

A PUBLIC PRIVATE PARTNERSHIP
ON BIO-BASED INDUSTRIES

The Biobased Industries Initiative



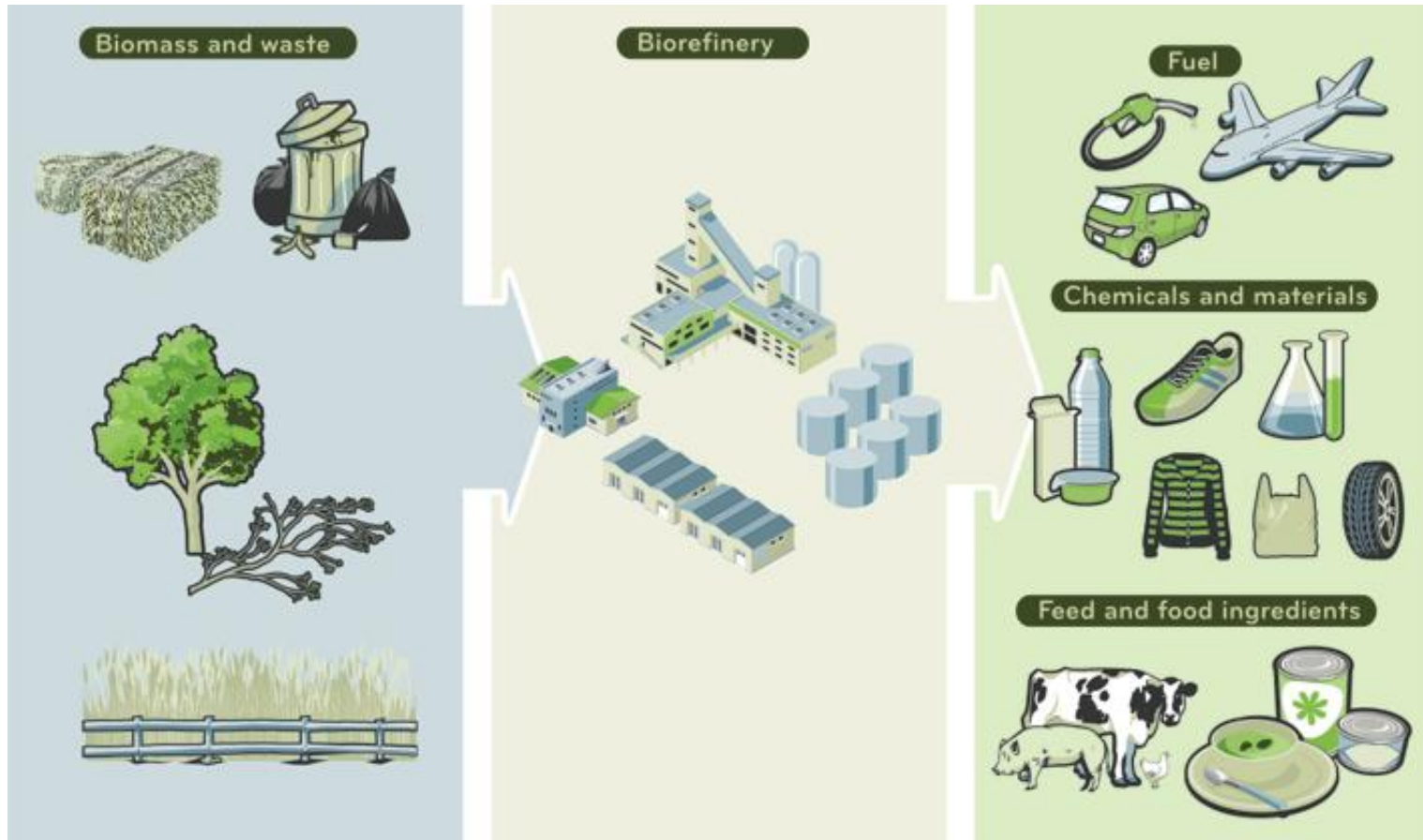
Dirk Carrez – Executive Director BIC

Cross-sectorial and cross-border cooperation of clusters in support of green chemicals industries.

Brussels, 27th February 2014



The concept



The challenge:

Overcoming the innovation & deployment gap



Europe's ability to commercialise / produce high value products lies in its ability to reach demonstration scale of advanced biorefineries to mature technologies

About the initiative

- A Public-Private Partnership (PPP) between the Bio-based Industries Consortium and the EU
- A **joint** commitment of €3.8 billion over 2014-2020
 - €1 billion (EU)
 - €2.8 billion (Biobased Industries Consortium)
- Multi-annual funding programmes for bio-based projects
- Enabling rural development and re-industrialisation in Europe

Our sectors



Stage 1 - Reinforce innovation and extend current infrastructure across the economy

The bridges



Stage 2 - Build and strengthen value chains across industry sectors

The PPP community



Stage 3 - Realise a connected biobased economy from field to end consumer

Our focus

- Interconnections between different sectors
- New co-operations throughout industry clusters
- Bio-based value chains: from feedstock → products
- Innovative and sustainable bio-based chemicals and materials
 - locally sourced biomass
 - validated at demonstration scale
- > 5 flagships resulting
 - producing new bio-based materials, chemicals and fuels in a sustainable way
 - which have proven to become cost-competitive

Five Value Chains

- **Value Chain 1:** From **lignocellulosic feedstock to advanced biofuels, bio-based chemicals and biomaterials:** realising the feedstock and technology base for the next generation of fuels, chemicals and materials
- **Value Chain 2:** The **next generation forest-based value chains:** utilisation of the full potential of forestry biomass by improved mobilisation and realisation of new added value products and markets
- **Value Chain 3:** The **next generation agro-based value chains:** realising the highest sustainability and added value by improved agricultural production, and new added value products and markets
- **Value Chain 4:** Emergence of **new value chains from (organic) waste:** from waste problems to economic opportunities by realising sustainable technologies to convert waste into valuable products
- **Value Chain 5:** The **integrated energy, pulp and chemicals biorefineries:** realising sustainable bio-energy production, by backwards integration with biorefinery operations isolating higher added value components

Different types of projects

The SIRA includes a balanced combination of projects:

- **R&D PROJECTS** focuses on filling the gaps in technological innovations: dedicated projects on the development of specific technologies and concepts needed to realise the value chains, and proving the principles in pilot installations
- **DEMONSTRATION PROJECTS**
 - To integrate and deploy technologies and R&D results into actual value chains
 - To bring technology close to commercial scale through upscaling in demonstration activities
- **FLAGSHIP PROJECTS**
 - To optimise technology for biomass conversion and ensure price-competitiveness: by building new operations, or upgrading existing or abandoned industrial
 - 7Each value chain area will lead to at least one flagship project.
- **SUPPORTING PROJECTS** mainly include Research activities, focused on solving cross-cutting issues arising from the Value Chain demonstration projects.

- **OPENNESS:** Applications for financial support will be made following open competitive calls for proposals
- External and independent evaluation of the projects on the basis of **EXCELLENCE**
- Strong participation of **ACADEMIA, RESEARCH ORGANISATIONS AND SMEs**
 - EU Funding in R&D projects only to academia, RTOs and SMEs
 - Additional industry funding will go to academia, RTOs and SMEs through their participation in R&D and industry-driven demonstration activities
- **MEMBER STATES and REGIONS** will play a key role in the deployment of projects

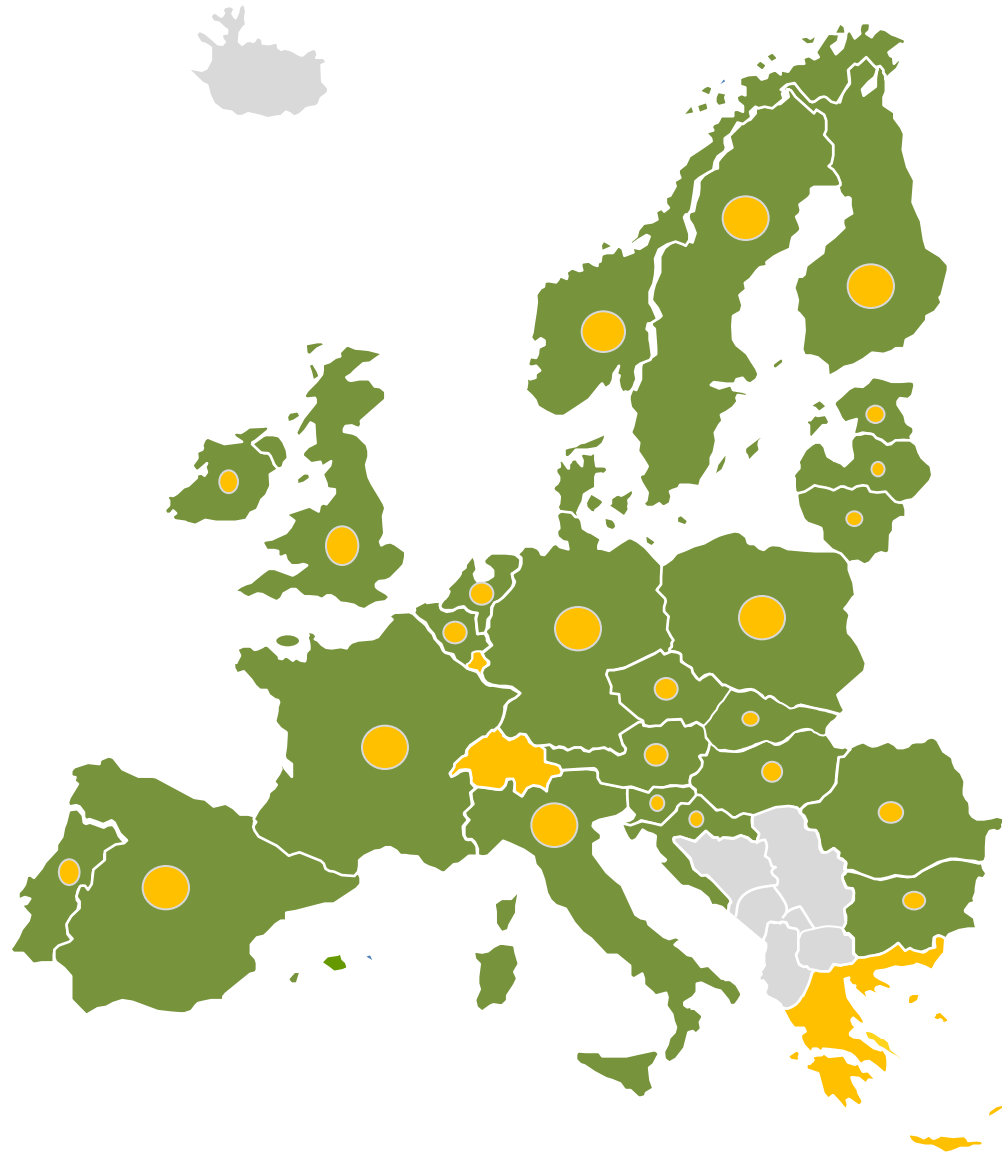
THE BIO-BASED INDUSTRIES CONSORTIUM

To date we have:
65 Full Members
90 Associate Members

Coverage so far

- 69 Full members
 - 40 Large industries
 - 17 SMEs
 - 12 SME Clusters

- 102 Associated members
 - 33 Universities
 - 54 RTOs
 - 8 European trade organisations
 - 4 Associations
 - 3 European Technology Platforms (ETPs)









Forest-Based Sector
Technology Platform





BUILDING SYNERGIES WITH REGIONS

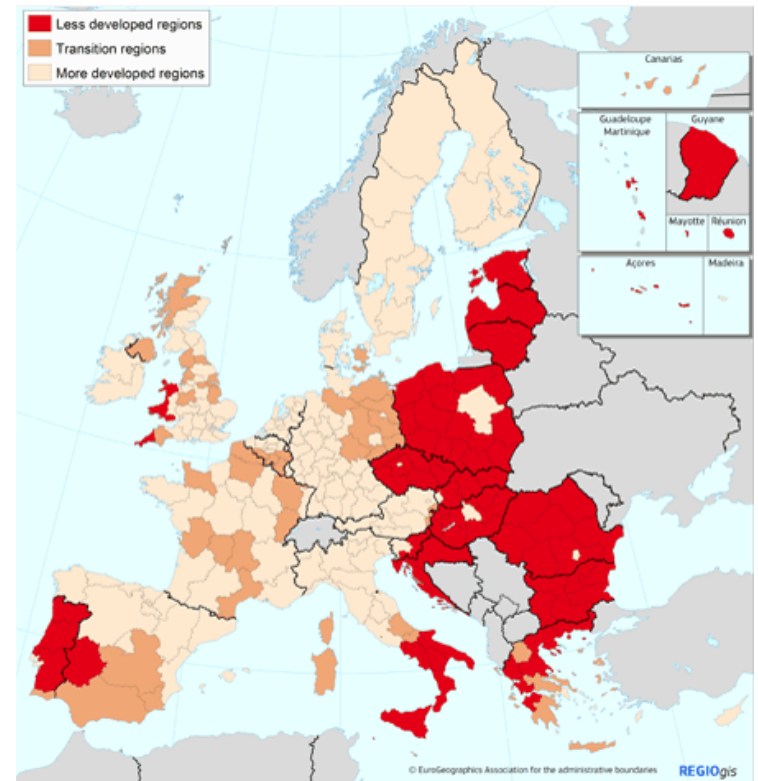
**Bio-based Industries Initiative (Horizon 2020)
&
Smart Specialisations (ESIF)**



Why Smart Specialisations?

- **Smart specialisation:** priority-setting in national/regional innovation strategies

- Reduce growth disparities in the EU
- Re-focus Structural Funds on investments that:
 - trigger innovation
 - achieve economic transformation and industrial renewal
 - boost growth and jobs
- ...while measuring performance.



Source: European Commission

Building synergies and increasing efficiencies

Perfect complementarity between the objectives of BBI and those of the Structural and Investment Funds (ESIF)

Bio-based Industries JTI

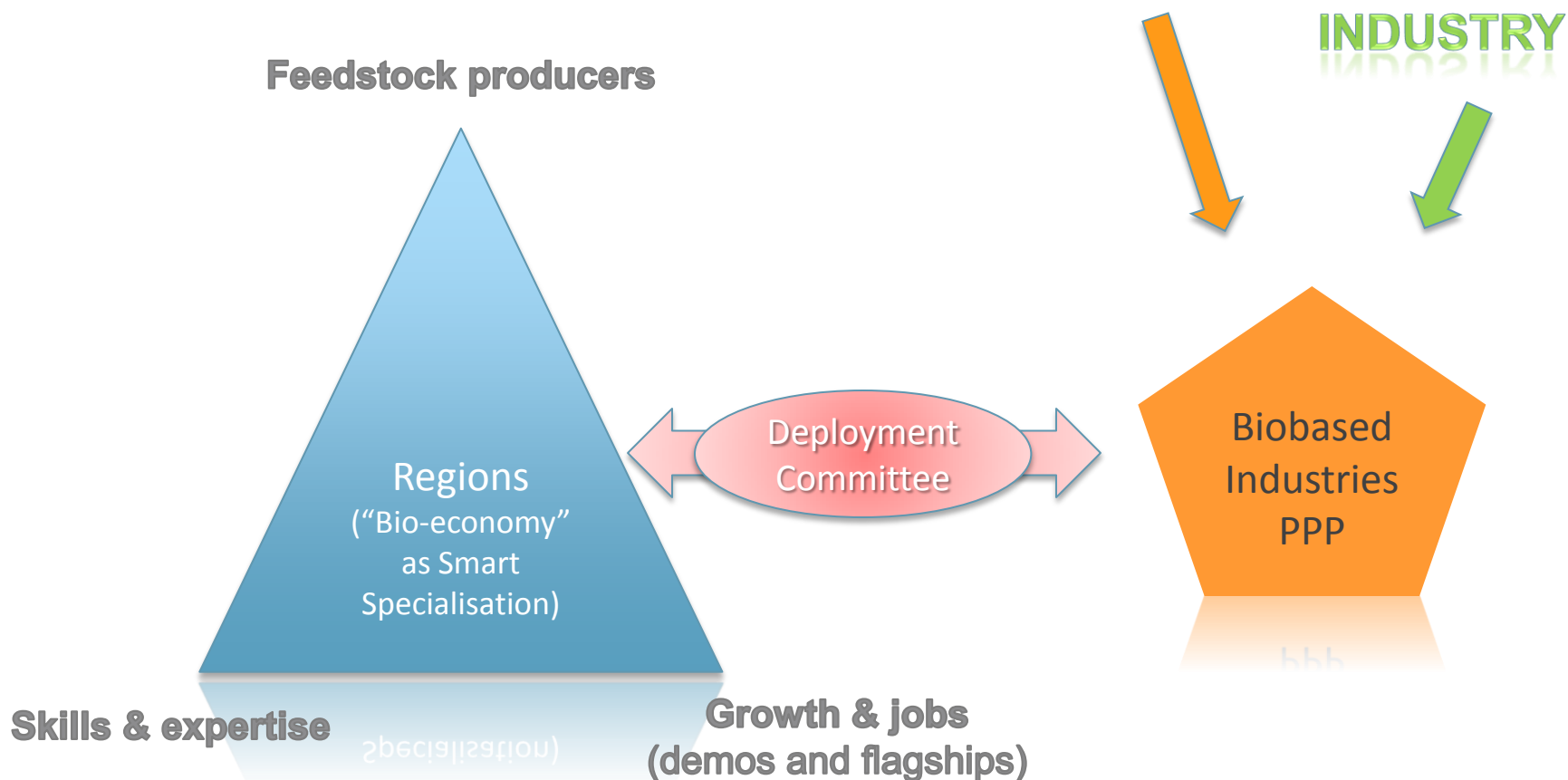
- **€3.8bn** public-private investment in the deployment of the European bio-based economy over 2014-2024 (€1bn public contribution and €2.8bn private investments)
- Massive potential for **growth and jobs**, especially in **rural areas**
- **Feedstock** such as sustainable biomass at the centre of this JTI - Five value chains approach.
- Bio-based products are/must be **locally sourced and produced** – hence connecting farmers and foresters with consumers.
- **Deployment Committee** for national, regional and local authorities with 'bioeconomy' as Smart Specialisation

Synergies & efficiencies potential

- **Leverage effect:** regions can compete, co-invest in, and host demonstration / flagship projects
- **Smart specialisations in action:** building on, and/or leveraging regional natural resources, skills, innovation and technological expertise
- **Regions as bioeconomy clusters across the EU** enabling a sustainable and competitive force in the ongoing global bioeconomy race.



REGIONAL DEVELOPMENT



Next steps

- **Regions:** elect “bio-economy” as a Smart Specialisation
- **How it works in practice**
 - Clear guidelines on the *modus operandi* between eligible areas, the combination of funds and initiatives such as the JTI on Bio-based Industries
- **Identify other synergies/efficiencies**
 - To make the best out of the available tools
 - Identify possible synergies and efficiencies

A photograph of a misty forest with tall, thin trees. Sunlight is filtering through the canopy, creating a warm, golden glow. The ground is covered in fallen leaves and moss.

Thank you

Contact us!

www.biconsortium.eu