

# Supporting the green and digital transition of the EU process industries

### Why RESURGENCE?

RESURGENCE is an EU-funded project focused on advancing circular water systems in industries to support EU goals for climate neutrality, circularity, and competitiveness.

With a consortium of 20 partners located across 11 countries, the project explores innovative water treatment technologies and recovery of energy and materials, enhanced by digital tools for optimized operations.

### 4 case studies



## The project's objectives

- **Turn** EU process industries into facilities that recover resources from wastewater, aiming for climate friendliness, reuse, and competitive edge.
- → **Improve** how we value industrial wastewater using flexible treatments and digital tech to handle its different qualities.
- → Use new digital tools to get the most out of water, energy, and other materials, making resource use more efficient.
- Make sure these technologies work across different industries and fit well with current systems.
- → Gain major environmental, social, and economic benefits, improving the EU's competitive and innovative strength.

# **RESURGENCE methodology**

- Develop and research innovative technologies focusing on climate neutrality, circularity, and competitiveness in resource use (water, energy, feedstock).
- → Integrate innovative technologies into pilot plants for design, construction, and validation, ensuring they are modular and adaptable to current industrial wastewater treatment practices.
- → Promote Seeds of Hubs for Circularity (S4C) to foster industrial ecosystems for effective cross-collaboration among various sectors and regions.

#### **CASE STUDY 1**

**Pulp and paper industry** Figueira da Foz, Portugal

CASE STUDY 2

Chemical industry Istanbul, Turkey

**CASE STUDY 3** 

**Steel industry** Ostrowiec, Poland

- → Focus on maximizing the replicability and scalability of these technologies and approaches to ensure widespread adoption and impact across the EU.
- Use an interdisciplinary approach to foster co-design and collaboration among stakeholders



#### CASE STUDY 4

Urban-industrial symbiosis Campo de Gibraltar, Spain



Funded by the European Union

### resurgence-project.eu



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START DATE: 01 December 2023

DURATION: 48 months

BUDGET: **€9,222,570.50** 



