

HORIZON
2020

InteGRated systems for Effective ENvironmEntal Remediation

Fact Sheet

Project Information

GREENER

Grant agreement ID: 826312

[Project website](#) 



DOI

[10.3030/826312](https://doi.org/10.3030/826312) 

Project closed

EC signature date

7 March 2019

Start date

1 March 2019

End date

31 August 2023

Funded under

INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Biotechnology

Total cost

€ 5 558 061,50

EU contribution

€ 4 964 168,24

Coordinated by

UNIVERSIDAD DE BURGOS



Spain

Project description

‘Electric’ bacteria eliminate waste and generate electricity

Modern industrial processes have caused widespread pollution of soil and water across the globe that can seriously affect ecosystems and human health. Efforts to decontaminate or remediate these sites are costly, complex and energy-consuming. Bioremediation, which uses microbes like bacteria and fungi to break down toxic pollutants into harmless substances, is less expensive and more sustainable than other remediation alternatives. The GREENER initiative is developing a low-cost

hybrid solution that integrates bioremediation with microbial fuel cell technology. These electrically active microbes will not only clean up but also produce electricity.

Fields of science (EuroSciVoc)

[natural sciences](#) > [biological sciences](#) > [microbiology](#) > **[bacteriology](#)**

[natural sciences](#) > [chemical sciences](#) > [electrochemistry](#) > **[bioelectrochemistry](#)**

[engineering and technology](#) > [environmental biotechnology](#) > **[bioremediation](#)**

[natural sciences](#) > [biological sciences](#) > [microbiology](#) > **[mycology](#)**

[engineering and technology](#) > [environmental engineering](#) > [energy and fuels](#) > **[fuel cells](#)**



Keywords

[bioremediation](#)

[water](#)

[soil](#)

[bio-electrochemical systems](#)

[mixed cultures](#)

[biopile](#)

[ecopile](#)

[phytoremediation](#)

[hybrid systems](#)

[hydrocarbons](#)

[heavy metals](#)

[emerging contaminants](#)

[validation](#)

[scale-up](#)

Programme(s)

[H2020-EU.2.1.4. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Biotechnology](#) 

Topic(s)

[CE-BIOTEC-04-2018 - New biotechnologies for environmental remediation \(RIA\)](#)

Call for proposal

[H2020-NMBP-TR-IND-2018-2020](#)

[See other projects for this call](#)

Sub call

H2020-NMBP-BIO-CN-2018

Funding Scheme

[RIA - Research and Innovation action](#)

Coordinator



UNIVERSIDAD DE BURGOS

Net EU contribution

€ 602 036,50

Total cost

€ 654 036,50

Address

HOSPITAL DEL REY

09001 Burgos

 **Spain** 

Region

Centro (ES) > Castilla y León > Burgos

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Participants (23)



INTERNATIONAL PARTNER



Jiangsu University

 **China**

Net EU contribution

€ 0,00




Address

Xuefu Street 301
212013 Zhen Jiang 

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

[Contact the organisation](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost

No data



AXIA INNOVATION GmbH

 Germany

Net EU contribution

€ 137 000,00

Address

Fritz-Hommel-Weg 4
80805 MUNCHEN 

SME 

Yes

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

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

Links

[Contact the organisation](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Total cost

€ 174 500,00

 **THIRD-PARTY** 

EXELISIS IKE

 Greece

Net EU contribution

€ 37 500,00

Address

SKRA 2 & DEKELEIAS 215

143 42 NEA FILADELFEIA 

SME 

Yes

Region

Αττική > Αττική > Κεντρικός Τομέας Αθηνών

Activity type

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

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



TALAM BIOTECH LIMITED

 Ireland

Net EU contribution

€ 184 107,00

Address

ENTERPRISE AND RESEARCH INCUBATION CENTRE INSTITUTE OF TECHNOLOGY

CARLOW KILKENNY ROAD

R93 V960 Carlow 

SME 

Yes

Region

Ireland > Southern > South-East

Activity type

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

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

Total cost

€ 534 601,00

 INTERNATIONAL PARTNER 

Qingdao University of Science and Technology

 China

Net EU contribution

€ 0,00

Address

99, Songling Road, Qingdao

Qingdao 

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



SUSTAINABLE INNOVATIONS EUROPE SL

 Spain

Net EU contribution

€ 206 250,00

Address

CALLE DE SILVA 2 PISO 2 PUERTA 3

28013 Madrid 

SME 

Yes

Region

Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type

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

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 206 250,00



TAUW GMBH

 Germany

Net EU contribution

€ 292 877,49

Address

RICHARD-LOCHEL-STRASSE 9

47441 Moers 

Region

Nordrhein-Westfalen > Düsseldorf > Wesel

Activity type

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

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 333 502,49

 **THIRD-PARTY** 

TAUW BELGIE NV

 Belgium

Net EU contribution

€ 24 375,00

Address

REMYLAAN 4C CAMPUS REMY

3018 Wijgmaal 

SME 

Yes

Region

Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type

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

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data

 **THIRD-PARTY** 

TAUW IBERIA SA

 Spain

Net EU contribution

€ 16 250,00

Address

AVDA DE LA ALBUFERA 321-PLANTA 1 OFICINA 10

28031 Madrid 

Region

Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type

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

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

No data



VERITECH GROUP 

 France

Net EU contribution

€ 15 643,94

Address

11 RUE DEFLY
06000 Nice 

SME 

Yes

Region

Provence-Alpes-Côte d'Azur > Provence-Alpes-Côte d'Azur > Alpes-Maritimes

Activity type

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

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 15 643,95



INSTITUT JOZEF STEFAN

 Slovenia

Net EU contribution

€ 309 713,75

Address

Jamova 39
1000 Ljubljana 

Region

Slovenija > Zahodna Slovenija > Osrednjeslovenska

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 310 260,00



SOUTH EAST TECHNOLOGICAL UNIVERSITY

 Ireland

Net EU contribution

€ 212 000,00

Address

CORK ROAD CAMPUS WATERFORD
X91 K0EK Waterford 

Region

Ireland > Southern > South-East

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 340 793,00

 **INTERNATIONAL PARTNER** 

Ecology Institute, Shandong Academy of Sciences

 China

Net EU contribution

€ 0,00

Address

NO.19, Keyuan Road
Jinan 

Activity type

Other

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



MATERIA NOVA

 Belgium

Net EU contribution

€ 408 750,00

Address

AVENUE N COPERNIC 3

7000 Mons 

Region

Région wallonne > Prov. Hainaut > Arr. Mons

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 408 750,00



MENDELOVA UNIVERZITA V BRNE

 Czechia

Net EU contribution

€ 270 600,00

Address

ZEMEDELSKA 1/1665

613 00 Brno Sever 

Region

Česko > Jihovýchod > Jihomoravský kraj

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 270 600,00



ACONDICIONAMIENTO TARRASENSE ASSOCIACION

 Spain

Net EU contribution

€ 529 000,00

Address

CARRER DE LA INNOVACIO 2

08225 Terrassa 

Region

Este > Cataluña > Barcelona

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 560 030,00

 **INTERNATIONAL PARTNER** 

NANJING UNIVERSITY OF TECHNOLOGY

 China

Net EU contribution

€ 0,00

Address

Xinmofan Road 5

Nanjing 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



UNIVERSIDAD AUTONOMA DE MADRID

Spain

Net EU contribution

€ 233 062,50

Address

CALLE EINSTEIN 3 CIUDAD UNIV CANTOBLANCO RECTORADO
28049 Madrid

Region

Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 233 062,50



UNIVERSITY OF BATH

United Kingdom

Net EU contribution

€ 539 500,00

Address

CLAVERTON DOWN
BA2 7AY Bath

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 539 500,00



EXERGY LTD 

 United Kingdom

Net EU contribution

€ 112 178,63

Address

**PUMA WAY THE TECHNOCENTRE COVENTRY UNIVERSITY TECHNOLOGY PARK
CV1 2TT Coventry** 

SME 

Yes

Region

West Midlands (England) > West Midlands > Coventry

Activity type

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

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 143 208,63



UNIVERSITA DEGLI STUDI DI CAGLIARI

 Italy

Net EU contribution

€ 163 178,75

Address

**VIA UNIVERSITA 40
09124 Cagliari** 

Region

Isole > Sardegna > Cagliari

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

Total cost

€ 163 178,75



UNIVERSITY OF SURREY

 United Kingdom

Net EU contribution

€ 295 144,68

Address

Stag Hill

GU2 7XH Guildford 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 295 144,68



ACCIONA CONSTRUCCION SA

 Spain

Net EU contribution

€ 375 000,00

Address

CALLE MESENA 80

28033 MADRID 

Region

Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type

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

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

Total cost

€ 375 000,00

Last update: 1 August 2024

Permalink: <https://cordis.europa.eu/project/id/826312>

European Union, 2025

