



The relevance of the bioeconomy strategy and the BBI JU for bio-based industries

Building an effective Bioeconomy Strategy

Brussels EP, 28 September 2017

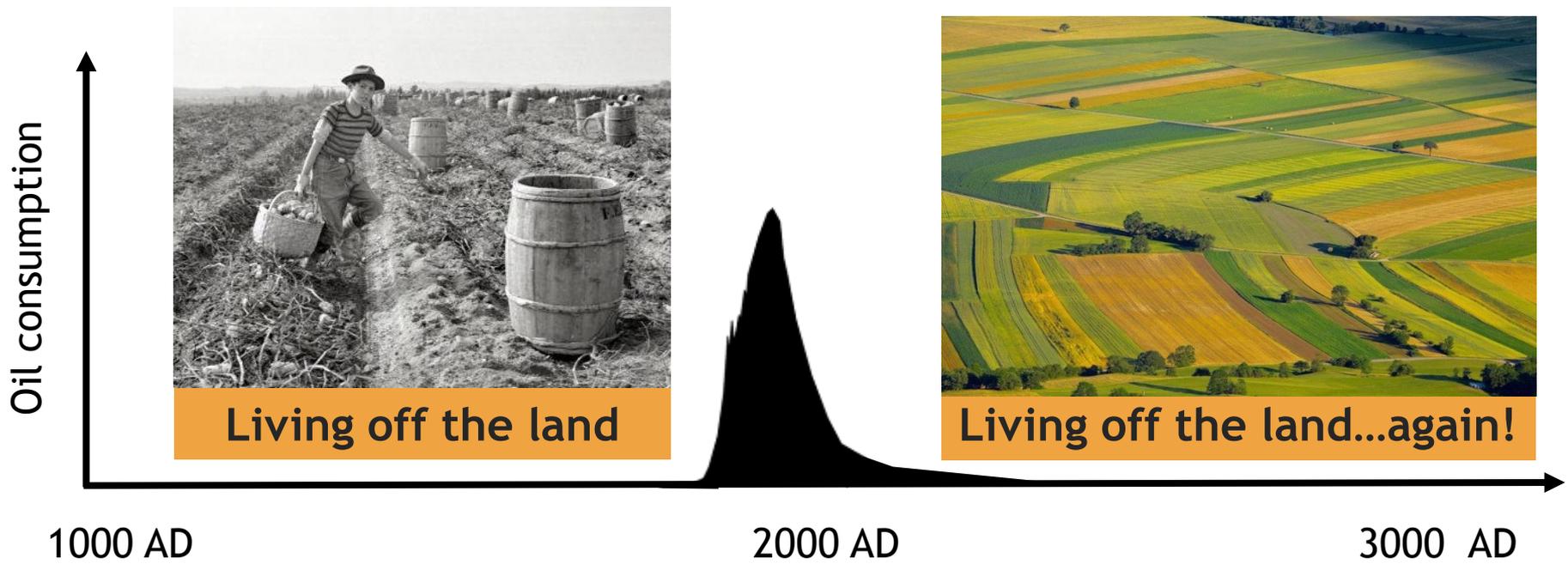
Philippe Mengal

BBI JU Executive Director



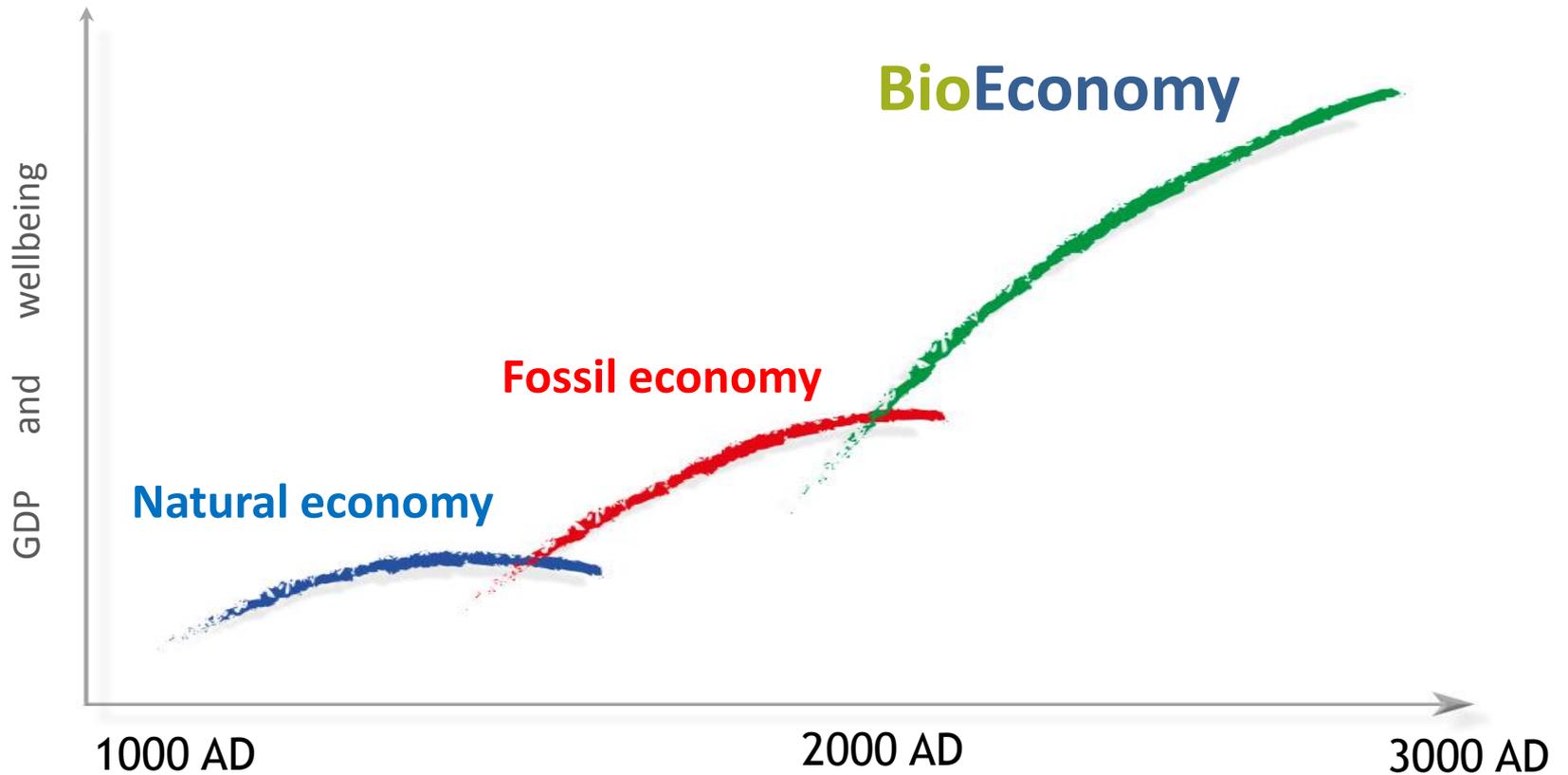
Bioeconomy: already a reality today

Fossil economy is just a brief moment in our history





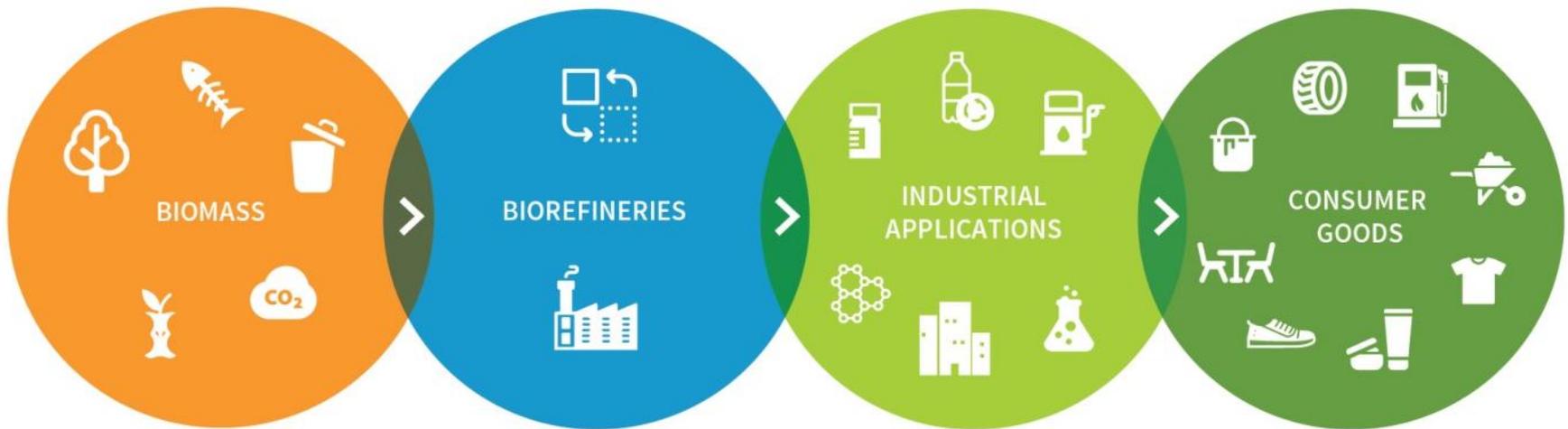
(How) do we want to achieve it? Europe on the driver's seat? Shape the Bioeconomy we want?





Bio-based industries (BBI) value chains in 3 segments

BBI value chains represent 3.3 million jobs and € 674 bn turnover but **extremely fragmented** between **actors** and across **geographies**



- Waste streams
- Multiple organic waste
- By-products & by-streams
- Forestry side-streams
- Dedicated agricultural crops and residues
- Aquatic biomass
- Food processing residues
- Process and waste water
- CO₂

- (Pre -) treatment
- Transformation

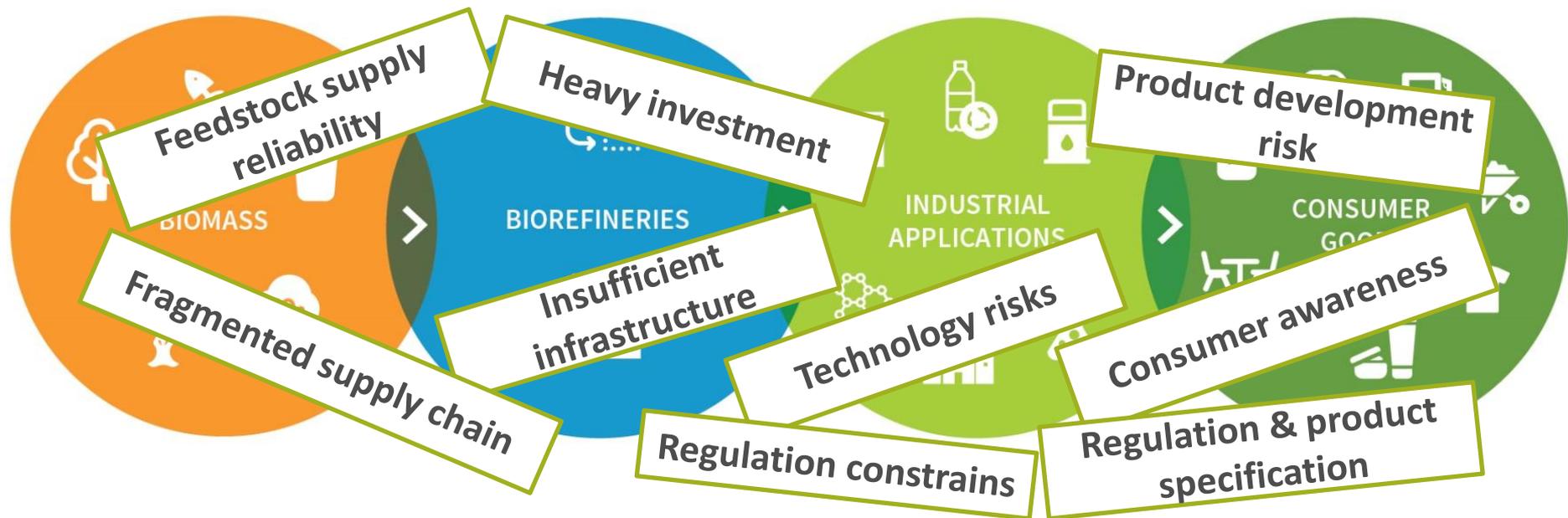
- Bioplastics
- Building blocks
- Biopolymers
- Surfactants
- Active ingredients
- Biomaterials
- Biolubricants

- Biofuels
- Textiles
- Packaging
- Solvents
- Furniture
- Cosmetics
- Construction elements
- Pharmaceuticals
- Clothing
- Car components



Bio-based industries (BBI) value chains

Bio-based industries value chains are faced with several challenges and risks





BBi JU was part of EU Bioeconomy strategy in 2012

European public-private partnership (iPPP)
was needed to:

- **De-risk** investments;
- **Organize** the value chains;
- Reach **critical mass** of this “emerging” sector



About BBI JU

- Public-Private Partnership (PPP) between European Commission & BIC supporting R&I for bio-based industries
- BBI JU Budget: € 3.7 billion (25% EU - 75% BIC)
→ Fund R&I projects from technology development to full scale
- EU body - operates under Horizon 2020 rules

BBI JU Mission

Implement under Horizon 2020 rules, the Strategic Innovation and Research Agenda (SIRA) developed by the European Bio-based industry (BIC)



BBi JU objectives

Develop sustainable and competitive bio-based industries in Europe, based on advanced biorefineries that source their biomass sustainably by:

- 1. Demonstrating new technologies** to fill the gap in value chains
- 2. Developing business models** integrating all economic actors along the value chain
- 3. Set-up flagship biorefinery plants** deploying business models & technologies to keep investment in EU



Expected impact for Europe by 2030

- Replace 30% of oil-based chemicals & materials
- Diversify and grow farmers' revenues
- Create 700,000 jobs – 80% in rural areas
- Reduce EU's dependency on import of fossil raw materials, protein and P - K
- Develop potential of agr-food “waste” & forestry residues
- Shift to bio-based economy → average 50% GHG emission reduction



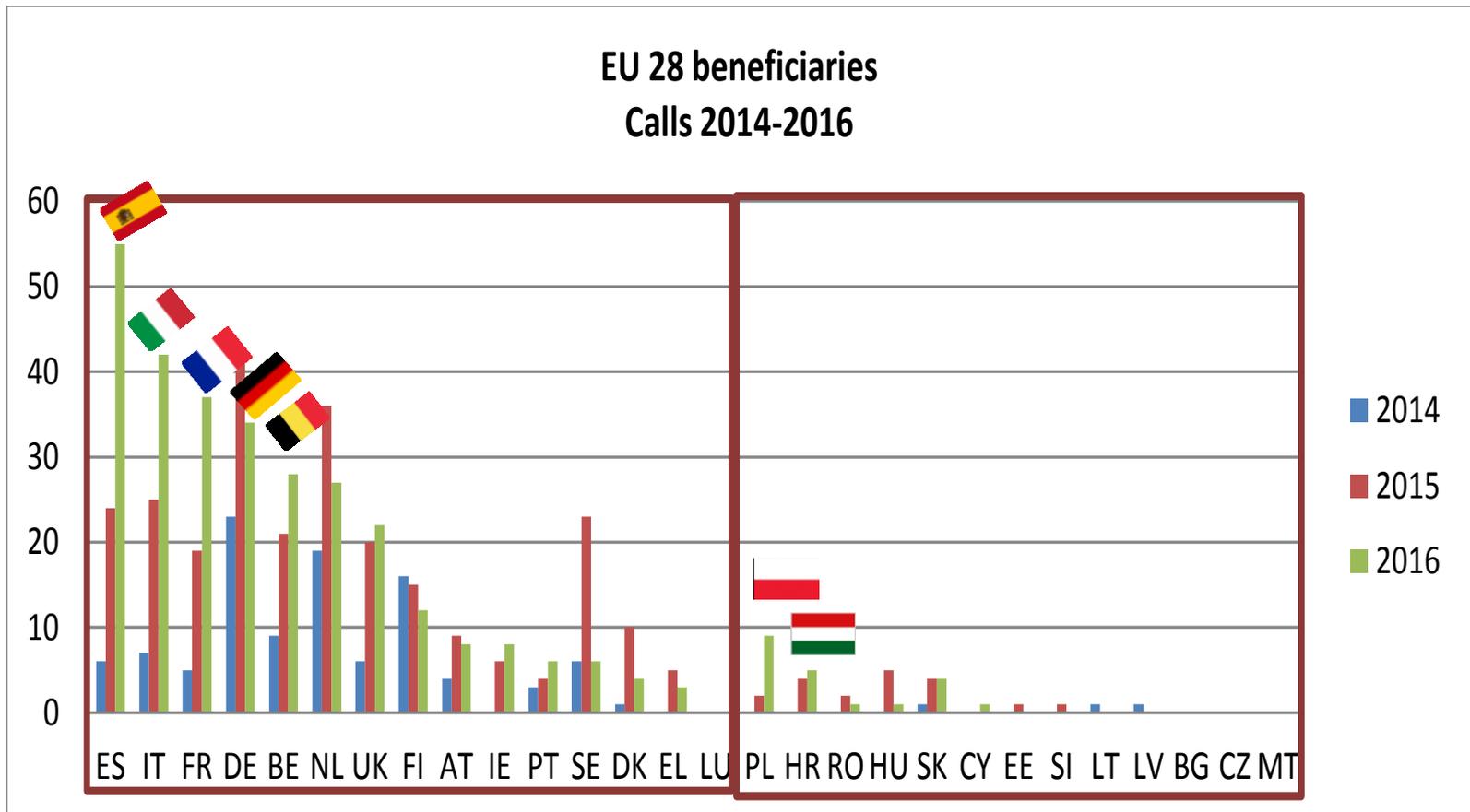
BBI JU's target for a sustainable bio-based industry thanks to focus on:

- LCAnalysis for each project
- Waste valorisation (industry, agriculture and municipalities)
- Reconversion of marginal lands and semi-arid areas
- Increase productivity of industrial multipurpose crops
- New feedstock supply chains: ligno-cellulosic residues from agriculture and forestry residues
- Protein, P & K recovery
- Reduction of fertilisers input while increasing crop yield



Total beneficiaries in calls 2014 - 2015 - 2016

65 projects - Total beneficiaries: 729 (incl. multiple participation)





BBI JU Flagships & Demo plants on-going projects

- **Flagships**
- **Demo plants**



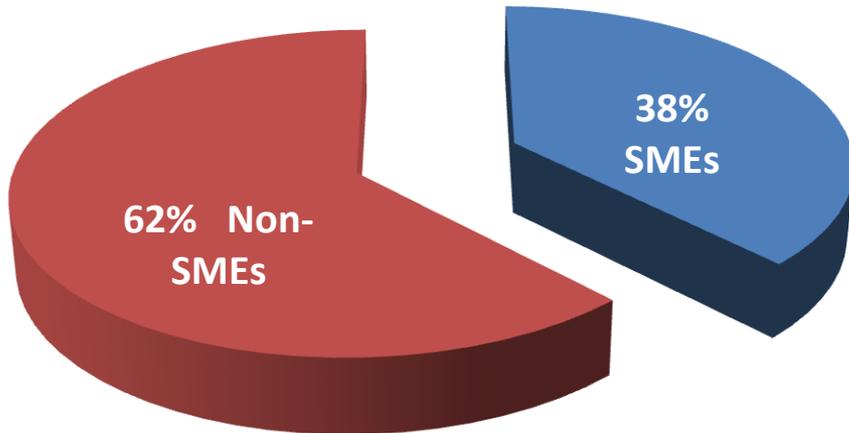
OPTISOHEM:
3 DEMO plants will be involved in the projects. The locations are not confirmed yet. Two possible locations: **Germany** and **Belgium**

→ More information on the projects: www.bbi-europe.eu

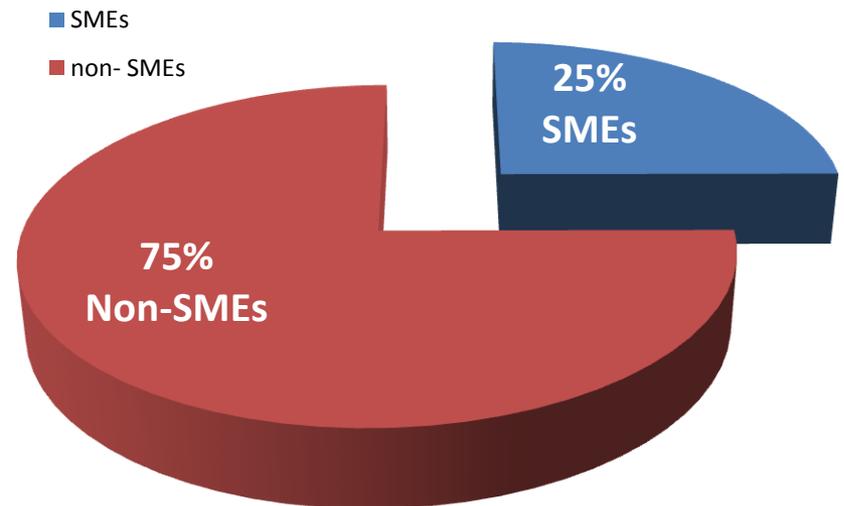


SMEs share in retained proposals (Calls 2014-15-16)

SMEs share in funded projects (number)

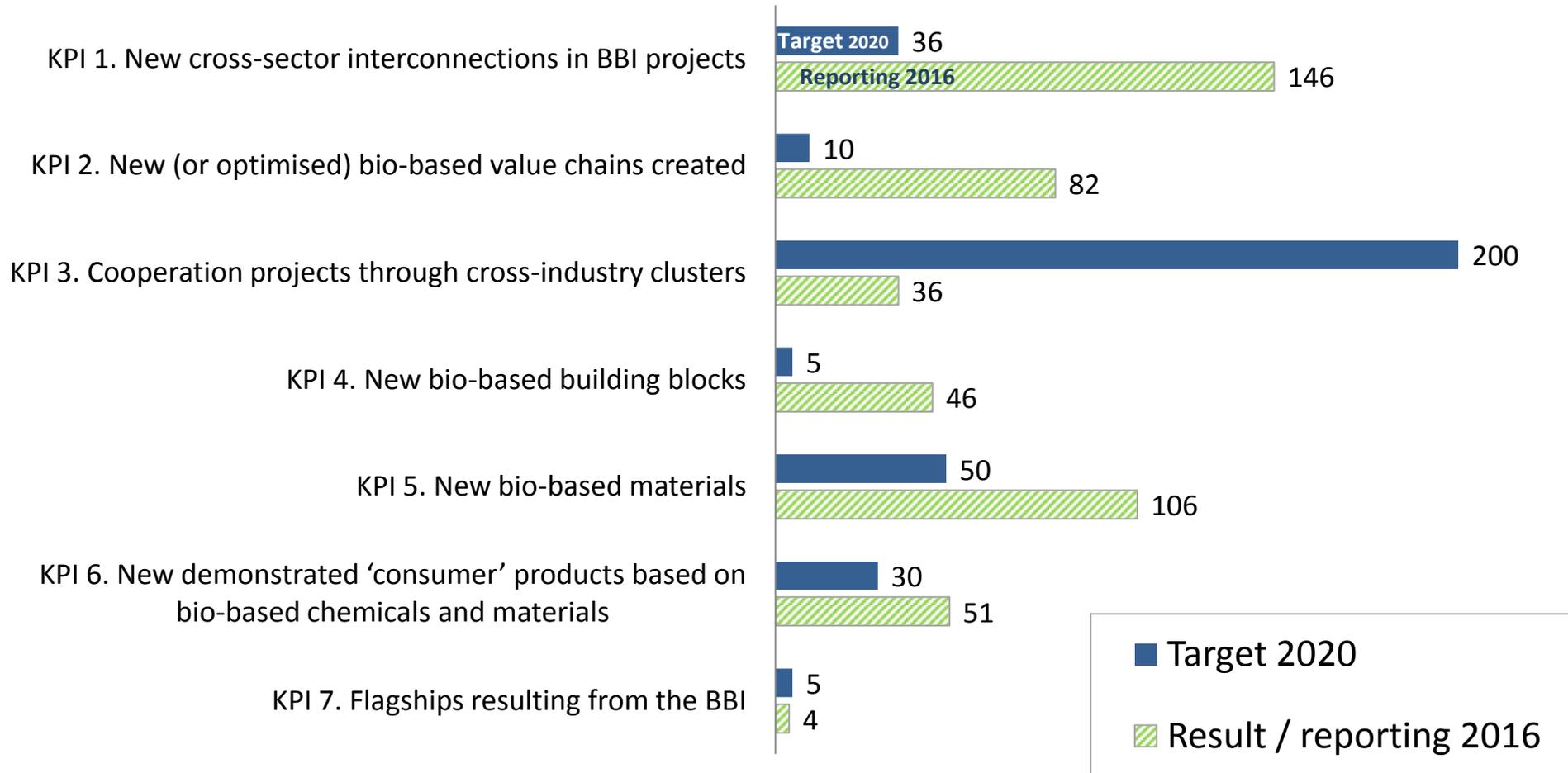


SMEs share in funded projects (budget)





Progress of the 7 KPIs BBI projects outcome by end 2016 vs targets by 2020



➤ More details in BBI JU AAR2016



Some lessons learned

- Increasing mobilisation in BBI calls
- Optimal Value Chains coverage
- New types of collaboration → structuring effect
- High % of SME participation
- Increasing interest from Regions
- Growing BBI JU awareness (also outside EU)
- The industry invest massively 2014: €2bn → 2017: €5bn
- First result of widening participation strategy
- Europe back on the map



Future priorities

- Farmer organisations participation
- Municipal bio-waste
- BBi JU widening participation strategy
- More emphasis on aquatic biomass
- Increase « brand owners » participation
- Better communication value for EU citizens
- Engage more with young scientists

→ Adjusted SIRA June 2017

→ Bioeconomy strategy update



Join us!

Upcoming BBI JU events

- 1st Stakeholder Forum, 7th December 2017,
The Square, Brussels, Belgium

Contact us

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Thank you