### December 2022 / Newsletter 01



# WASTE2COAG

Brine and Metal Wastes Valorisation to Produce Coagulants for Wastewater Treatment

## Welcome to the first LIFE Waste2Coag Newsletter!

### Boosting the circular economy in the water and industrial sector

The LIFE Waste2Coag project aims to demonstrate an innovative and resource-efficient technology solution for brine and metal waste valorisation to produce sustainable coagulants for wastewater treatment. The technology is based on electrolysis (ELS) and the coagulant produced can be applied insitu for pollutant removal at both urban and industrial wastewater treatment plants (WWTPs).

Industrial scrap metallic wastes, generated by the metal industry, and brines, produced in desalination and industrial plants, will be valorised. Therefore, the project creates synergies between desalination plants, industrial plants and WWTPs, promoting a circular economy model.

### **Technology Updates**

Our project partners have been busy during this first year designing and building the ELS prototype for use in both urban and industrial WWTPs.

The ELS is being constructed inside a 20-foot container. This will allow for its transport between the three demo sites within the project (two municipal WWTPs (Spain, Belgium) and one industrial WWTP (Spain)). The vessels for brine reception and coagulant storage have been installed in one of the municipal WWTPs.



ELS prototype, installed in Gandia WWTP, July 2022

The scrap metals (iron and aluminium) have been acquired and cut to be used as electrodes for the reactor.

The brine characterisation at two of the demo plants in the project (municipal WWTP in Belgium and industrial WWTP in Spain) has been completed. This is an essential preliminary step as it will impact the ELS operation and performance.



Recirculation tanks for brines and coagulants, July 2022



Brine characterisation, November 2021

#### Exploitation & business strategy

The Key Exploitable Results (KER) have been identified and the best exploitation and business strategy assessed via a collaborative approach between all partners. These have shaped the scope of market analysis which is due to be completed by early 2023.

Innovation Workshops (IW) will be organised to engage with potential end-users and identify opportunities and barriers for the market uptake of the ELS. The feedback obtained in the IW will be used to support the development of the exploitation and business strategy for the ELS.



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25,000

people

### **Dissemination & Communication strategy**

The LIFE Waste2Coag project aims to reaching a combination of stakeholders from the general public to potential up-takers of the ELS. Different communication and dissemination tools and activities have been launched to achieve this.

We have reached 25,000 people so far!

#### Where has LIFE Waste2Coag been?

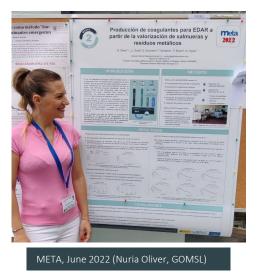
Sharing the project results beyond the Consortium is an essential part of LIFE projects. So far, the LIFE Waste2Coag partners have been in **six (6)** events this year.

- XIV Congreso Español de Tratamiento de Aguas (META) in June 2022
- Water Europe Working Groups in June 2022
- LIFE projects networking day in June 2022
- Ecofira in October 2022
- Efiaqua in October 2022
- IWA Young Professionals Conference in November 2022

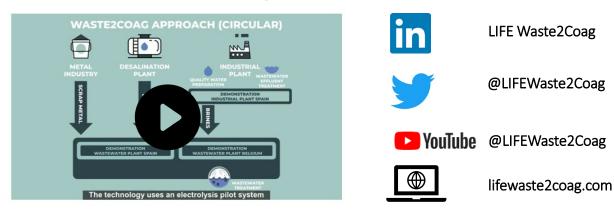
#### Attending these events has enabled us to reach over 20,000 people!



Ecofira, October 2022 (Silvia Oyonarte, AIDIMME)



### Learn more about the project



With best wishes for the festive season and wishing you all a happy new year. We look forward to sharing more project news with you next year!













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