



# BBI JU

# INFO DAY 2019

**12 April 2019**

*Alcide de Gasperi room, Charlemagne building,  
European Commission, Brussels*

**#BBInfoday**





Session 2 | The BBI JU 2019 Work Programme

# **BBI JU: a high-impact initiative structuring the EU bio-based industries**

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*Executive Director*

Bio-based Industries Joint Undertaking (BBI JU)

**#BBInfoday**





# BBI JU was part of the EU Bioeconomy Strategy in 2012

## Mission

Under Horizon 2020 rules, implement the Strategic Innovation and Research Agenda (SIRA) developed by the European Bio-based Industries Consortium (BIC) and endorsed by the European Commission (EC)

**European public-private partnership (iPPP) aims at:**

**De-risk** investments

Reach **critical mass**

**Organize** the value chains

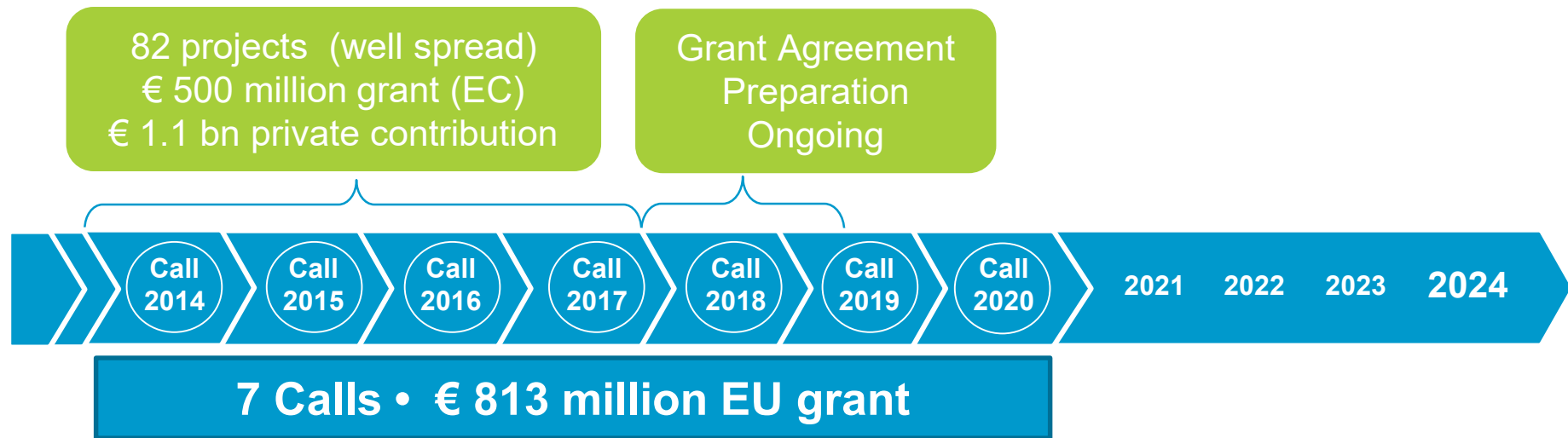


Trigger + Keep + Attract  
investments

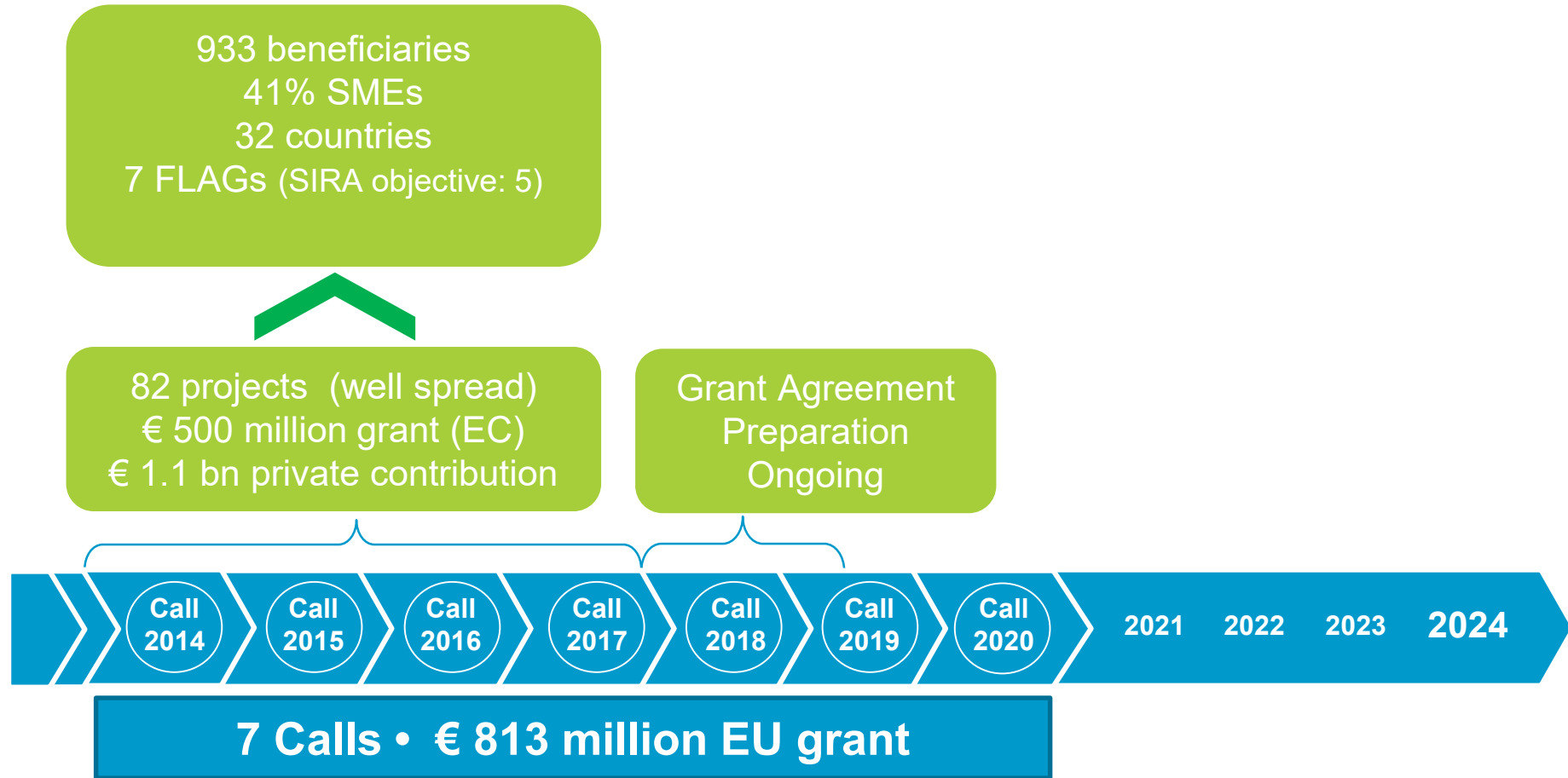
Mobilising effect

Structuring effect

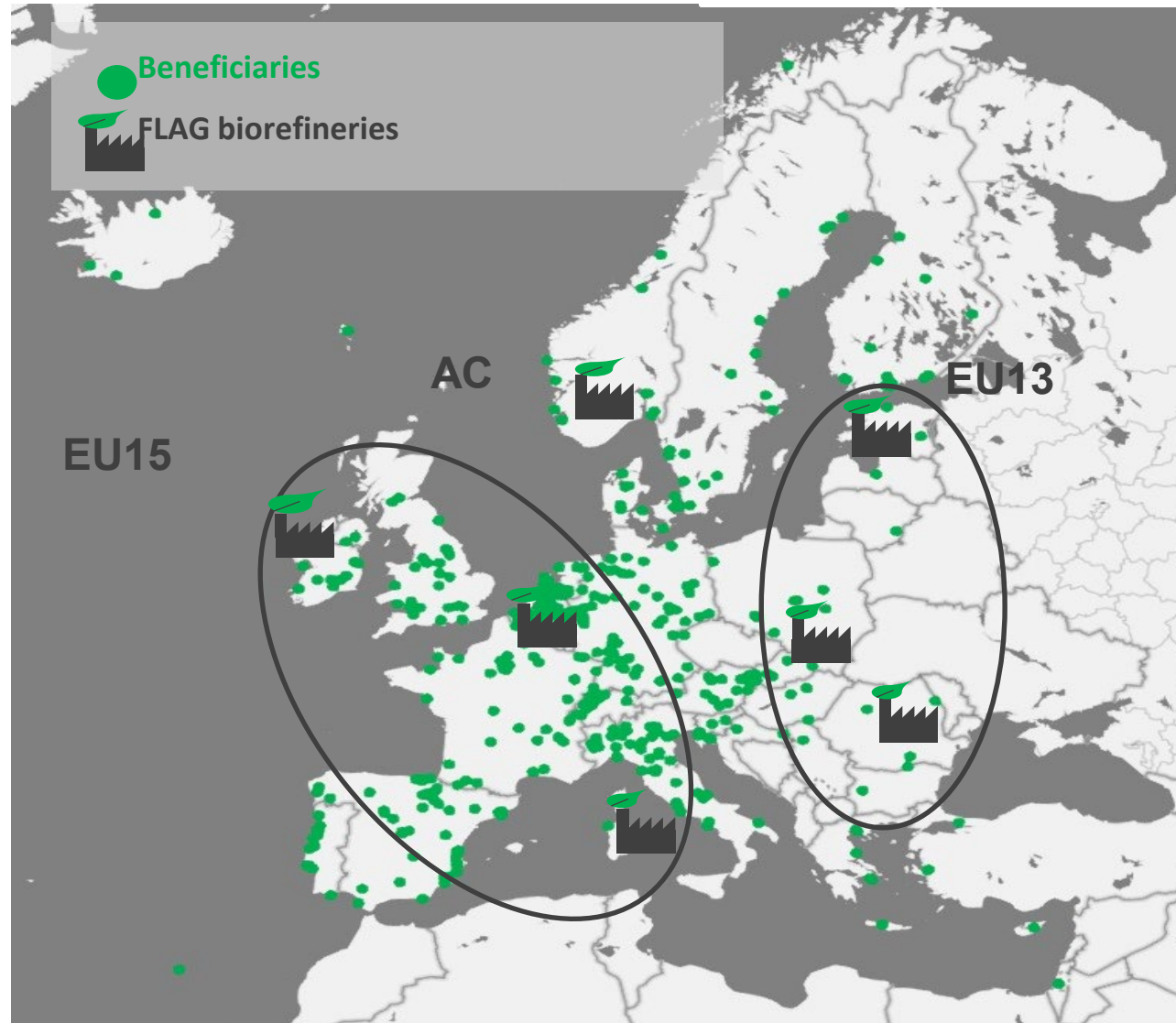
# Outputs from Calls 2014 - 2017



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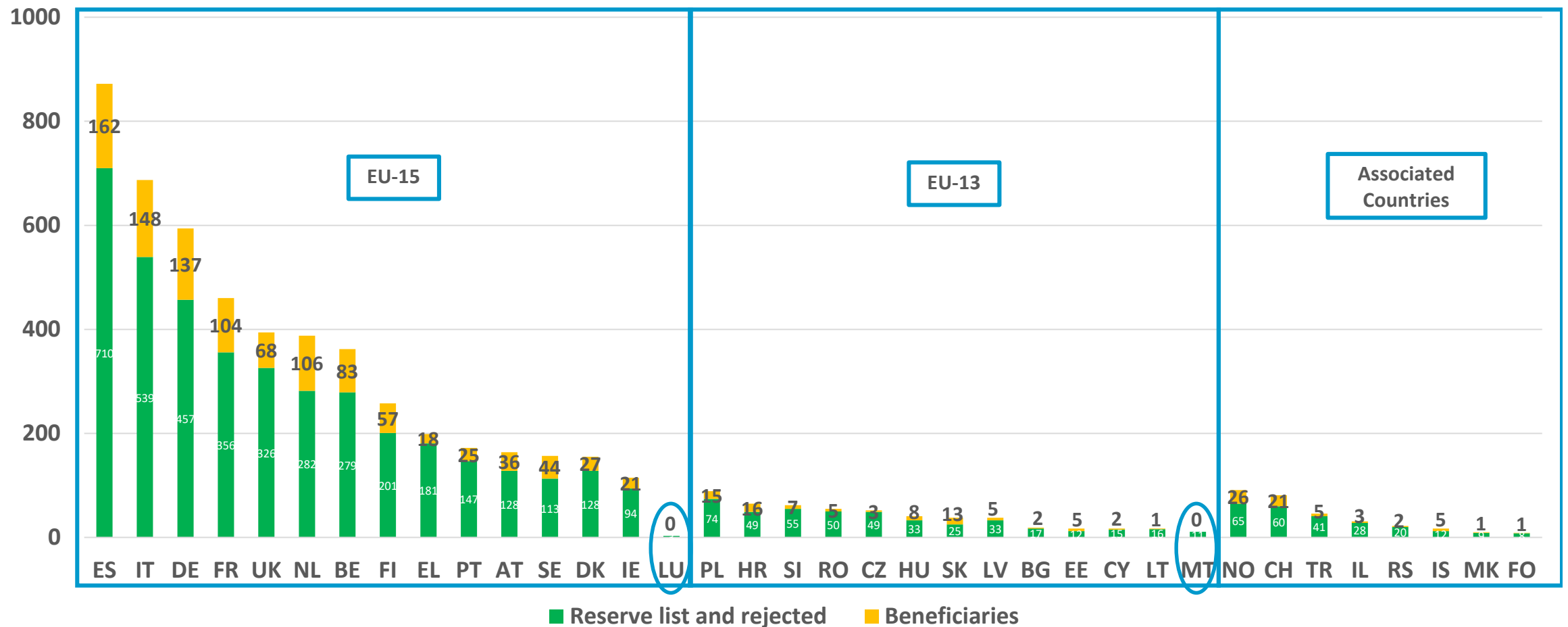
# Successful **Participants** in retained proposals compared to reserve list and rejected – Calls 2014 - 2018

Total successful participations: 1179

EU-15: 1036

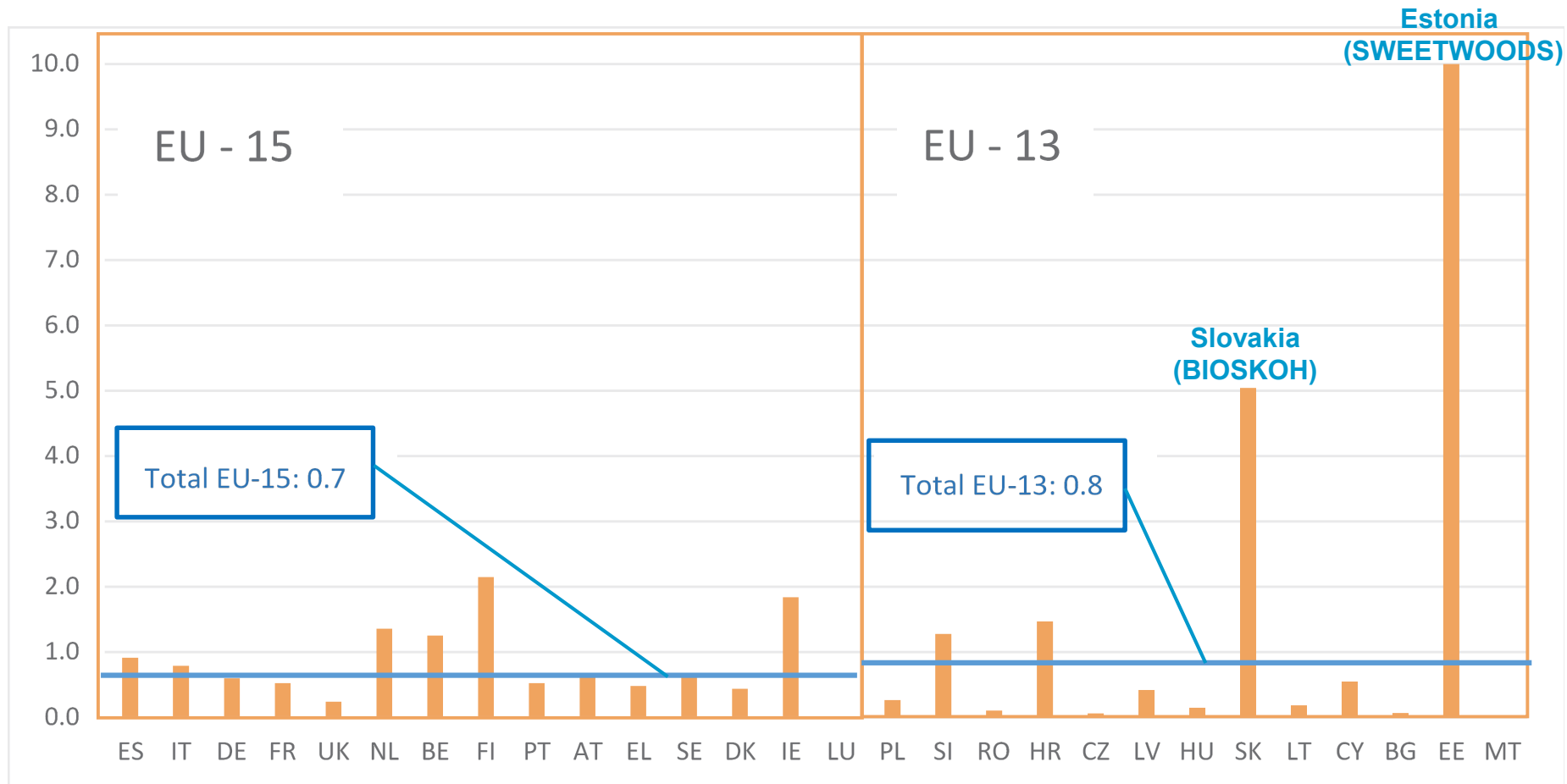
EU-13: 82

AC: 64



# Distribution of **funding** per country normalised per GDP

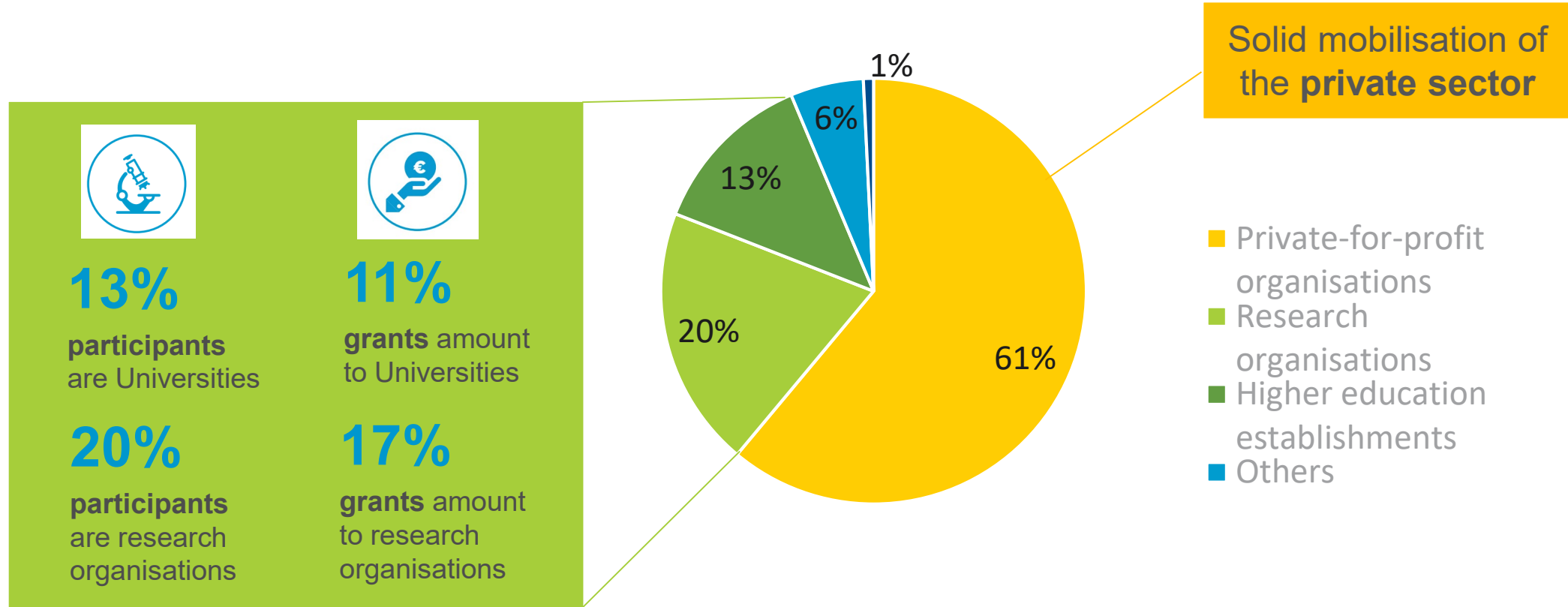
**EU13** countries when normalised by their total GDP is **comparable** to that of EU15





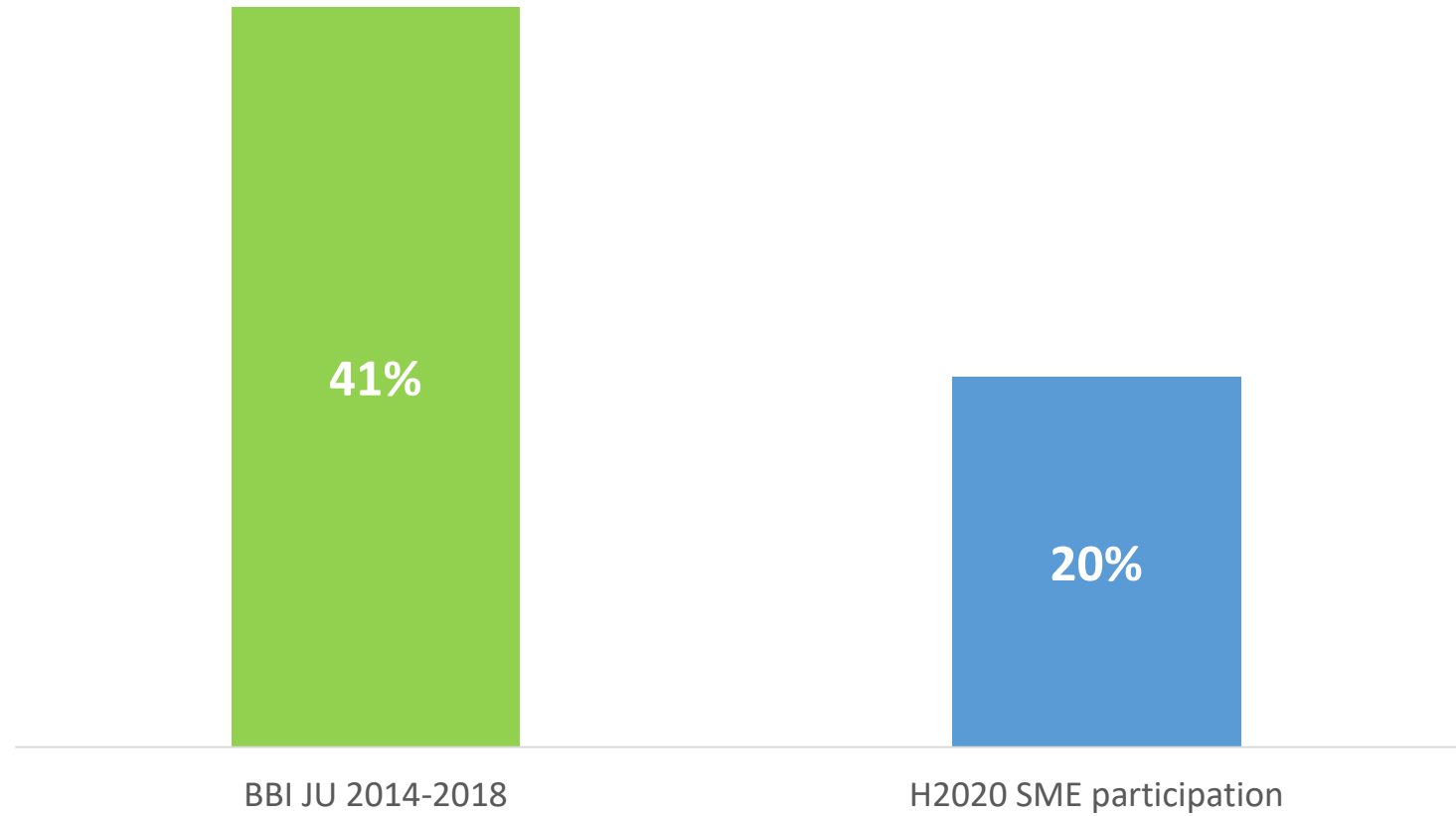
# Beneficiaries from Calls 2014 – 2017

## Type of participants



Beneficiaries  
from Calls  
2014 – 2017  
**SME  
participation**

## High representation by SMEs





# A well balanced project portfolio

Calls 2014 + 2015 + 2016 + 2017 + 2018 (\*)

		Per Type of Action		
Origin of feedstock		RIA	DEMO	FLAGSHIP
Per SO1 Feedstock	Agri-based	Carbosurf, PROMINENT, LIBBIO, HYPERBIOCOAT, Zelcor, BIOrescue, EnzOx2, InDIRECT, BioBarr, SSUCHY, ReSolve, BIOSMART, ECOXY, REFUCOAT, POLYBIOSKIN NEWPACK, Pro-Enrich, Prolific, EXCornsEED, VIPRISCAR iFermenter, **	Pulp2Value, AgriMax, Funguschain, GreenProtein, LIPES, GRACE, OPTISOCEM, BIOMOTIVE SUSFERT, Relnvent, EFFECTIVE *	FIRST2RUN, LIGNOFLAG, BIOSKOH AgriChemWhey, PEFerence, **
	Forest based	SmartLi, Greenlight, PROVIDES, US4GREENCHEM NeoCel, LIBRE, TECH4EFFECT, EFFORTE, SHERPACK SusBind, WoodZymes, UNRAVEL, ****	ValChem, BIOFOREVER, GreenSolRes, PULPACKTION, FRESH, LigniOx Dendromass4Europe SYLFEEED, EUCALIVA, *	EXILVA SWEETWOODS
	Bio-waste and CO <sub>2</sub>	NewFert, AFTERLIFE, PERCAL, BARBARA, **	EMBRACED, URBIOFIN, DEMETER, Biowaste, *	
	Aquatic Biomass	MACROCASCADE, BIOSEA, ABACUS, MAGNIFICENT, VALUEMAG, AQUABIOPROFIT, *	SpiralG	
Per SO4 Market uptake	SO4	Policy, regulations and standardization	Consumer awareness of the benefits of the bio-based products	Knowledge gathering and networking
	CSA	STAR4BBI	BioCannDo, BIOWAYS BIOBRIDGES	BIOPEN, Pilots4U, RoadToBio ICT-BIOCHAIN ***



# Project outcome monitoring

## KPI 1/8 from SIRA



**>140**

**expected new cross  
sector interactions**

against a target of **36** by 2020



# Project outcome monitoring

## KPI 2/8 from SIRA

**>100**

**expected new bio-based  
value chains**

against a target of 10 by 2020

70% new  
market/product

50% new  
technology

50% new  
feedstock

40% new  
business  
model



# Project outcome monitoring

## KPI 2/8 from SIRA

**>100**  
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against a target of 10 by 2020

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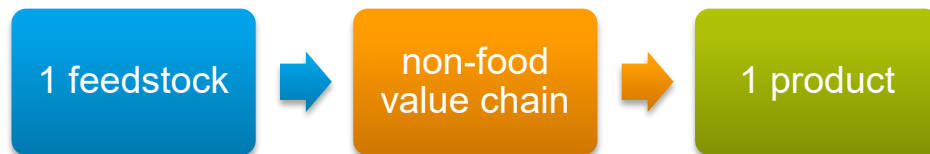
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# Project outcome monitoring

## KPI 2/8 from SIRA

**>100**  
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value chains**  
against a target of **10** by 2020

SIRA 2014 defined  
a **linear value chain** in which:

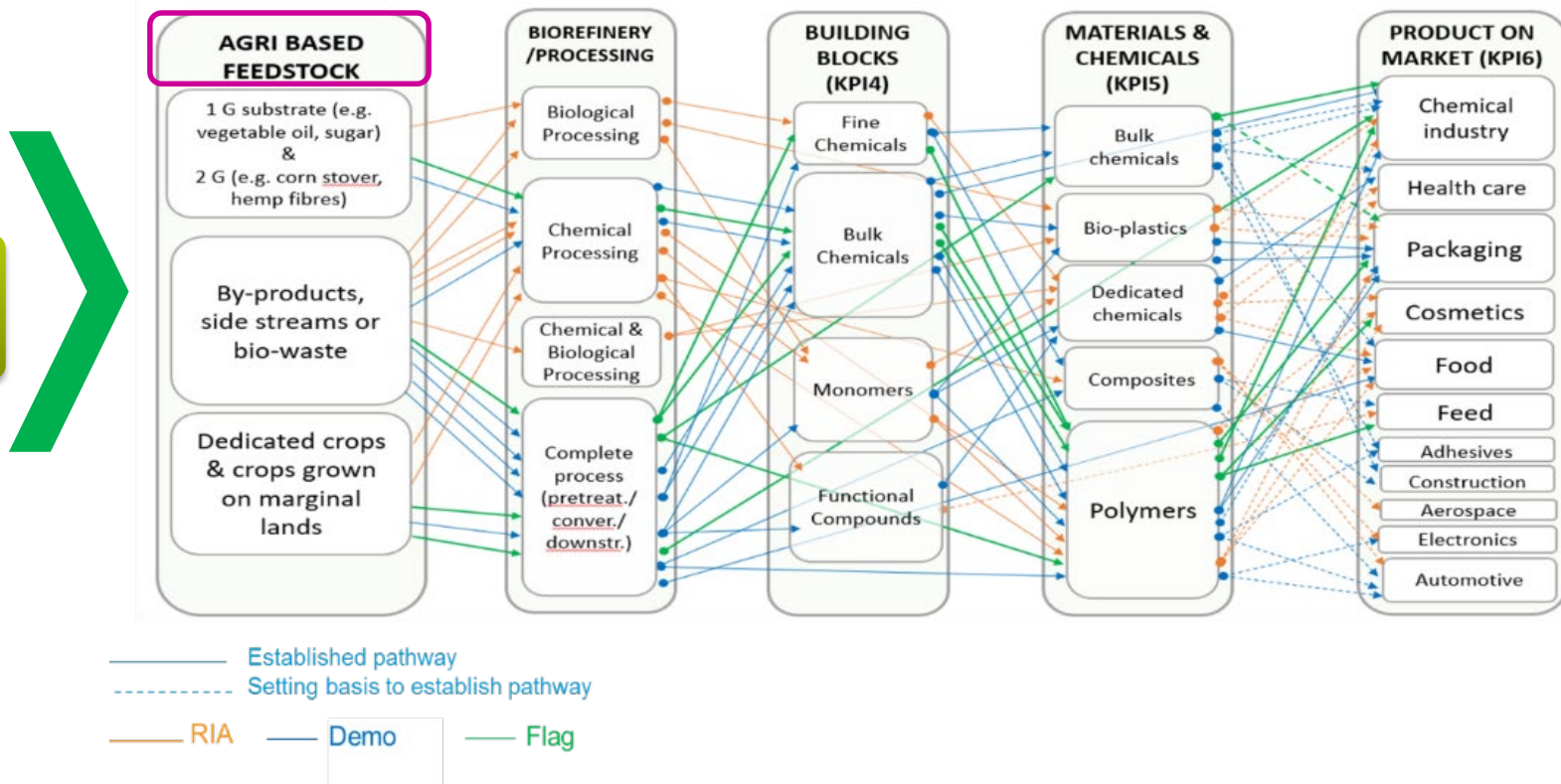
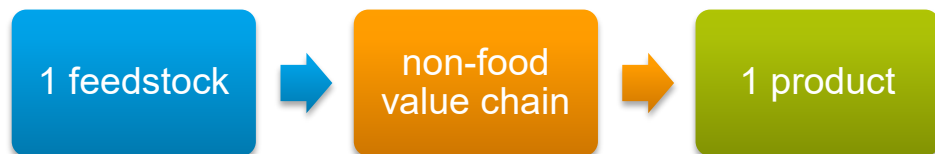


# Project outcome monitoring

## KPI 2/8 from SIRA

### The reality of the sector

SIRA 2014 defined  
a **linear value chain** in which:





# Outcome monitoring

## OUTPUT

**933** beneficiaries  
**41%** SMEs  
**32** countries  
**7** FLAGs

**82 projects** (well spread)  
€ 500 million grant  
€ 1.1 bn BIC contrib.

## OUTCOME

**> 140** new  
cross sector  
interactions

**> 100** new  
bio-based  
value chains

# Outcome monitoring

## OUTPUT

**933** beneficiaries  
**41%** SMEs  
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## OUTCOME

**> 140** new  
cross sector  
interactions

**> 100** new  
bio-based  
value chains

Organise the  
value chains

**Structuring  
effect**

**Mobilising  
effect**

Reach  
critical mass



# Outcome monitoring – KPI 4/8 from SIRA

**>60**

**expected new bio-based  
building blocks**

against a target of 5 by 2020

40% drop-in

30% better  
performance  
vs fossil-based

30%  
breakthrough



# Outcome monitoring – KPI 5/8 from SIRA

**>140**

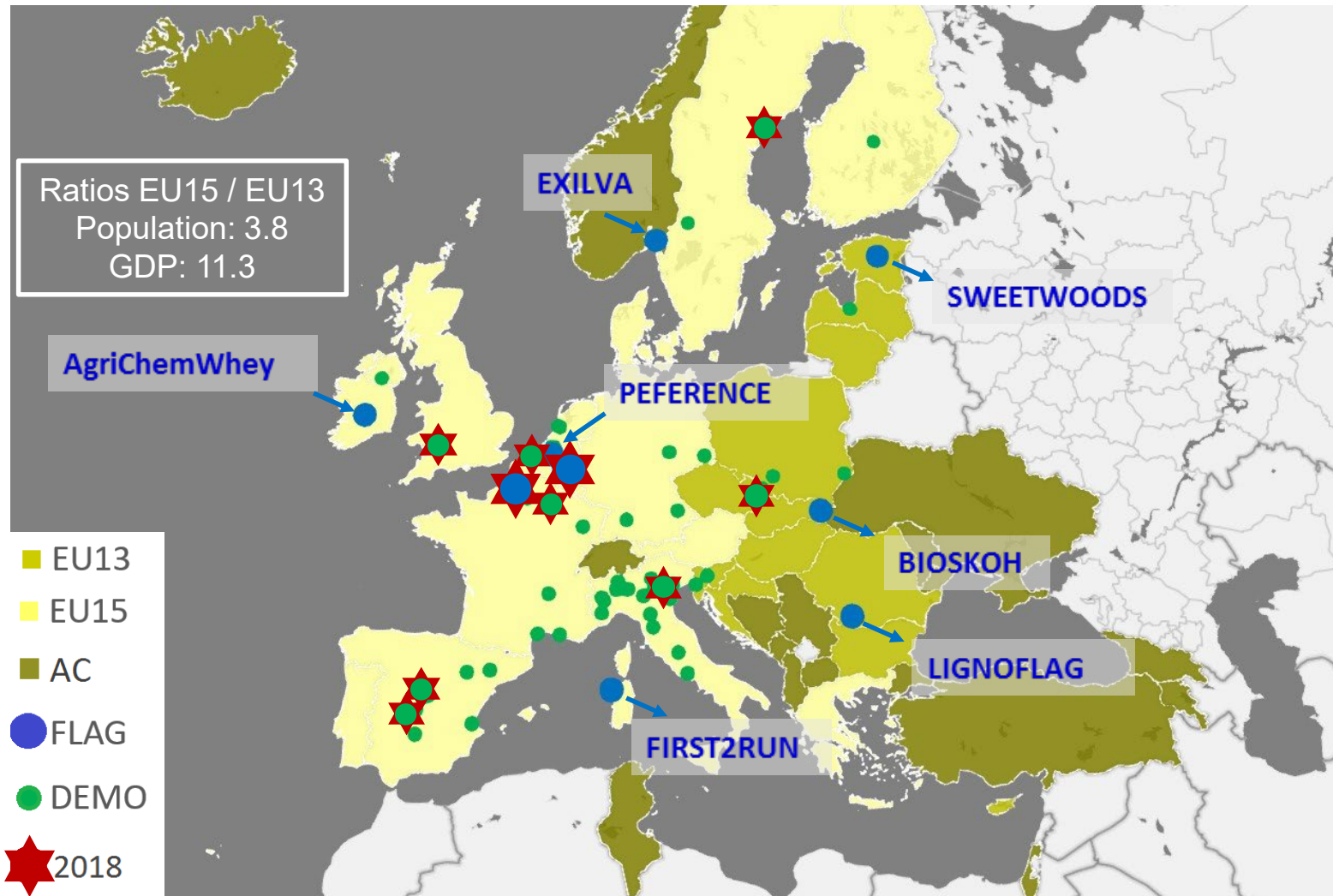
**expected new  
bio-based materials**

against a target of 50 by 2020

30% drop-in

> 60% new or  
improved  
functionality

# Geographical coverage of DEMOs and FLAGs from Calls 2014 - 2017



## KPI 7/8

7 FLAGSHIPS

3.000 direct jobs

> 10.000 indirect jobs

Total Grant: € 159 million

€1.000 million  
private investment

High replicability potential

Most in EU13

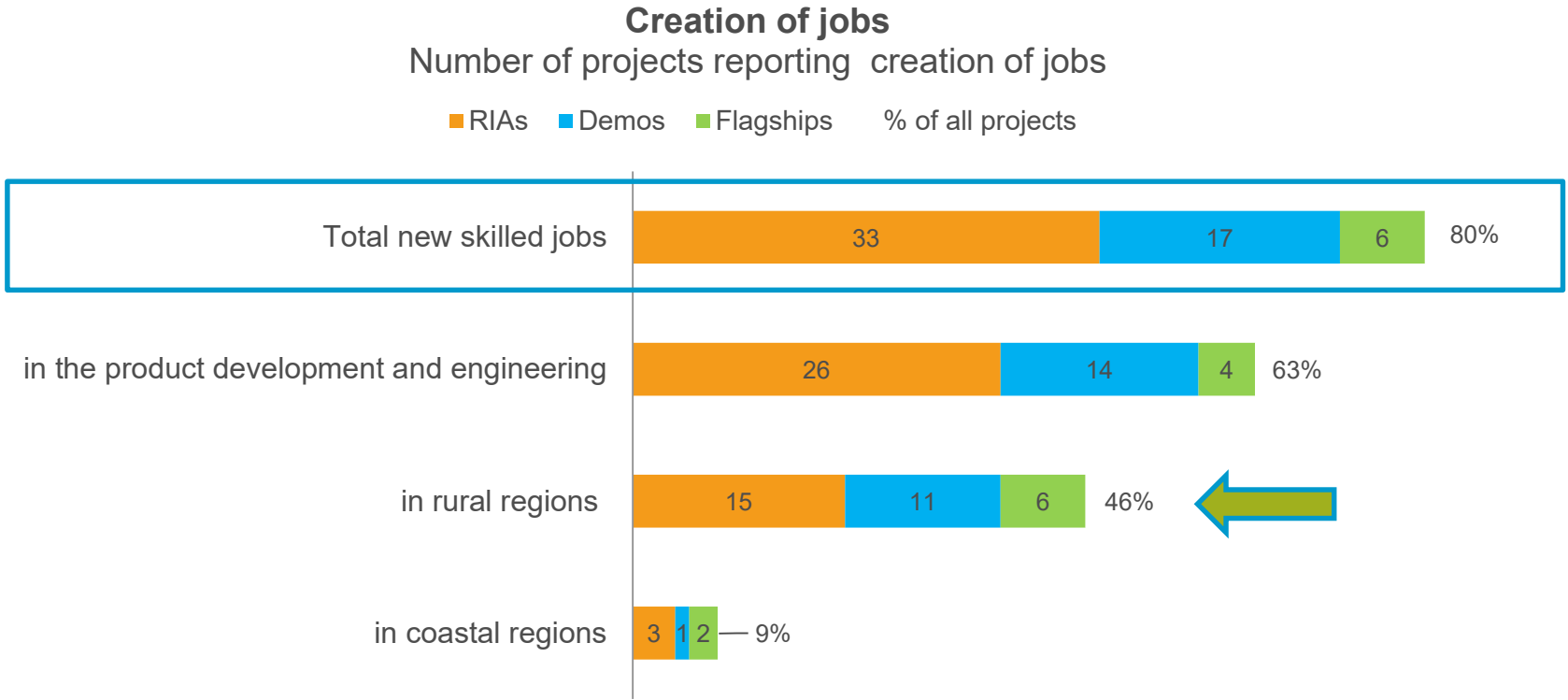


# Socio-economic and environmental impact monitoring

## Yearly survey of BBI JU projects:

- Investment and job creation
- Environmental impact
- Scientific and knowledge
- Primary producers and rural deployment
- Education and citizen
- Market and industry
- Regional and local impact
- Safety and health
- contribution to the UN SDGs (NEW 2018)

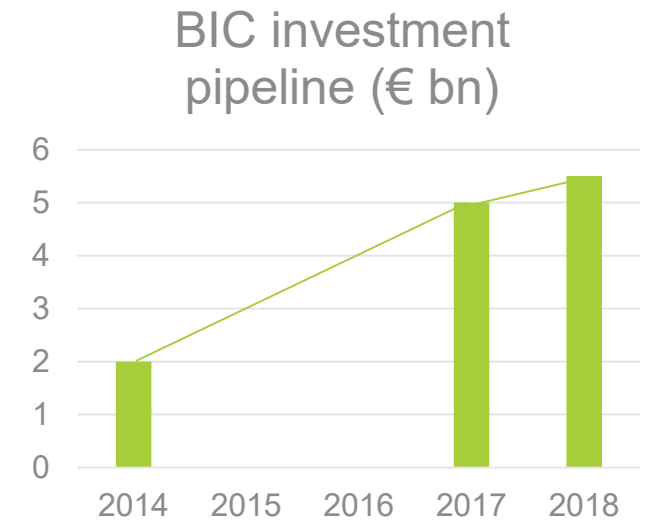
# Project impact on jobs & investment



# Project impact on Jobs & Investment

Project  
impact on  
jobs &  
investment

- **EU grant under BBI JU (Calls 2014-2017):**  
→ € 500 million
- **BIC members investment pipeline** survey:  
→ 2014: € 2 bn  
→ 2017: € 5 bn  
→ 2018: € 5.5 bn

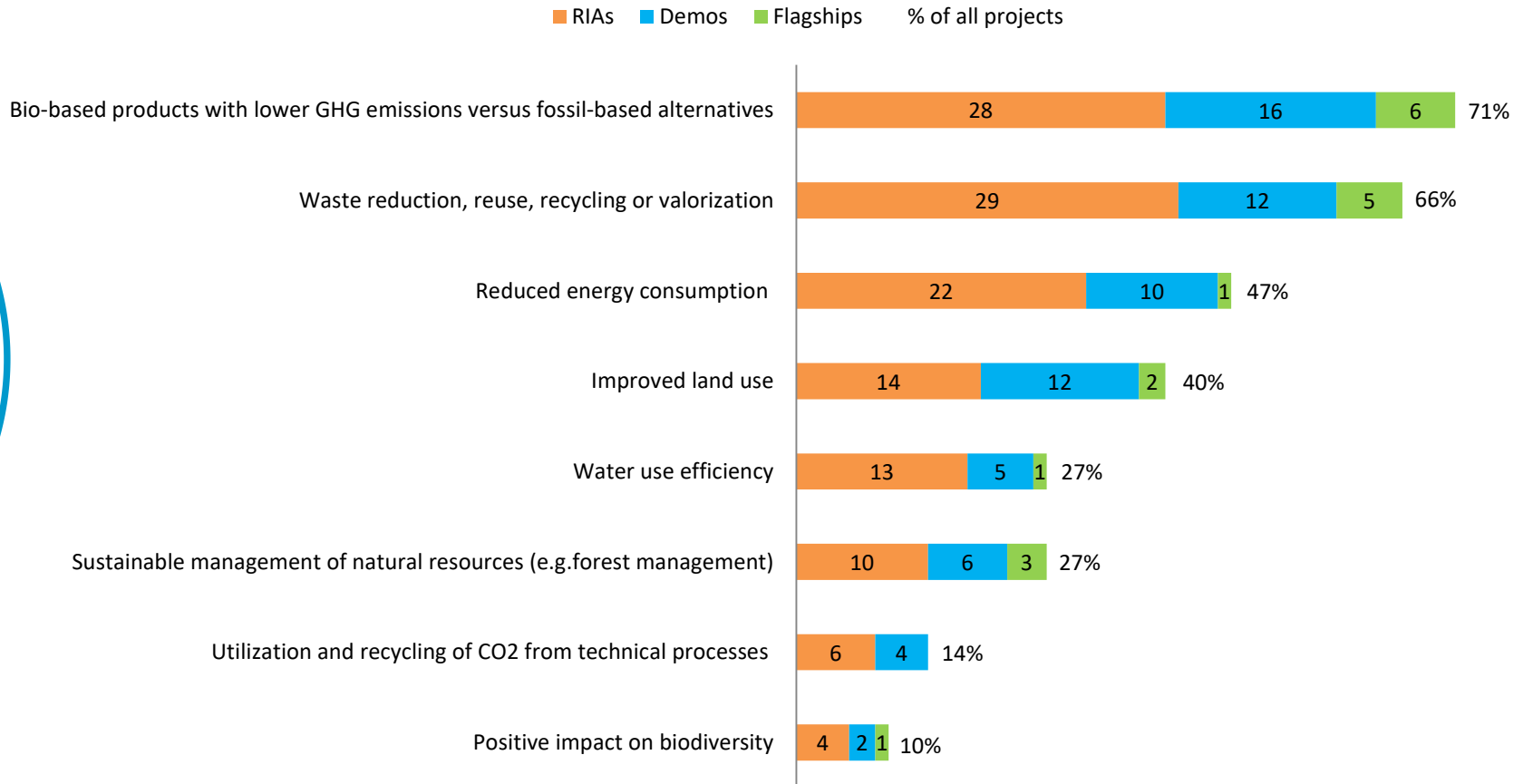






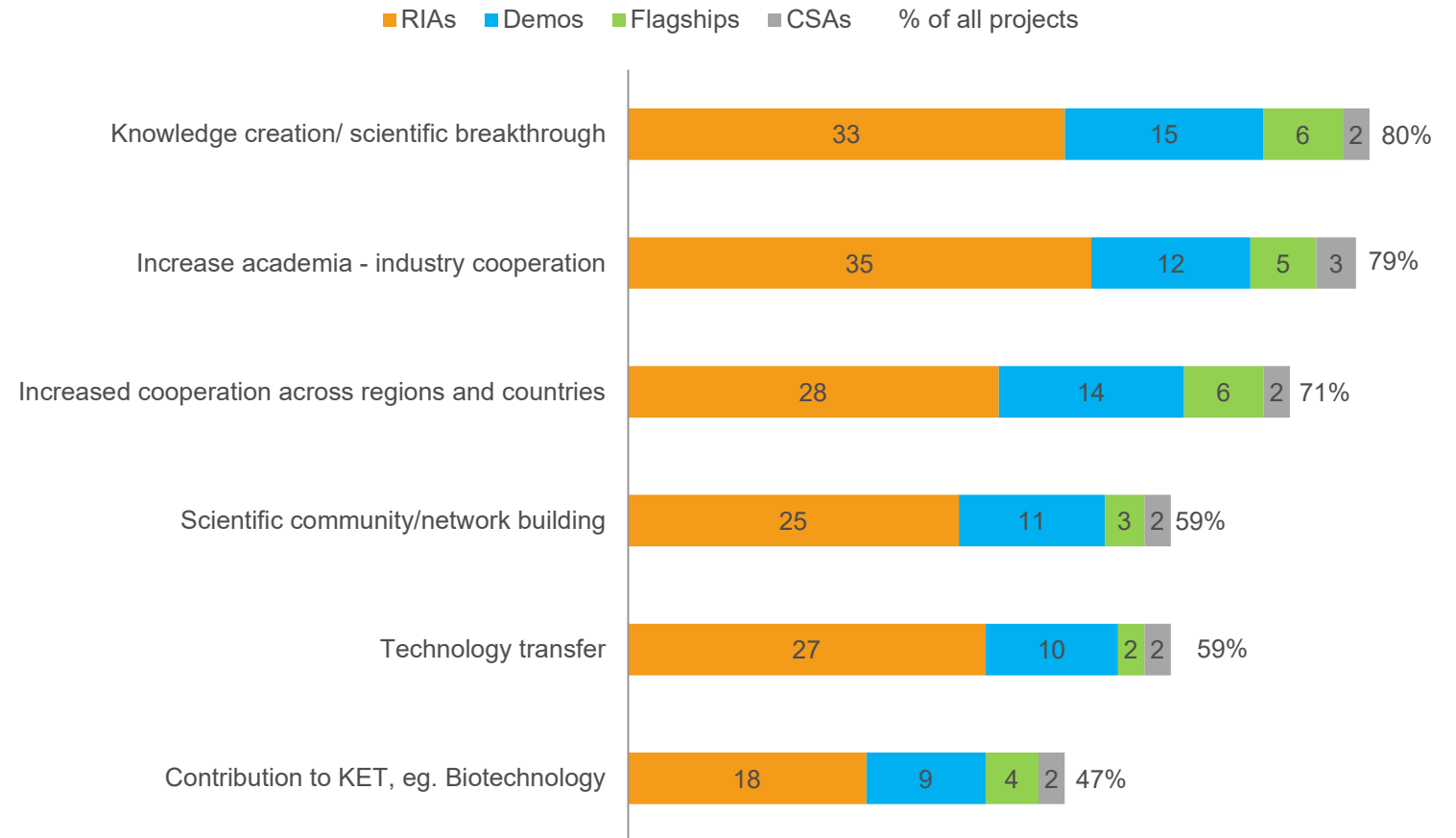
## Environmental impact

Projects reporting expected impact in these aspects



# Project impact on science and knowledge

## Science and knowledge Projects reporting expected impact in these areas



# Lessons learnt (1/3)

## Key achievements

- **Specific KPIs and socio-economic & environmental impact** from SIRA **well on track** and monitoring works;
- **BBI JU is achieving its objectives with two main effects:**
  - Structuring effect: value chain-driven cooperation across sectors creating competitiveness
  - Mobilizing effect: innovation-driven mobilising key stakeholders
- **Financial leverage effect overall on track** with some contrast
- **Well balanced portfolio** showing an optimal value chains coverage
- **Public funding of high TRL research projects:** Demonstration and Flagships coverage (geographic and feedstock)
- **High % of SME participation** (and with key role)
- **The industry invest in EU:** in 2014: € 2 bn → 2018: € 5.5 bn
- **Europe back on the map** (BIC CEOs, BBI JU Advisory bodies)



# Lessons learnt (2/3)

## What is said

- **BBI JU interim evaluation (EC report 2017)**
  - Structuring effect
  - Mobilising effect
  - BBI JU is well aligned vs initial challenges + specific KPIs on track
- **Discharge report CONT Committee of European Parliament (Oct 2018):**
  - “The objectives of the Joint Undertaking could not be addressed with traditional Union instruments.
  - “The Joint Undertaking has provided a structuring effect, bringing together the sectors and actors towards deployment of new value chains, and it has mobilised increasing investments on developing innovations for the bio-based industries”.
- **New EU BioEconomy strategy ( Approved Oct 2018):**
  - BBI JU ” has been instrumental in the development of new bio-based value chains centred around the use of renewable resources including waste”.
  - The role of BBI JU “*is proving crucial in supporting the development of European industrial bio-based infrastructures and value chains*”



## Lessons learnt (3/3)

# ***“We are not there yet”*** – Horizon Europe

- **Huge and still risky investments**
  - ✓ Issues accessing private capital
  - ✓ Remaining funding gaps in Demo and Flag
- **Structuration still ongoing: market and demand risks**
- **Some areas not yet covered enough**
  - ✓ Farmers participation
  - ✓ Full feedstock potential
  - ✓ Geographic coverage
  - ✓ ...
- **Brand owners and retailers participation**
- **Sector request coherent, supportive and stable regulatory framework**
- **Better tell the story of BioEconomy & Bio-Based products: Consumer awareness, education**
- **Go beyond “fossil to biobased” story: climate mitigation, water quality, human and animal health, biodiversity...**



# Thank you!

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**WI-FI**

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