Ressource recovery from industrial waste water by cutting edge membrane technologies

Fact Sheet

Project Information

ReWaCEM

Grant agreement ID: 723729

Project website [link]

Funded under H2020-EU.2.1.5.3.

Start date 1 October 2016

End date 30 November 2019

Overall budget € 5 781 631,25

EU contribution € 5 041 866,76

Coordinated by FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.

Germany

Objective

The ReWaCEM project aims at reducing water use, wastewater production, energy use, valuable metal resource recovery and water footprint by between 30-90% in the metal plating, galvanizing and printed circuit board industry. In order to achieve these goals, 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 in order to evaluate the accomplishment of the ReWaCEM goals. Through the evaluation of the demonstration a highly attractive technological solution for low energy wastewater treatment will be available to be
A technological solution for low energy wastewater treatment will be available to be entered into the large and growing market of metal processing. This market will profit significantly from the technological outcome of the innovation action, with cost savings and environmental benefits as relevant rewards. In order to maximise impact, the project consortium was selected carefully to represent all relevant stakeholders in the quadrant of end users, scientific partners, associations and decision makers and SMEs. The consortium will establish a dissemination & exploitation board that will create a substantial network of interest groups from agencies, industry, research SMEs and research centres as well as universities. The successful exploitation of the results will lead to a post project up-scaling of the technology and a step by step market introduction. Part of ReWaCEM will be to mobilise all relevant stakeholders into 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.

Field of science
/social sciences/economics and business/business and management/commerce
/engineering and technology/environmental engineering/waste management/waste water

Programme(s)

Topic(s)

Call for proposal

H2020-SPIRE-2016

Funding Scheme

IA - Innovation action

Coordinator

FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.

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<th>EU contribution</th>
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<td>Hansastrasse 27C, 80686 Munchen, Germany</td>
<td>Research Organisations</td>
<td>€ 921 605</td>
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# Participants (14)

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<td>AEE - INSTITUT FUR NACHHALTIGE TECHNOLOGIEN</td>
<td>Austria</td>
<td>€ 490 387,50</td>
<td>Feldgasse 19 8200 Gleisdorf</td>
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<tr>
<td>VDEH-BETRIEBSFORSCHUNGSINSTITUT GMBH</td>
<td>Germany</td>
<td>€ 603 168,75</td>
<td>Sohnstrasse 65 40237 Dusseldorf</td>
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<td>UNIVERSITA DEGLI STUDI DI PALERMO</td>
<td>Italy</td>
<td>€ 420 637,50</td>
<td>Piazza Marina 61 90133 Palermo</td>
<td>Higher or Secondary Education Establishments</td>
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<td>CENTRO DE INVESTIGACIONES ENERGETICAS, MEDIOAMBIENTALES Y TECNOLOGICAS-CIEMAT</td>
<td>Spain</td>
<td>€ 315 237,50</td>
<td>Avenida Complutense 40</td>
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<td>DEUTSCHE EDELSTAHLWERKE SPECIALTY STEEL GMBH &amp; CO. KG</td>
<td>Auestrasse 4, 58452 Witten, Germany</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
<td>€ 350 225,75</td>
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<td>AT &amp; S AUSTRIA TECHNOLOGIE &amp; SYSTEMTECHNIK AKTIENGESELLSCHAFT</td>
<td>Fabriksgasse 13, 8700 Leoben, Austria</td>
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<td>€ 228 567,50</td>
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DEUKUM GMBH
Germany
EU contribution
€ 224 717,50
Address
Maybachstrasse 5
72636 Frickenhausen
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

ASSOCIAZIONE ITALIANA ZINCATURA
Italy
EU contribution
€ 199 887,50
Address
Via Luigi Lilio 62
00142 Roma
Activity type
Other

UNIVERSITAET STUTTGART
Germany
EU contribution
€ 393 117,50
Address
Keplerstrasse 7
70174 Stuttgart
Activity type
Higher or Secondary Education Establishments
Website
Contact the organisation

TECNOZINCO SOCIETA A RESPONSABILITA LIMITATA
Italy
EU contribution
€ 217 354 38
Address | Activity type
---|---
Via Don Milani 72 90040 Carini | Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

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**PSE AG**

Germany

EU contribution

€ 80 500

Address | Activity type
---|---
Emmy Noether Strasse 2 79110 Freiburg | Private for-profit entities (excluding Higher or Secondary Education Establishments)

Website | Contact the organisation

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**PSE CONFERENCES & CONSULTING GMBH**

Germany

EU contribution

€ 88 964,75

Address | Activity type
---|---
Emmy-noether Strasse 2 79110 Freiburg | Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

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**Record number:** 205540

**Permalink:** [https://cordis.europa.eu/project/id/723729/](https://cordis.europa.eu/project/id/723729/)

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