BRIDGE

Biobased and Renewable Industries for Development and Growth in Europe

A public Private Partnership for biobased industries

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- The European Association for Bioindustries
- Created in 1996 to provide a voice for the biotech industry in Europe
- Representing the entire sector: Healthcare, Agriculture and Industrial Biotechnology
- 56 corporate members operating worldwide, 14 associate members & BioRegions as well as 19 national biotechnology associations (2000 SMEs)
What do our members do?

- New products for longer, healthier and more sustainable living
- Drive responsible innovation based on sound science
- Develop PPPs and provide ideas and solutions to decision makers
- R&I breakthroughs to satisfy unmet medical needs and to provide more sustainable agricultural and industrial products and processes for future generations
The Bioeconomy

- Food
- Non-food
- Biomass

- Natural resources
- Climate change
- Public health
- Energy security
- Sustainable production
- Food security
- Economic and social development
Pre-requisites for a competitive bio-based industry

1. Need a coherent, comprehensive, supportive and integrated bioeconomy policy
2. Ensure access to renewable raw material at competitive prices
3. Support market creation and stimulate market demand for biobased products
4. Improve awareness and understanding of biobased industries and their role within the bioeconomy
5. **Support more targeted research and innovation (and particularly) demonstration projects**
Bridging the gap between research and market

- **Problem**: Time lag from research results to marketable products
- **Outcome**: EU research commercialised elsewhere
- **Root Cause**: Poor access to public money for high-cost demo and flagship plants (e.g., biorefineries). Need for an EU biobased industries PPP = BRIDGE
Bio-based industries

1. Renewable raw materials, for example in the form of agricultural and forestry residues and municipal wastes, are used as feedstocks for the integrated biorefinery.

2. The biorefinery uses cutting edge technology to turn renewable feedstocks into bio-based products such as fuels, fibres, food, feed and chemicals. These can then be substituted in a broad range of applications replacing their fossil fuel equivalents.

3. The biorefinery also focuses on developing more resource-efficient processes as well as products. As such, waste can be minimized and all «fractions» or by-products can be used for other purposes. The ultimate goal is to achieve a «zero waste» society where more is produced using less resources.
Background to the PPP

• **Horizon 2020**, 2014-2020 with a proposed €80 billion budget: Aims at tackling **societal challenges** by helping to **bridge the gap between research and the market**

• This market-driven approach will include creating **Public-Private Partnerships** to bring together the resources needed for addressing specific societal challenges outlined in Horizon 2020

• A possible **PPP in the field of biobased industries** explicitly mentioned in:

  1. Horizon 2020
  2. EC Strategy and Action Plan for a sustainable bioeconomy in Europe (13/02/2012)
  3. New Industrial Policy Communication (highlighting KETs and Biobased industries as key areas for action)

• Funding for BRIDGE PPP from budget allocated to **'Food security, sustainable agriculture, and the bioeconomy' challenge** within Horizon 2020.
SCOPE of BRIDGE

• Focus on the segment of the bioeconomy:
  
  – That uses **renewable biological resources only** in industrial processes i.e. **biobased industries**, and
  
  – That produces **biobased products/goods and fuels/energy** in so called **biorefineries**

• Develops the **entire value-chain** from the field to the consumer
Overall Objective of BRIDGE

“Foster “radical innovation”, from R&D and deployment to market pull, to deliver biobased products superior, or at least comparable to, non-biobased products in terms of price, performance and availability, and environmental benefits”

- **Feedstock**
  - Fostering a sustainable biomass supply and building new value chains

- **Biorefineries**
  - Optimising efficient processing through R&D and upscaling in large-scale demo/flagship biorefineries

- **Markets, products and policies**
  - Developing markets for biobased products and optimising policy frameworks
Budget for BRIDGE

- **Public contribution**: up to €1 bn for a period of 7 years (2014-2020)

- **Private contribution**: ‘Founding Members’ committed investments of €2.8bn in collaborative research, development and demonstration of biobased technologies

- In addition, the PPP should further leverage and facilitate access to funding from other companies and funding sources such as national agencies, research institutions, private foundations or venture capital firms.
Strategic Innovation and Research Agenda (SIRA)
An integrated value chain approach

• A joint initiative to overcome industry challenges
• Focused on development and actual realisation of integrated biobased value chains
  – Cross-sectoral integration - From biomass production to markets & products
  – Facilitated by realisation of demo and flagship projects
R&D topics: The Innovation Challenge

• Fostering a sustainable biomass supply
  – New business models
  – Sustainable management practices
  – Mobilising an increasing supply
    • Screening & breeding
    • Harvesting, mobilisation, storage & recycling

• Biorefineries: optimising efficient processing
  – Primary conversion: refining of biomass into its valuable components
  – Secondary conversion: Valorisation of intermediates and products (bio-technological, chemo-catalytical, thermo-chemical, hybrid & combined processes, downstream processes)

• Developing innovative products and accelerating market introduction
  – New materials and products (incl conversion technologies)
  – New applications and market development
Integration challenge

• Strengthening the innovation pillars

• Key demonstration activities: value chain projects.
  Examples:
  – Towards a strong and sustainable feedstock production
  – Reinforcing competitiveness of the existing value chain through better added value
  – Broadening the feedstock-base for advanced biofuels and further towards biobased chemicals
  – From biorefinery products towards commercial solutions
  – Integration towards co-production of bioenergy
  – Emergence of new value chains from ‘waste’
The story so far:

- End 2012, formation of BIC (Biobased Industries Consortium) legal entity for the PPP
- End 2012 Public consultation on a PPP for Biobased Industries (700+ responses)
- Beginning 2013 Briefings with MS R&I attachees
- Commission-lead stakeholder meeting (300-400 people) on 9 January
- Impact assessment sent to Sec Gen of Commission
- 7-8 February 2013 MFF discussed by MS Council
- 2 April JTIs to interservice consultation by the Commission College
- Political agreement with EP and MS Council sought by October
- PPPs launched beginning 2014
Thank you

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