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Research & Codex Division

Horizon 2020  
Societal Challenge 2  
Biobased Innovation Call  
&  
Biobased Industries Joint  
Technology Initiative



Department of  
**Agriculture,  
Food and the Marine**

An Roinn  
**Talmhaíochta,  
Bia agus Mara**

# Growing Complexity – Systems Approach

## **Biomass uses** (terrestrial and aquatic)

Food & Feed  
Fuels & Energy  
Materials & Chemicals

## **Biomass production**

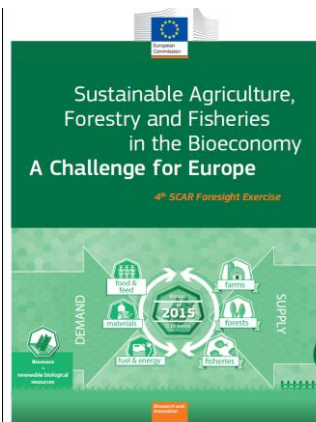
Agriculture  
Forests  
Fisheries  
Aquaculture

## **Global Challenges**

Climate Change  
Biodiversity & ecosystem loss  
Energy & Resource Scarcity  
Inappropriate agriculture & fishing practices  
Terrestrial & Marine  
Pollution  
Food Waste  
Plant & animal disease,  
Population Change, Demography,  
Diet & Health  
Financial Crisis

## **Increased knowledge and actions required for/by**

Farmers etc  
Processors/Retailers  
Consumers/Citizens  
Publicly & Regionally  
MS & EU



## **Fast growing technologies**

ICT, Sensors, IoT, Big Data  
Gene technology,  
Biotechnology, Nanotechnology

## **Food and nutrition security**

Viable Food Production,  
Food Quality, Safety, Provenance,  
Authenticity, Traceability

## **Market & Territorial Development**

Competiveness, modernisation & diversification

## **Sustainable use of natural resources**

EU Bioeconomy strategy	Actions	Issues & Principles
<b>Research &amp; Innovation</b>	Societal Challenge 2 Biobased Industries PPP Circular Economy	Food security Natural Resource Reduce Fossil Fuel use Climate change Territorial development
<b>Policy &amp; stakeholder engagement</b>	National, EU & Global events	
<b>Markets, standards, education</b>	Use of green procurement, development of standards & certification, updating schools & 3 <sup>rd</sup> level curriculum	Food First Sustainable Yields Circularity Cascading Diversity





# Societal Challenge 2

## Four Calls 2016-17

**Sustainable  
food security**

**Blue  
Growth**

**Rural  
Renaissance**

**Bio-based  
innovation  
for  
sustainable  
goods and  
services**



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## **SOCIETAL CHALLENGE 2 CALL**

### **Bio-based innovation for sustainable goods and services**



**Upstream**  
**Securing sustainable  
biomass supply**



**Downstream**  
**Building the bio-based  
markets of the future**

# 1. Securing sustainable biomass supply



2017 - 21 million - 3 topics

- Method for collection of statistical data on bio-based industries and bio-based products
- Adaptive tree breeding strategies and tools for forest production
- Plant Molecular Factory



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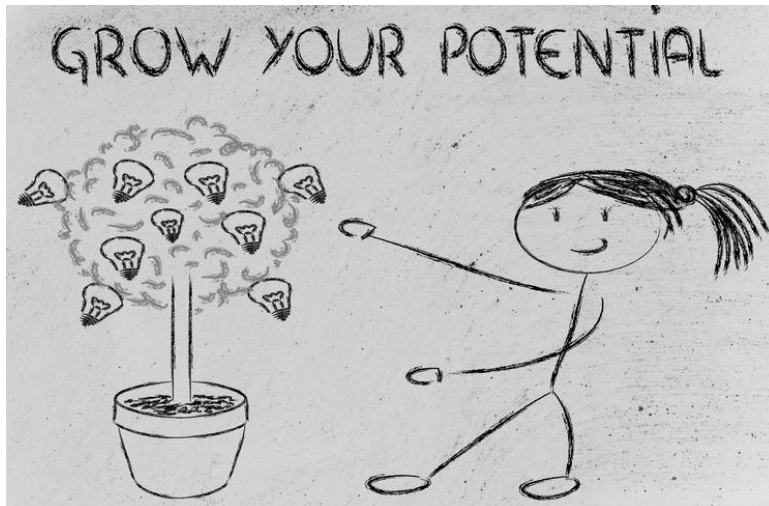


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## 2. Building the bio-based markets of the future

- € 2017 5 million - 2 topics & RUR-08 2017
- Bio-based products: mobilisation and mutual learning action plan
  - Improving public knowledge



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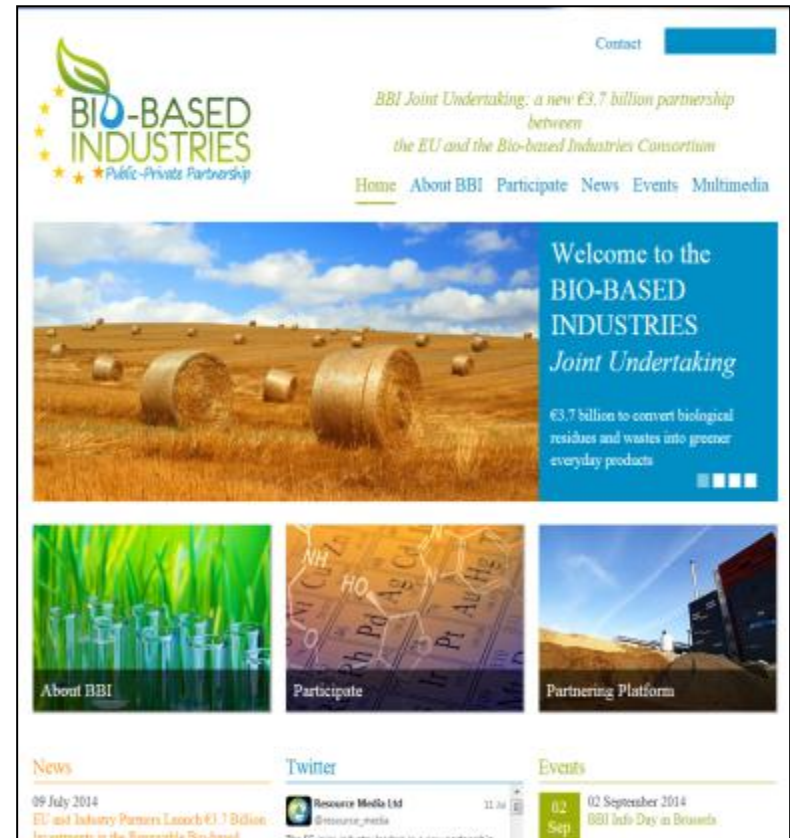


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## Bio-based Industries Joint Undertaking (BBI – JU)

Public Private Partnership supporting R&I  
for bio-based industries:

- Partners: European Commission and Biobased Industries Consortium (BIC)
- Budget: **€ 3.705 billion** (about 75% from industry) with a focus on biorefineries
- Implementation:
  - Principles of **openness, transparency and excellence**
  - Horizon 2020 rules for participation
- Objectives: At least **5 new bio-based value chains** for Europe based on **2nd generation/advanced biorefineries**



[www.bbi-europe.eu](http://www.bbi-europe.eu)



# BBI JU CALLS



Biobased Industries Joint Undertaking published **Research and Innovation, Demonstration and Flagship** calls in: 2014-(€50 million) and 2015-(€120 million)

The Annual Work Plan for 2016 is now available.  
See the BBI JU website



# Examples in the 2016 call



Call 2016.R1-12 (opens 18.04.16 – closed 15.09.16)  
Budget €50 million

Call 2016.D1- 9 (opens 18.04.16 – closed 15.09.16)  
Budget €67.65 million

Call 2016.F1 (opens 18.04.16 – closed 15.09.16)  
Budget €40 million

Call 2016.S1-4 (opens 18.04.16 – closed 15.09.16)  
Budget €3.5 million



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# Other relevant details



DAFM represent IE in the BBI JU States Representative Group

Kevin O'Connor UCD is the Scientific Chair of the BBI JTI

**South and Eastern Ireland Region** selected to receive advisory support to encourage sustainable chemicals production and circular economy approaches, e.g. by taking advantage of domestically available feedstock such as biomass, waste or CO<sub>2</sub>

See EIP workshop on **Circular Economy - Bioeconomy** for Agriculture & Forestry

Recently there was a BBI JU Open Day Brussels **April 21<sup>st</sup> 2016**





# Biobased Innovation

- Complementarities with SC-3, SC-5, SC-6 & Nano/Materials/Biotech/Processing research & innovation opportunities
- Contributes to Bioeconomy Strategy, CAP, Blue Growth, EU Forest Strategy, Industrial, Energy & Climate and COM agenda on Jobs, Growth & Investment
- Find out more: [www.ec.europa/research/horizon2020](http://www.ec.europa/research/horizon2020)

