

HORIZON  
2020

# FOSTERING INDUSTRIAL SYMBIOSIS FOR A SUSTAINABLE RESOURCE INTENSIVE INDUSTRY ACROSS THE EXTENDED CONSTRUCTION VALUE CHAIN

## Fact Sheet

### Project Information



**FISSAC**

Grant agreement ID: 642154

[Project website](#)

**DOI**

[10.3030/642154](https://doi.org/10.3030/642154)

Project closed

**EC signature date**

21 May 2015

**Start date**

1 September 2015

**End date**

29 February 2020

**Funded under**

SOCIETAL CHALLENGES - Climate action, Environment, Resource Efficiency and Raw Materials

**Total cost**

€ 11 214 564,94

**EU contribution**

€ 8 892 406,34

**Coordinated by**

ACCIONA CONSTRUCCION SA



Spain

This project is featured in...



## Circular economy innovations for industrial and urban waste management

## Objective

The overall objective of FISSAC project is to develop and demonstrate a new paradigm built on an innovative industrial symbiosis model towards a zero waste approach in the resource intensive industries of the construction value chain, tackling harmonized technological and non technological requirements, leading to material closed-loop processes and moving to a circular economy.

A methodology and a software platform will be developed in order to implement the innovative industrial symbiosis model in a feasible scenario of industrial symbiosis synergies between industries (steel, aluminium, natural stone, chemical and demolition and construction sectors) and stakeholders in the extended construction value chain. It will guide how to overcome technical barriers and non technical barriers, as well as standardisation concerns to implement and replicate industrial symbiosis in a local/regional dimension. The ambition of the model will be to be replicated in other regions and other value chains symbiosis scenarios. The model will be applied based on the three sustainability pillars.

FISSAC will demonstrate the applicability of the model as well as the effectiveness of the innovative processes, services and products at different levels:

- Manufacturing processes: with demonstration of closed loop recycling processes to transform waste into valuable secondary raw materials, and manufacturing processes of the novel products at industrial scale
- Product validation: with demonstration of the eco-design of eco-innovative construction products (new Eco-Cement and Green Concrete, innovative ceramic tiles and Rubber Wood Plastic Composites) in pre-industrial processes under a life cycle approach, and demonstration at real scale in different case studies of the application and the technical performance of the products
- FISSAC model, with the demonstration of the software platform and replicability assessment of the model through living lab concept

**Fields of science (EuroSciVoc)** 

[engineering and technology](#) > [mechanical engineering](#) > **[manufacturing engineering](#)**

[engineering and technology](#) > [environmental engineering](#) > **[waste management](#)**

[engineering and technology](#) > [materials engineering](#) > **[composites](#)**

[natural sciences](#) > [biological sciences](#) > [biological behavioural sciences](#) > [ethology](#) > **[biological interactions](#)**

[engineering and technology](#) > [materials engineering](#) > **[ceramics](#)**



## Programme(s)

[H2020-EU.3.5. - SOCIETAL CHALLENGES - Climate action, Environment, Resource Efficiency and Raw Materials](#) MAIN PROGRAMME

[H2020-EU.3.5.4. - Enabling the transition towards a green economy and society through eco-innovation](#)

## Topic(s)

[WASTE-1-2014 - Moving towards a circular economy through industrial symbiosis](#)

## Call for proposal

[H2020-WASTE-2014-2015](#)

[See other projects for this call](#)

## Sub call

H2020-WASTE-2014-two-stage

## Funding Scheme

[IA - Innovation action](#)

## Coordinator



## ACCIONA CONSTRUCCION SA

Net EU contribution

€ 1 207 370,15

Total cost

€ 1 724 814,50

Address

**CALLE MESENA 80**

**28033 MADRID**

 **Spain** 

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](#) 

## Participants (27)

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### ASSOCIATION OF CITIES AND REGIONS FOR SUSTAINABLE RESOURCE MANAGEMENT

 Belgium

Net EU contribution

€ 551 352,50

Address

**AVENUE DES ARTS 3-4-5**

**1210 BRUXELLES** 

Region

**Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest > Région de Bruxelles-Capitale/ Brussels Hoofdstedelijk Gewest > Arr. de Bruxelles-Capitale/Arr. Brussel-Hoofdstad**

Activity type

**Other**

Links

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

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

Total cost

€ 551 352,50

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## ASOCIACION ESPANOLA DE NORMALIZACION

 Spain

Net EU contribution

€ 75 000,00

Address

**CALLE GENOVA 6**

**28004 Madrid** 

Region

**Comunidad de Madrid > Comunidad de Madrid > Madrid**

Activity type

**Other**

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 75 000,00

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## AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS

 Spain

Net EU contribution

€ 113 505,00

Address

**CALLE SERRANO 117**

**28006 Madrid** 

Region

**Comunidad de Madrid > Comunidad de Madrid > Madrid**

Activity type

**Research Organisations**

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 113 505,00

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**AKG GAZBETON ISLETMELERI SANAYI VETICARETCARET AS** 

 Türkiye

Net EU contribution

€ 186 382,09

Address

**KONAK MAHAKLLESİ NO:19-208, MILLI KUTUPHANE CAD TI MERKEZI APT NO 19/208**

**KONAK**

**35260 NIKFER** 

Region

**Ege > İzmir > İzmir**

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

€ 266 260,13

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**BEFESA SALZCHALACKE GMBH**

 Germany

Net EU contribution

€ 287 437,50

Address

**AM BRINKER HAFEN 6**

**30179 HANNOVER** 

Region

**Niedersachsen > Hannover > Region Hannover**

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

**€ 500 625,00**

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 **THIRD-PARTY** 

**BEFESA ALUMINIO SLU**

 Spain

Net EU contribution

**€ 63 000,00**

Address

**CR LUTXANA ASUA 13**  
**48950 Erandio Bizkaia** 

Region

**Noreste > País Vasco > Bizkaia**

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

**€ 90 000,00**



**BRITISH GLASS MANUFACTURERS CONFEDERATION**

 United Kingdom

Net EU contribution

**€ 196 762,50**

Address

**9 CHURCHILL WAY**  
**S35 2PY CHAPELTOWN** 

Region

**Yorkshire and the Humber > South Yorkshire > Sheffield**

Activity type

**Research Organisations**

Links

[Contact the organisation](#)

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

[HORIZON collaboration network](#)

Total cost

**€ 196 762,50**



**RISE CBI BETONGINSTITUTET AB**

Sweden

Net EU contribution

€ 123 570,27

Address

**DROTTNING KRISTINAS VAG 26**

**10044 STOCKHOLM**

Region

**Östra Sverige > Stockholm > Stockholms län**

Activity type

**Research Organisations**

Links

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

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

[HORIZON collaboration network](#)

Total cost

€ 123 570,27



**RINA CONSULTING - CENTRO SVILUPPO MATERIALI SPA**

Italy

Net EU contribution

**€ 250 687,50**

Address

VIA DI CASTEL ROMANO 100

00128 Roma 

Region

**Centro (IT) > Lazio > Roma**

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

**€ 358 125,00**



## RINA CONSULTING SPA

 Italy

Net EU contribution

**€ 469 000,00**

Address

VIA CECCHI 6

16129 Genova 

Region

**Nord-Ovest > Liguria > Genova**

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

**€ 670 000,00**



## EKODENGE MUHENDISLIK MIMARLIK DANISMANLIK TICARET ANONIM SIRKETI

 Türkiye

Net EU contribution

€ 378 700,00

Address

**HACETTEPE UNIVERSITESI TEKNOKENTI 1NOLU AR GE BINASI ODA 18 BEYTEPE  
06800 Cankaya Ankara** 

SME 

Yes

Region

**Bati Anadolu > Ankara > Ankara**

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

€ 541 000,00



## FUNDACION AGUSTIN DE BETANCOURT

 Spain

Net EU contribution

€ 258 750,00

Address

**E.T.S. de Ingenieros de Caminos, Canales y Puertos Ciudad Universitaria  
28040 MADRID** 

Region

**Comunidad de Madrid > Comunidad de Madrid > Madrid**

Activity type

**Other**

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 258 750,00



## FENIX TNT SRO

 Czechia

Net EU contribution

€ 163 625,00

Address

**DUSIKOVA 906/33**

**638 00 Brno** 

SME 

Yes

Region

**Česko > Jihovýchod > Jihomoravský kraj**

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

€ 233 750,00



## FERALPI SIDERURGICA SPA

 Italy

Net EU contribution

€ 384 078,63

Address

**VIA AURELIO SAFFI 15**

**25100 Brescia** 

Region

**Nord-Ovest > Lombardia > Brescia**

Activity type

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

Links

[Contact the organisation](#) 

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

Total cost

€ 548 683,75

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## GEONARDO KORNYEZETVEDELMI TERINFORMATIKAI ES REGIONALIS PROJEKTFEJLESZTO KORLATOLT FELELOSSEGU TARSASAG

 Hungary

Net EU contribution

€ 178 609,38

Address

**ZAHONY U 7**

**1031 Budapest** 

SME 

Yes

Region

**Közép-Magyarország > Budapest > Budapest**

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

€ 255 156,25

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## GLASS TECHNOLOGY SERVICES LIMITED

 United Kingdom

Net EU contribution

€ 112 647,50

Address

**CHURCHILL WAY 9**

**S35 2PY SHEFFIELD** 

SME 

Yes

Region

**Yorkshire and the Humber > South Yorkshire > Sheffield**

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

**€ 160 925,00**

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## **INGENIEURBUERO TRINIUS GMBH**

 Germany

Net EU contribution

**€ 139 371,09**

Address

**BARMBEKER STRASSE 9A**

**22303 HAMBURG** 

SME 

**Yes**

Region

**Hamburg > Hamburg > Hamburg**

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

**€ 199 101,56**

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## **HIFAB AB**

 Sweden

Net EU contribution

€ 216 142,50

Address

**SVEAVAGEN 167 3TR**  
**113 46 STOCKHOLM** 

Region

**Östra Sverige > Stockholm > Stockholms län**

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

€ 308 775,00



## KERABEN GRUPO SA

 Spain

Net EU contribution

€ 454 606,25

Address

**CTRA VALENCIA BARCELONA KM44.3**  
**12520 Nules** 

Region

**Este > Comunitat Valenciana > Castellón/Castelló**

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

€ 649 437,50



## OPENBARE VLAAMSE AFVALSTOFFENMAATSCHAPPIJ

 Belgium

Net EU contribution

**€ 212 322,50**

Address

**STATIONSSTRAAT 110**

**2800 Mechelen** 

Region

**Vlaams Gewest > Prov. Antwerpen > Arr. Mechelen**

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

**€ 212 322,50**



## **RINA SERVICES SPA**

 Italy

Net EU contribution

**€ 143 937,50**

Address

**VIA CORSICA 12**

**16128 Genova** 

Region

**Nord-Ovest > Liguria > Genova**

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

**€ 205 625,00**



## RISE RESEARCH INSTITUTES OF SWEDEN AB

 Sweden

Net EU contribution

**€ 766 273,48**

Address

**BRINELLGATAN 4**  
**501 15 Borås** 

Region

**Södra Sverige > Västsverige > Västra Götalands län**

Activity type

**Research Organisations**

Links

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

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

[HORIZON collaboration network](#) 

Total cost

**€ 766 273,48**



## SIMBIOSY SIMBIOSI INDUSTRIAL SL

 Spain

Net EU contribution

**€ 126 507,50**

Address

**COMTE BORRELL 167 4 4**  
**08015 Barcelona** 

SME 

**Yes**

Region

**Este > Cataluña > Barcelona**

Activity type

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

Links

[Contact the organisation](#) 

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

Total cost

€ 180 725,00

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## TURKIYE CIMENTO SANAYICILERI BIRLIGI DERNEGI

 Türkiye

Net EU contribution

€ 542 500,00

Address

**M KEMAL MAH D PINAR BLV A BLOK 266 104**  
**06800 Cankaya Ankara** 

Region

**Batı Anadolu > Ankara > Ankara**

Activity type

**Other**

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 542 500,00

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## FUNDACION TECNALIA RESEARCH & INNOVATION

 Spain

Net EU contribution

€ 634 000,00

Address

**PARQUE CIENTIFICO Y TECNOLOGICO DE BIZKAIA, ASTONDO BIDEA, EDIFICIO 700**  
**48160 DERIO BIZKAIA** 

Region

**Noreste > País Vasco > Gipuzkoa**

Activity type

**Research Organisations**

Links

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

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

[HORIZON collaboration network](#) 

Total cost

€ 634 000,00

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**VANNPLASTIC LTD** 

 United Kingdom

Net EU contribution

€ 8 211,79

Address

**ABENBURY WAY UNIT 13 WREXHAM 3**

**LL13 9UZ Wrexham** 

SME 

**Yes**

Region

**Wales > East Wales > Flintshire and Wrexham**

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

€ 11 731,13

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**SPECIALIST BUILDING PRODUCTS LIMITED**

 United Kingdom

Net EU contribution

€ 648 055,71

Address

**UNIT 1B STRATFORD COURT CRANMORE BOULEVARD**

**B90 4QT Solihull** 

Region

West Midlands (England) > West Midlands > Solihull

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

**€ 925 793,87**

**Last update:** 6 September 2024

**Permalink:** <https://cordis.europa.eu/project/id/642154>

European Union, 2025