RES URBIS aims at making it possible to convert several types of urban bio-waste into valuable bio-based products, in an integrated single biowaste biorefinery and by using one main technology chain. This goal will be pursued through:

- collection and analysis of data on urban bio-waste production and present management systems in four territorial clusters that have been selected in different countries and have different characteristics.
- well-targeted experimental activity to solve a number of open technical issues (both process- and product-related), by using the appropriate combination of innovative and catalogue-proven technologies.
- market analysis within several economic scenarios and business models for full exploitation of bio-based products (including a path forward to fill regulatory gaps).
Urban bio-waste include the organic fraction of municipal solid waste (from households, restaurants, caterers and retail premises), excess sludge from urban wastewater treatment, garden and parks waste, selected waste from food-processing (if better recycling options in the food chain are not available), other selected waste streams, i.e. baby nappies.

Bio-based products include polyhydroxyalkanoate (PHA) and related PHA-based bioplastics as well as ancillary productions: biosolvents (to be used in PHA extraction) and fibers (to be used for PHA biocomposites).

Territorial and economic analyses will be done either considering the ex-novo implementation of the biowaste biorefinery or its integration into existing wastewater treatment or anaerobic digestion plants, with reference to clusters and for different production size. The economic analysis will be based on a portfolio of PHA-based bioplastics, which will be produced at pilot scale and tested for applications:
- Biodegradable commodity film
- Packaging interlayer film
- Speciality durables (such as electronics)
- Premium slow C-release material for ground water remediation

Field of science

/field of science/engineering and technology/materials engineering/fibers
/field of science/engineering and technology/materials engineering/composites/biocomposites
/field of science/agricultural sciences/agricultural biotechnology/biomass
/field of science/social sciences/economics and business/business and management/business model
/field of science/engineering and technology/industrial biotechnology/biomaterials/bioplastics/polyhydroxyalkanoates
/field of science/engineering and technology/environmental engineering/water treatment processes/wastewater treatment processes

Programme(s)

Topic(s)

Call for proposal

H2020-CIRC-2016OneStage

Funding Scheme

RIA - Research and Innovation action
Coordinator

UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA

Address
Piazzale Aldo Moro 5
00185 Roma
Italy

Activity type
Higher or Secondary Education Establishments

EU contribution
€ 346 250

Website
Contact the organisation

Participants (22)

DANMARKS TEKNISKE UNIVERSITET

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Anker Engelundsvej 1
Bygning 101 A
2800 Kgs Lyngby

Activity type
Higher or Secondary Education Establishments

EU contribution
€ 299 865

Website
Contact the organisation

NOVA ID FCT - ASSOCIACAO PARA A INOVACAO E DESENVOLVIMENTO DA FCT

Address
Campus De Caparica
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2829 516 Caparica

Activity type
Research Organisations

EU contribution
€ 234 762,50

Website
Contact the organisation

BIOTREND-INOVACAO E ENGENHARIA EM BIOTECNOLOGIA SA

Address

Activity type

EU contribution
€ 137 125

Website
Contact the organisation
| Biocant Park Nucleo 4 Lote 2 3060-197 Cantanhede | Private for-profit entities (excluding Higher or Secondary Education Establishments) |
| Website | Contact the organisation |

| SO.F.TER. S.R.L. | Italy |
| EU contribution | € 0 |
| Address | Activity type |
| Via Mastro Giorgio 1 47122 Forli | Private for-profit entities (excluding Higher or Secondary Education Establishments) |
| Website | Contact the organisation |

| UNIVERSITA CA' FOSCARI VENEZIA | Italy |
| EU contribution | € 199 020 |
| Address | Activity type |
| Dorsoduro 3246 30123 Venezia | Higher or Secondary Education Establishments |
| Website | Contact the organisation |

| UNIVERSITA DEGLI STUDI DI VERONA | Italy |
| EU contribution | € 250 375 |
| Address | Activity type |
| Via Dell Artigliere 8 37129 Verona | Higher or Secondary Education Establishments |
| Website | Contact the organisation |

| BIOINICIA SL | Spain |
| EU contribution | € 150 875 |
Address: Calle Algepsr 65 Puerta 3 46980 Paterna
Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

CONSIGLIO NAZIONALE DELLE RICERCHE
Italy
EU contribution: € 87 500
Address: Piazzale Aldo Moro 7 00185 Roma
Activity type: Research Organisations
Website: Contact the organisation

UNIVERSITAT DE BARCELONA
Spain
EU contribution: € 240 007,50
Address: Gran Via De Les Corts Catalanes 585 08007 Barcelona
Activity type: Higher or Secondary Education Establishments
Website: Contact the organisation

ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA
Italy
EU contribution: € 88 750
Address: Via Zamboni 33 40126 Bologna
Activity type: Higher or Secondary Education Establishments
Website: Contact the organisation

PROVINCIA AUTONOMA DI TRENTO
Italy
EU contribution: € 49 766,25
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### MI-PLAST DOO ZA PROIZVODNJU, TRGOVINU I PRUZANJE USLUGA

- **Croatia**
- **EU contribution**: € 127,500

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### PHYSIS SRL

- **Italy**
- **EU contribution**: € 0

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Contact the organisation

### EPAL-EMPRESA PORTUGUESA DAS ÁGUAS LIVRES, SA

- **Portugal**
- **EU contribution**: € 9,877,60

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Website | Contact the organisation
INNOEXC GMBH
Switzerland
EU contribution
€ 0
Address
Bellerivestrasse 11
8008 Zurich
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

UNIVERSITY OF SOUTH WALES PRIFYSGOLDE CYMRU
United Kingdom
EU contribution
€ 268 255
Address
Llantwit Road Treforest
CF37 1DL Pontypridd
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Website
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ISTITUTO NAZIONALE ASSICURAZIONE INFORTUNI SUL LAVORO INAIL
Italy
EU contribution
€ 50 625
Address
Via IV Novembre 144
00187 Roma
Activity type
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)
Contact the organisation

AREA METROPOLITANA DE BARCELONA
Spain
EU contribution
€ 74 625
Address
Carrer 62 Num 16-18
08040 Barcelona
Activity type
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)
BIO-BASED AND BIODEGRADABLE INDUSTRIES ASSOCIATION (BBIA) LTD
United Kingdom
**EU contribution**
€ 80 000
**Address**
Room 2 Pelmark House 11
Amwell End
SG12 9HP Ware
**Contact the organisation**

INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET L'ENVIRONNEMENT
France
**EU contribution**
€ 110 387,50
**Address**
147 Rue De L'universite
75007 Paris Cedex 07
**Website**
**Contact the organisation**

SABIO S.R.L.
Italy
**EU contribution**
€ 124 500
**Address**
Via poveromini 6
48022 Lugo (Ra)
**Activity type**
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

AGUAS DO TEJO ATLANTICO SA
Portugal
**EU contribution**
€ 66 622,40
**Address**

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

Contact the organisation

Last update: 13 August 2020
Record number: 206585

Permalink: https://cordis.europa.eu/project/id/730349

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