in urban WWTPs. **AIDIMME Technology Institute** lead the designing of the electrolytic prototype technology used in the project and the optimisation of the technology, as well as the environmental and socio-economic study. **ISLE** lead the market access & exploitation of the results as well as the dissemination & communication activities. **AQUAFIN** lead the work related to replicability in urban wastewater treatment plants, and **JOVIAR** lead the part related to transferability in industrial wastewater treatment plants.

To learn more about the project please visit the website: [www.lifewaste2coag.com](http://www.lifewaste2coag.com) or follow the project on LinkedIn: [www.linkedin.com/company/life-waste2coag](http://www.linkedin.com/company/life-waste2coag), or Twitter: <https://twitter.com/LIFEWaste2Coag>. Please visit the LIFE Waste2Coag YouTube channel: [www.youtube.com/@LIFEWaste2Coag](http://www.youtube.com/@LIFEWaste2Coag) where the project explainer video is available to view. The project brochure is also available to download via the project website.

**Disclaimer:** LIFE Waste2Coag is co-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 CINEA. Neither the European Union nor the granting authority can be held responsible for them.

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