

Session 2 | The BBI JU 2018 Work Programme

BBI JU's research priorities and novelties

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(BBI JU)

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BBI JU implementation



Strategic level: SIRA
 Strategic Innovation and Research Agenda:
 guiding document developed by BIC



Operational Level
 Annual Work Plan

Drafting – Approval – Supporting

 Consultation
 BBI JU Scientific Committee and States Representatives Group

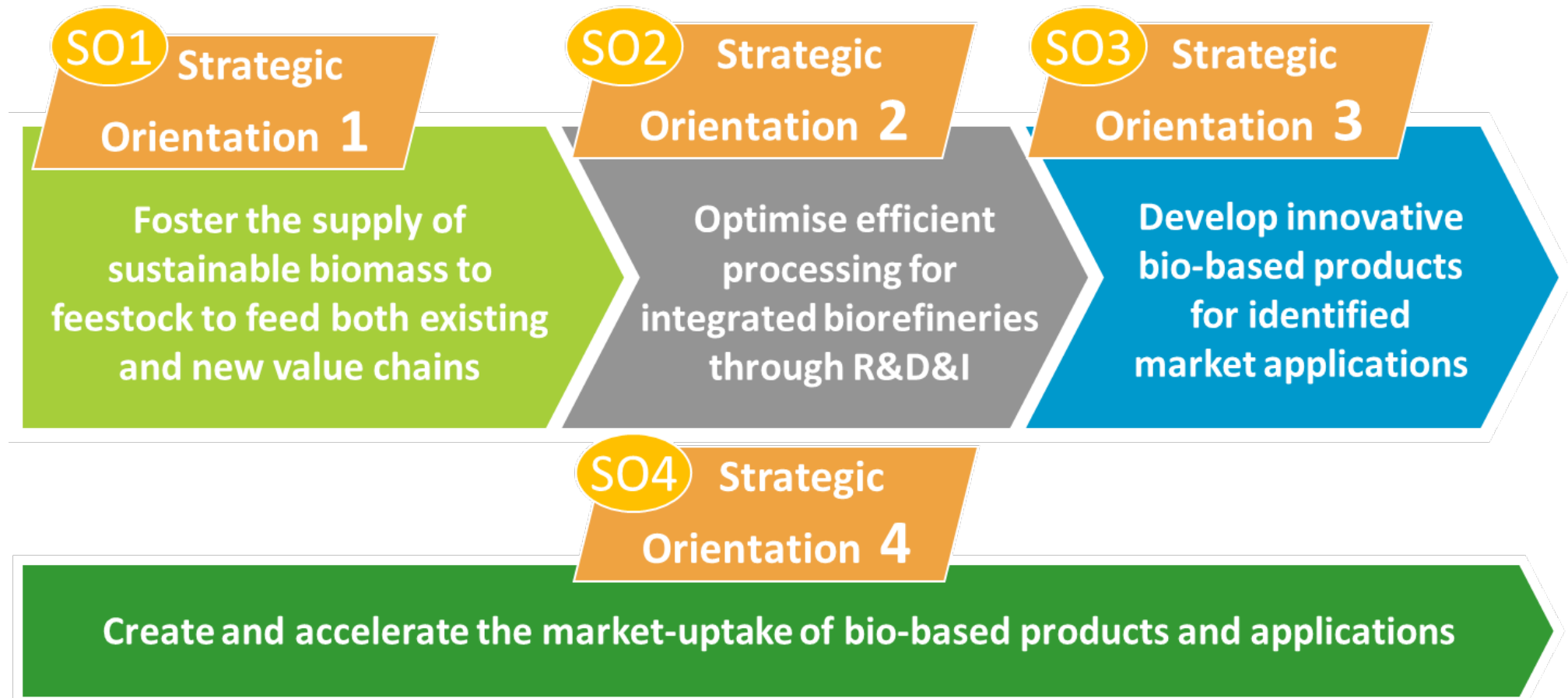


Call for proposals
 (RIAs, IAs, CSAs)

✓ Publication
 ✓ Evaluation
 ✓ GAP

Project management
 Reporting - Monitoring

SIRA Strategic Orientations (2017)



Strategic Orientations against topics in Call 2018

TOPICS



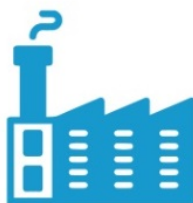
FEEDSTOCK

Fostering a sustainable biomass feedstock supply to feed both existing and new value chains



R1, D1, D2

PROCESS



Optimising efficient processing for integrated biorefineries



R2, R3,
R4, R5, R6,
R7, R8,
D3



PRODUCTS

Developing innovative bio-based products for specific market applications



R9, R10, R11,
D4, D5
F1, F2

MARKET UPTAKE



Creating and accelerating the market uptake of bio-based products and applications



S1, S2, S3



BBI JU Key Performance indicators

- KPI 1 New cross-sector interconnections
- KPI 2 New bio-based value chains
- KPI 3* BBI JU Cooperation projects
- KPI 4 New bio-based building blocks
- KPI 5 New bio-based materials
- KPI 6 New bio-based 'consumer' products
- KPI 7* BBI JU flagships projects
- KPI 8 'TRL' gain

Socio-economic impact

- All topics address KPI 3 and socio-economic impact
- KPIs specific to
 - RIAs: KPI 8
 - IAs: KPI 6
 - FLAGs: KPI7
- KPIs 1, 2, 4 and 5 are present in all type of actions

KPIs assessed during the evaluation!



Highlights of BBI JU Call 2018

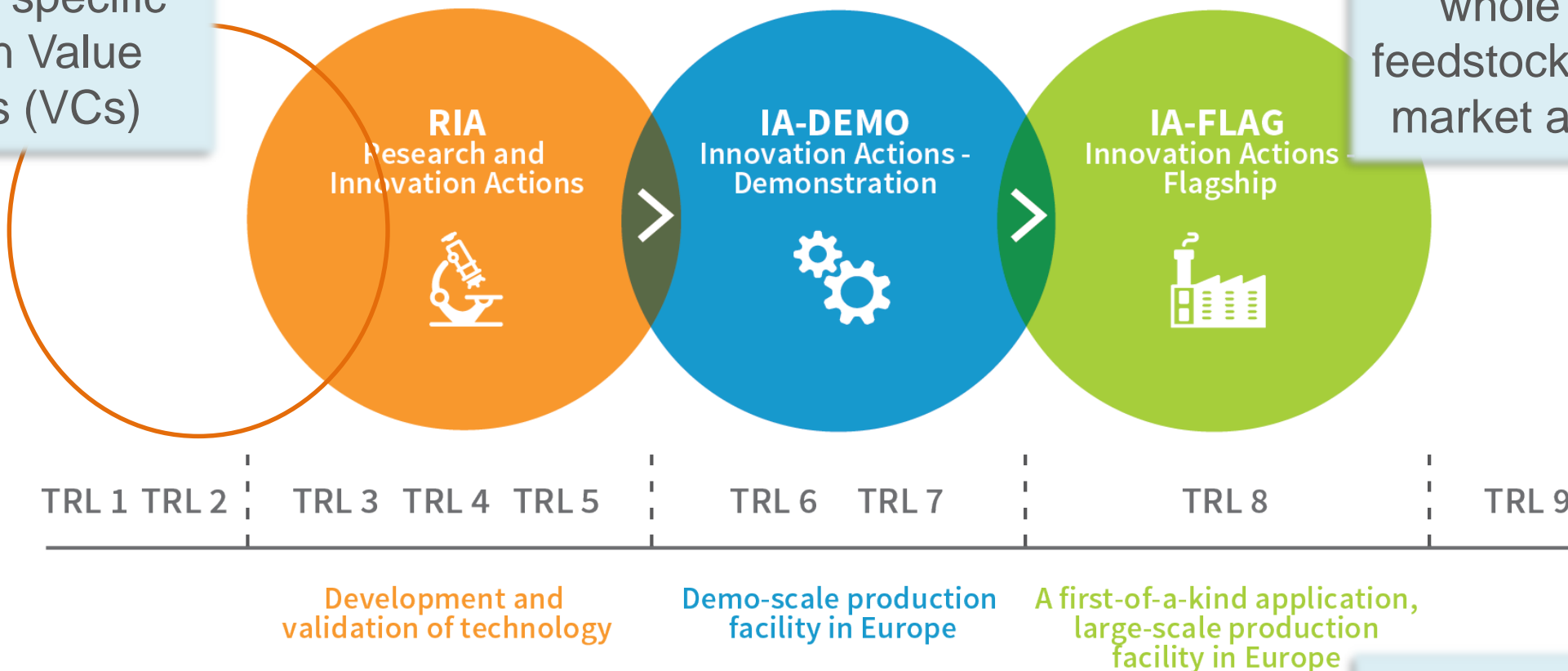


- Strong focus on **impact & KPIs**
- Widens the scope in terms of **feedstock** (e.g. urban bio-waste in DEMO), **processes** (e.g. electrochemical, modelling), **new products** (e.g. bio-based aromatics, coatings)
- Specific focus on the **improvement of logistical and pre-processing steps of local biomass resources** both for RIA & DEMO topics
- Promotes a **multi-value-chain approach**
- Contains **RIA topics covering lower TRLs (1-3)**

BBI JU - Types of Actions

RIAs fill specific gaps in Value Chains (VCs)

IAs address the whole VC from feedstock sourcing to market applications



CSA Coordination and Support Actions - no link to TRLs*

CSAs address non-technological challenges of VCs

*TRL = Technology Readiness Levels

End Technology Readiness Levels (TRL)

TRL: Method of estimating technology maturity using a scale from 1 to 9

RIA Topics
4,5,6,7,8,11

TRL 1 – basic principles observed
TRL 2 – technology concept formulated
TRL 3 – experimental proof of concept

Novelty!

RIA

TRL 4 – technology validated in lab
TRL 5 – technology validated in relevant environment

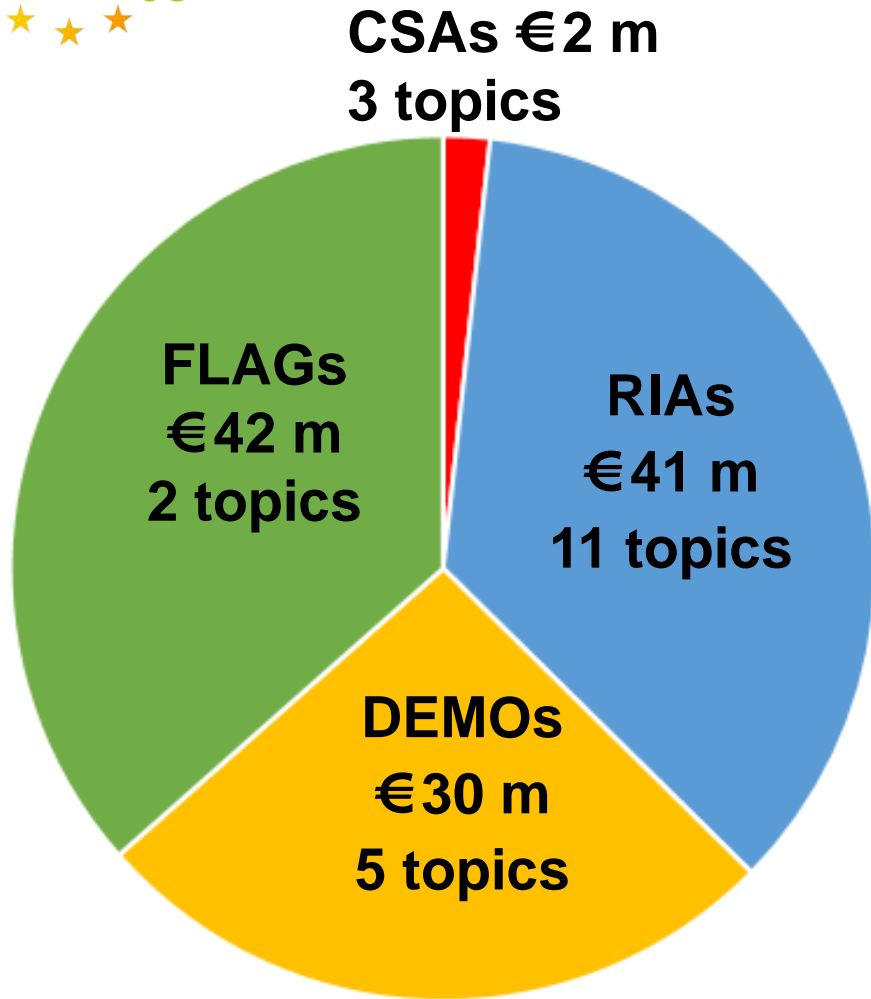
DEMO

TRL 6 – technology demonstrated in relevant environment
TRL 7 – system prototype demonstration in operational environment

FLAG

TRL 8 – system complete and qualified
TRL 9 – actual system proven in operational environment

Budget distribution Call 2018



**CSAs €2 m
3 topics**

**FLAGs
€42 m
2 topics**

**RIAs
€41 m
11 topics**

**DEMOs
€30 m
5 topics**

**RIAs (end TRL 4-5):
€ 26 m, 5 topics**

**RIAs (end TRL 3)
€ 15 m, 6 topics**

**Additional eligibility
condition: at least 1 BIC member (not
eligible for funding)**

*Total indicative
BBI JU budget is
€ 115 million for
21 topics*

In addition substantial resources from industry expected
Estimated value of the in-kind contribution is minimum 45 M €

11 RIA topics Call 2018



Objective: Filling specific gaps in the value chain through development of building blocks, products, technologies or processes

5 RIA topics aiming at end TRL 4 to 5 → BBI JU budget: € 26 million // Grant
€ 2-5 million per proposal


<p>Feedstock</p>	<ul style="list-style-type: none"> ▪ Valorization of aquaculture, fisheries and aquatic biomass (R1)
<p>Process</p>	<ul style="list-style-type: none"> ▪ Improvement of biocatalytic processes (R2) ▪ New technologies for pulping industries (R3)
<p>Products</p>	<ul style="list-style-type: none"> ▪ Functional molecules for bio-based coatings (R9) ▪ Biodegradable/ Compostable/ Recyclable packaging products (R10)
<p>Market uptake</p>	

11 RIA topics Call 2018



6 RIA topics aiming at end TRL 3: BBI JU budget: € 15 million // Grant
 €1- 2.5 million per proposal

Additional eligibility criterion: *the consortium must contain at least one constituent entity of the Bio-based Industries Consortium that is a beneficiary not eligible for BBI JU funding*

Feedstock	
Process 	<ul style="list-style-type: none"> ▪ Advanced technologies for biomass contains inhibitors (R4) ▪ Single step conversion processes (R5) ▪ Emerging breakthrough technologies for existing VCs (R6) ▪ Electrochemical processes (R7) ▪ Computational modelling systems for bioprocesses (R8)
Products	<ul style="list-style-type: none"> ▪ Bio-based aromatics (R11)
Market uptake	

5 Demo topics Call 2018

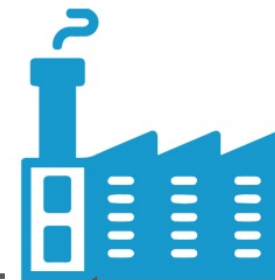


Objective: Demonstration of the technical and economic viability of a new or improved technology, process, product or service or value chain.

5 DEMO topics aiming at end TRL 6 to 7 → BBI JU Budget: €30 million // Grant up to €7 million / proposal

<p>Feedstock</p>	<ul style="list-style-type: none"> ▪ Improve the logistical and pre-processing steps of locally sourced biomass (D1) ▪ Valorization of mixed urban bio-waste (D2)
<p>Process</p>	<ul style="list-style-type: none"> ▪ Processes to valorize sugar from lignocellulosic biomass (D3)
<p>Products</p>	<ul style="list-style-type: none"> ▪ Bio-based pesticides & fertilizers (D4) ▪ High-performance functional ingredients (D5)
<p>Market uptake</p>	

2 Flagships topics Call 2018



Objective: deployment of a technology which has been already demonstrated, leading to a system which is complete and qualified for successful commercial operation (large-scale production facility in Europe)

2 Flagship topics aiming at end TRL 8 → BBI JU Budget: €42 million // Grant up to €21 million / proposal

Feedstock	
Process	
Products	<ul style="list-style-type: none"> Large scale competitive bio-based building blocks, polymers and materials that outperform existing market applications (F1) Large scale production of proteins for food and feed applications from alternative, sustainable sources (F2)
Market uptake	

3 CSA topics in Call 2018



Objective: non-technological actions supporting value chains development through various means

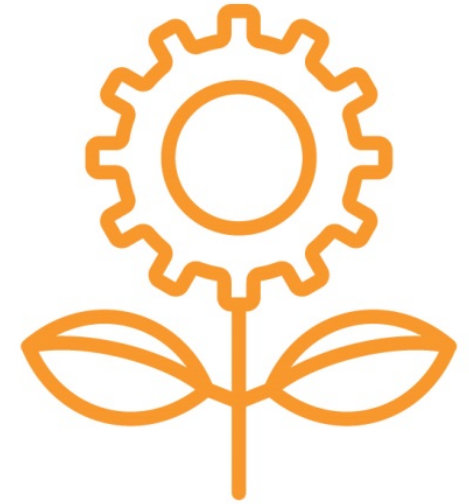
3 CSA topics (no link to TRL) → BBI JU Budget: €2 million

Feedstock	
Process	
Products	
Market uptake	<ul style="list-style-type: none">▪ Benefit from previous and current work to create a coherent and stimulating 'environment' for a sustainable bio-based industry in Europe (S1)▪ Expand the bio-based industry across Europe (S2)▪ Identify opportunities to promote careers, education and research activities in the European bio-based industry (S3)



Call 2018

Indicative Timetable



- **Call launch:** 11 April 2018 - Open for proposals
- **Call closure:** Submission of proposals
→ **6 September 2018 (17:00 CET)!!**
- **Evaluation process:** around 5 months after the proposal submission deadline
- **Announcement:** 6 Feb 2019 (tentative December 2018)
- **Signature of grant agreements:** 6 May 2019 (max 8 months after the proposal submission deadline)



Final remarks

➤ ***AWP 2018 opens new areas and opportunities by:***

- **widening scope** in terms of feedstock, processes, products and applications
- offering opportunities for technologies at **lower TRLs 1 to 3**
- opening new **cross-cutting opportunities**: multi-value-chain approach developing of products with new functionalities
- facilitating large-scale production for proteins and bio-based building blocks, polymers and materials and for urban waste conversion (FLAGS)
- **addressing also logistical challenges** (RIA, DEMO) and non-technological actions (CSAs) (e.g. promoting careers & identifying opportunities for the expansion of bio-based industries across Europe)
- being **inclusive for all actors** of the bio-based industries in Europe

➤ ***Strong focus on impact & KPIs***

- Proposals should clearly address (including quantitative information) how they contribute to KPIs and expected impacts of the call topics

➤ ***Industry driven program***

Thank you!

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