



SPIRE-01-2016

ReWaCEM

Full Title: Resource recovery from industrial waste water by cutting edge membrane technologies

Aim:

The ReWaCEM project aims at reducing water use, wastewater production, energy use and water footprint by between 30-90% as well as increasing valuable metal resource recovery in the metal plating, galvanizing and printed circuit board industry.

Concept:

To achieve its objectives, ReWaCEM will adopt two cutting edge membrane technologies suitable for the requirements of closed material cycles approaches and recovery concepts in metal processing industry: Diffusion Dialysis (DD) and Membrane Distillation (MD) as an integrated hybrid process. This combination of existing technologies will be adapted to fit the requirements of 4 pilot demonstration sites in representative industrial applications of the metallurgical industry. After evaluations, a highly attractive technological solution for low energy wastewater treatment will be available to be introduced into the large and growing market of metal processing. This market will profit significantly from the technological outcome of this innovation action, with cost savings and environmental benefits as relevant rewards. In order to maximise impact, the project consortium gathers end users, scientific partners, associations, decision makers and SMEs with the intention for further mobilisation towards promoting innovative membrane solutions for industrial water and resources management, leading to the effective implementation of European directives and policies while creating market opportunities for European industry and SMEs.

Start date:

01/10/2016

End date:

30/09/2019