



SPIRE and Catalysing the Circular Economy BROKERAGE EVENT

3-4 October 2017

***BIO BASE EUROPE PILOT PLANT
SCALE-UP OF PROCESSES FROM LAB TO
DEMO PHASE (RIA & IA)***

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Bio Base Europe Pilot Plant

- **Multi-purpose** pilot facility for **bio-based** products and processes in Ghent (Belgium)
- Role in projects:
 - **scale-up** from **TRL4-TRL7** of fermentation & biocat (incl. gas), purification, green chemistry
 - Provide sufficient test material; Piloting/demonstration
- Non profit **SME** with 67 employees
- Currently **active** in 14 **Horizon2020** and 3 Interreg projects, next to B2B projects

Running Horizon2020 projects: (RIA and IA)

NANO3BIO (Fermentative chitosan)

2G-BIOPIC (2nd generation ethanol)

MARISURF (Marine biosurfactants)

ERIFORE (Circular Forest Bioeconomy)

SUPERBIO (Voucher for service)

REHAP (wheat straw and wood to chemicals)

DAFIA (MSW and marine waste to chemicals)

FALCON (Lignin for fuels and chemicals)

NanoPack (Antimicrobial Packaging)

PULP2VALUE (Sugarbeet pulp to chemicals)

CARBOSURF (Biosurfactants & specialty carbohydrates)

DEMETER (Enzyme production for AD)

AFTERLIFE (PHA from olive industry wastewater)

RESOLVE (Biobased solvents)

Pilots4U (Biobased pilot & demo network)

KET4CleanProduction (Vouchers within KET network)

BioCONCO2 (CO₂ fermentation and biocatalysis)

PROJECT IDEA 3: SPIRE-03

Energy and resource efficiency in highly intensive industries (IA)

Process optimization of bio-based productions and by-product re-use (bio-based or flue-gas fermentation)

Offer:

- *Flue gas fermentation*
- *Bio-based solid and liquid sidestream valorization: extraction of valuable compounds, ABE fermentation, PHA fermentation from waste water, ...*
- *Process modification of biobased processes*

Expected impact

- *Demo-site OR trouble-shooting of individual processes*



PROJECT IDEA 4: SPIRE-10

Improved production of recyclable materials containing plastics (IA)

Biobased plastics

Offer:

- *Fermentative production of monomers and downstream processing*
- *PHA production*

Expected impact

- *Demo-site OR trouble-shooting of individual processes*



Catalytic transformation of hydrocarbons (RIA)

C1 fermentation

Offer:

- *Fermentative and biocatalytic modifications*
 - *To benchmark*
 - *To combine fermentative and chemical approach*

Expected impact

- *Industrially / techno-economically relevant process*



CONTACT DETAILS



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