



Bio-based Industries  
Joint Undertaking

**GLAUKOS contribution to address sustainability  
challenges for oceans' protection**  
**Stakeholders Lab workshop, 3 March 2021**

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# Bio-Based Industries Joint Undertaking

- **Public-Private Partnership (PPP)** developing sustainable and competitive bio-based industries in Europe
- **Mission:** to implement, under Horizon 2020 rules, the **Strategic Innovation and Research Agenda (SIRA)** developed by the industry and validated by the EC.

- **Partners:**

- European Union (via EC)
- Bio-based Industries Consortium (BIC)



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



# BBI JU objectives

400.000 skilled jobs by 2020  
rising to 700.000 skilled jobs by 2030



80% of which will be in rural areas

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

Type of projects:

1. Demonstrating new technologies

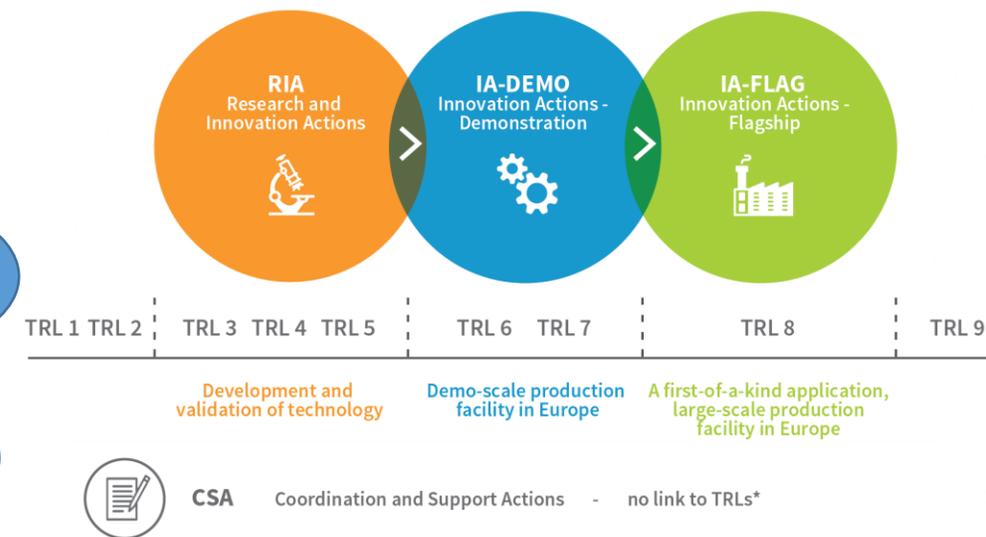
RIA

2. Developing business models

Demo

3. Set-up flagship biorefinery plants

FLAG



\*TRL = Technology Readiness Levels



# BBI JU promotes a sustainable bio-based economy

The replacement of fossil-based products by *any* bio-based products is not enough. New bio-based products must:

- use sustainably and locally sourced biomass
- provide better functionalities that outperform fossil based alternatives
- have reduced environmental impact and carbon footprint
- develop Innovative technologies with improved resource efficiency
- Integrate circular approaches (reuse, recycle, residues valorization) and an sustainable end-of-life options

→ **Glaukos** project as an example of integral approach to sustainable textiles and fishing gears with an improved end-of-life



# GLAUKOS contribution to sustainable circular textile industry and oceans' health (1/2)

- Use of **bio-based feedstock** to produce a building block, which otherwise is currently mainly fossil-based. This will contribute also to reduce external dependence and use local supply chains.
- Increase the **bio-based content** of textile products Replace fossil-based additives and coatings by bio-based ones.
- Glaukos will also use **resource efficient processes** and efficient biocatalyst for the bio-recycling.
- Ensure the **technical performance**, reconciling biodegradability with durability of these materials to enable long-term use



# GLAUKOS contribution to sustainable circular textile industry and oceans' health (2/2)

- Mitigate plastic pollution by increasing the **biodegradation rate** of materials compared to conventional materials
- Enhance the **bio-recycling** potential of the Glaukos bio-based textile products through efficient recycling biocatalyst.
- Develop methods to assess biodegradability
- Include full **LCA** to assess plastic footprint, ecotoxicity and circularity indicators
- **Establishing Stakeholder labs**, engaging academia, civil society, industry and policy makers to ensure wide acceptance and meeting the end-users requirements



**Thank you!**

## Contact us

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