

Press release

DECHEMA Gesellschaft für Chemische Technik und Biotechnologie e.V.

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EU project CORNERSTONE supports long-term circular economy of european industry

Traditional industrial wastewater practices fall short in achieving water valorization and reuse— a misalignment with the ambitious goals set by Europe. The recently launched CORNERSTONE project sets the goal of bridging this gap by integrating cutting-edge technology and digital solutions into established industrial wastewater treatment systems. The project not only aims to facilitate the recovery of freshwater, energy, and solutes but also to modernize wastewater treatment systems that seamlessly align with the principles of the circular economy.

The experts of the CORNERSTONE consortium want to achieve long-term circular economy of EU industry via recycling and reusing resources from industrial water and wastewater streams by developing novel technologies in combination with existing processes – combined with smart monitoring technologies and digital tools for risk and decision management.

"Industrial waste streams are highly complex, requiring a paradigm shift to transform them into valuable resources. We will develop new technologies and combine them with conventional processes to create synergies for circular industrial value chains," says Cejna Anna Quist-Jensen, who coordinates the project together with Aamer Ali from Aalborg University.

Sixteen partners from eight European member states form a multidisciplinary consortium, which includes large enterprises, academia and research & technology organisations. Targeting steel, pulp, paper, and chemical industries, CORNERSTONE aligns with P4Planet's objectives, paving the way for circular processes and EU climate neutrality by 2050.

Via novel technological developments the aim is to enable up to 90% wastewater, energy and solute reuse by tapping the potential of currently difficult-to-treat wastewater streams and using waste heat for water recovery. These new developments, together with digital tools shall be easily deployed cross-sectorial and deliver long-lasting impacts to a sustainable European industrial water management approach.

CORNERSTONE is an EU Funded project with a total budget of 10,569,803€ and runs till the end of 2027. The project officially launched its activities in Aalborg, Denmark, from January 30 to February 1.

DECHEMA is responsible for the communication, dissemination and exploitation of project results and is involved in the development of decision support tools for the digital management of water, energy and dissolved substances in industry.

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