Objective

The EU is currently facing the challenge of recycling materials and water of high quality to become carbon neutral by decreasing its energy consumption and CO2 emissions. The current Water Framework Directive has strict regulations on a wide range of contaminants, and most treatments continuously increase the energy demand of the water cycle. Yet, the EU is committed to ambitious targets to reduce Greenhouse Gas emissions, including the legally binding 2015 Paris agreement. These conflicting interests have motivated REWATERGY, a partnership within the water-energy nexus. This integrated network, led by industry in partnership with world leading academic institutions, envisions the scientific and technological opportunities of such challenges with direct economic and social impacts to the EU. Three research objectives set the foundation of this ambitious programme, i) enhance the energy recovery from waste water streams inspired by the circular economy concept, ii) improve the energy efficiency of water disinfection and removal of contaminants of
emerging concern, and iii) increase the resilience of distributed household safe drinking water systems addressing potential health and safety challenges. The programme is particularly designed to cultivate an entrepreneurial spirit by the collaborative design, development and manufacturing of new prototypes aligned with the three research objectives. This training concept will have a long term impact by providing a stream of highly trained innovative scientists and engineers able to communicate ideas and to develop creative solutions for the adoption of novel technologies in the market.

Field of science

/socıal sciences/economics and business/business and management/commerce
/engineering and technology/environmental engineering/energy and fuels/fossil energy/gas
/engineering and technology/environmental engineering/waste management/waste water
/engineering and technology/environmental engineering/waste management/energy recovery
/engineering and technology/environmental engineering/waste management/energy efficiency

Programme(s)

Topic(s)

Call for proposal

H2020-MSCA-ITN-2018

Funding Scheme

MSCA-ITN-EID - European Industrial Doctorates

Coordinator

UNIVERSIDAD REY JUAN CARLOS

Address
Calle Tulipan
28933 Mostoles
Spain

Activity type
Higher or Secondary Education Establishments

EU contribution
€ 501 809,76

Website
Contact the organisation
Participants (5)

THE CHANCELLOR MASTERS AND SCHOLARSOF THE UNIVERSITY OF CAMBRIDGE
United Kingdom
EU contribution
€ 303 172,56
Address
Trinity Lane The Old Schools
CB2 1TN Cambridge
Activity type
Higher or Secondary Education Establishments
Website
Contact the organisation

UNIVERSITY OF ULSTER
United Kingdom
EU contribution
€ 303 172,56
Address
Cromore Road
BT52 1SA Coleraine
Activity type
Higher or Secondary Education Establishments
Website
Contact the organisation

DELFT IMP BV
Netherlands
EU contribution
€ 265 619,88
Address
Molengraaffsingel 10
2629 JD Delft
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

PROPHOTONIX IRL LIMITED
Ireland
EU contribution
€ 549 368,64
Address
3020 Euro Business Park
Little Island
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Partners (8)

**FCC AQUALIA SA**
Spain
EU contribution
€ 250 904,88

Address
Calle Federico Salmon 13
28016 Madrid

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Website
Contact the organisation

**FUNDACIO INSTITUT CATALA DE RECERCA DE L'AIGUA**
Spain

Address
Calle Emili Grahit Edifici H20 101
17003 Girona

Activity type
Research Organisations

Website
Contact the organisation

**UNIVERSIDADE CATOLICA PORTUGUESA**
Portugal

Address
Palma De Cima
1649 023 Lisboa

Activity type
Higher or Secondary Education Establishments

Website
Contact the organisation

**Fundacion IMDEA Energia**
Spain

Address
Avenida Ramon De La Sagra 3
28935 Mostoles Madrid

Activity type
Research Organisations
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<th>Organisation</th>
<th>Country</th>
<th>Address</th>
<th>Activity type</th>
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<td>UNIVERSITY OF CYPRUS</td>
<td>Cyprus</td>
<td>Kallipoleos Street 75 1678 Nicosia</td>
<td>Higher or Secondary Education Establishments</td>
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<td>OPEN DATA INSTITUTE LBG</td>
<td>United Kingdom</td>
<td>St. James Square, St. James House (1St. Floor) GL50 3PR Cheltenham</td>
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<td>NATIONAL UNIVERSITY OF IRELAND MAYNOOTH</td>
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<td>UNIVERSITA DEGLI STUDI DI SALERNO</td>
<td>Italy</td>
<td>Via Giovanni Paolo li 132 84084 Fisciano Sa</td>
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<tr>
<td>WATERSCHAP DE DOMMEL</td>
<td>Netherlands</td>
<td>Bosscheweg 56 5283 WB Boxtel</td>
<td>Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)</td>
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