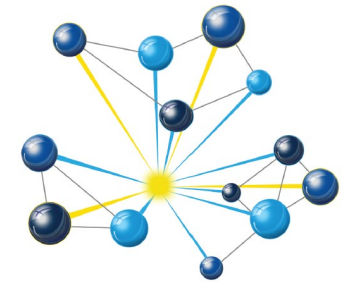
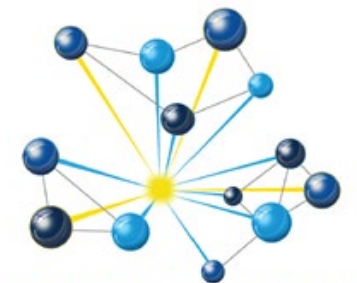
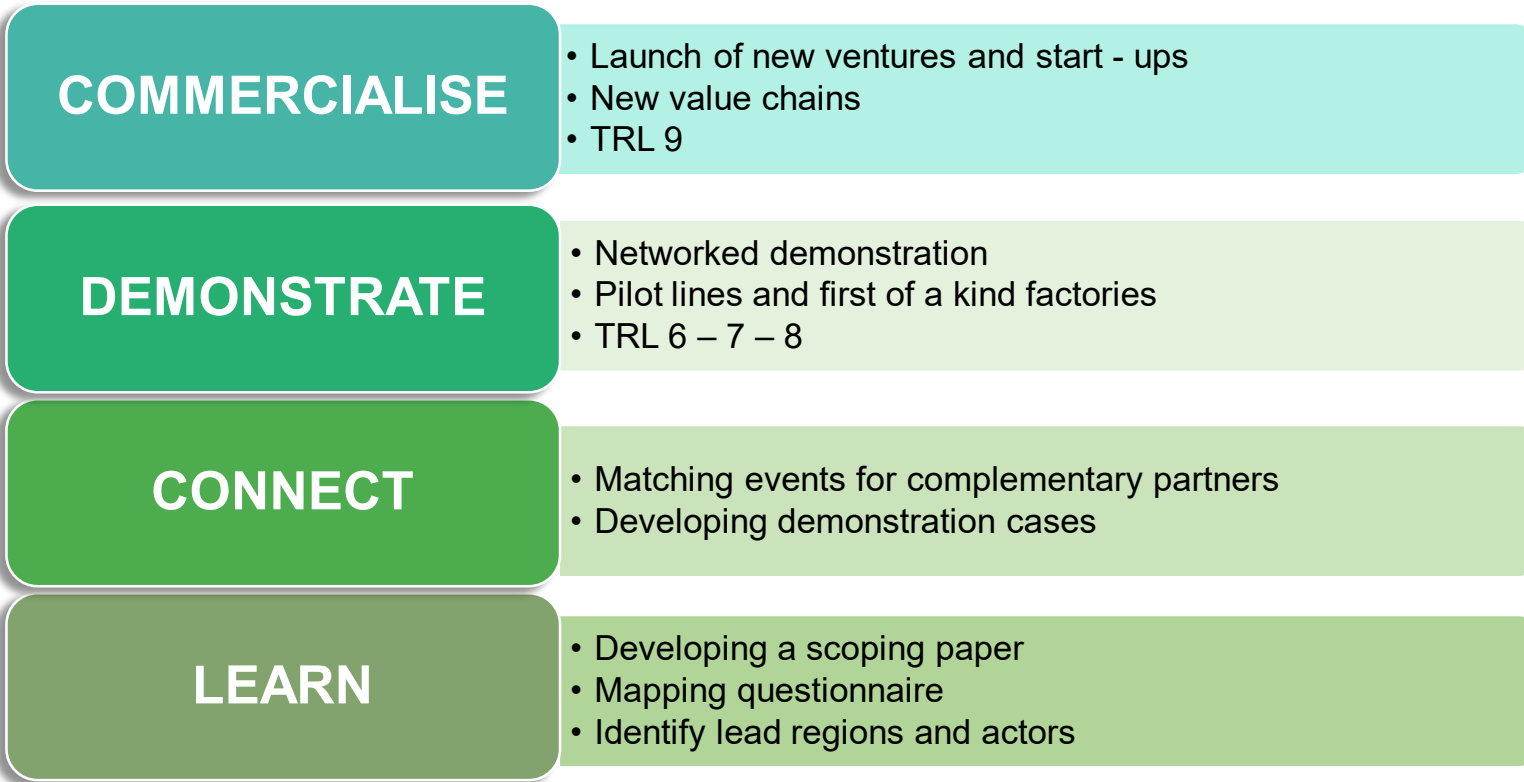
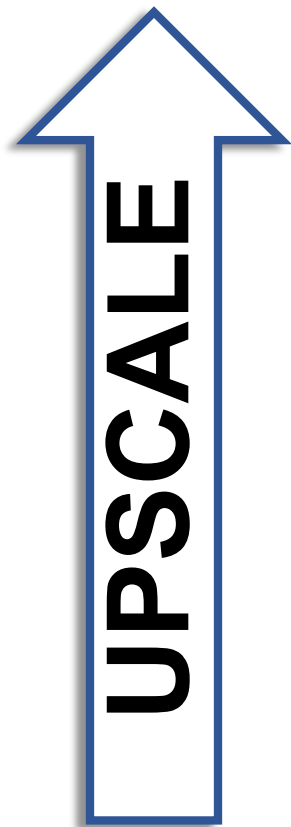


# Vanguard Initiative – Bioeconomy Pilot Project



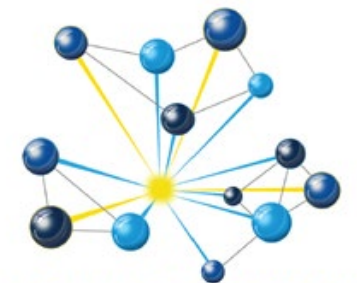
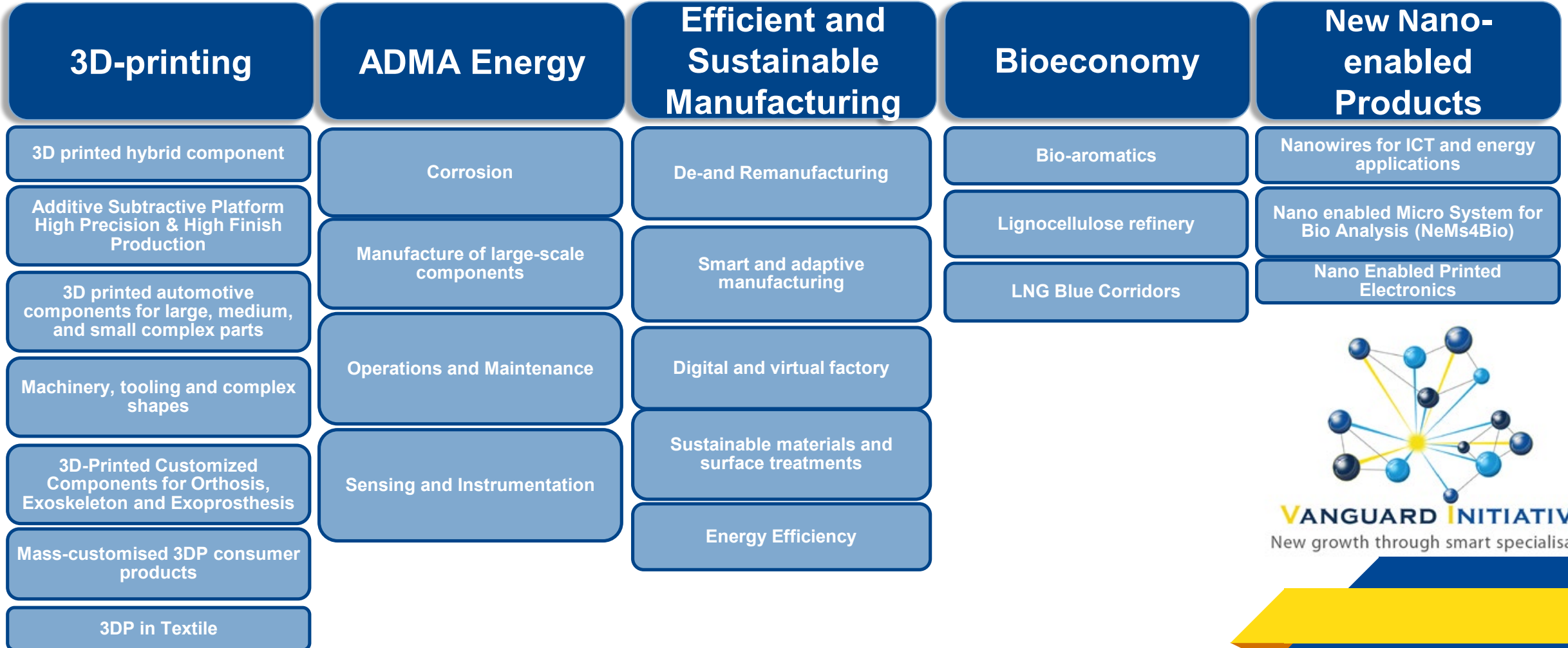
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# Vanguard Initiative Pilot Projects' Methodology



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# Vanguard Initiative Pilot Projects Overview



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## Bioeconomy Pilot

“ *To support deployment of high TRL technologies, through setting up of transregional value chains in an industry-driven process, where public support comes into play to help bridging the valley of death* ”

**Lead regions:** Randstad and Lombardy

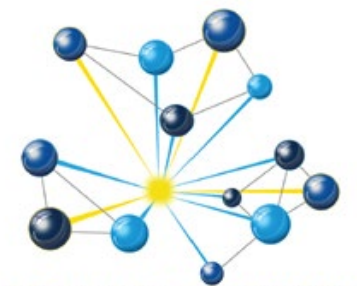
**Participating Regions:** Asturias, Basque Country, Emilia-Romagna, Flanders, Gelderland, Lombardy, Malopolska, Navarra, North Rhein Westfalia, Scotland, South Holland, Trentino, Upper Austria, Värmland, Wales, Wallonia



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## Objectives

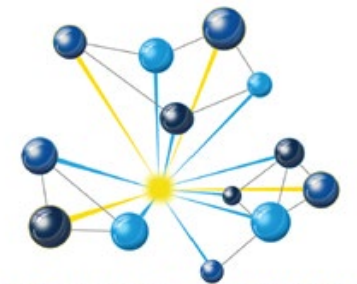
- **Setting up trans-regional value chains** in the area of innovative and sustainable use of renewable resources
- Identifying critical challenges beyond the capabilities of a single region to **team up skills, energies and resources** that can make a difference in market terms.
- **Focus on new integral bio-based value chains** and new connections to be developed between across sectors
- **Establish investment pipelines based on industry-driven business cases** coherent with the smart specialization strategies of the participating regions.



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## Objectives for 2018

- Implement the 2018 Action Plan for the three Demo Cases
- Stimulate new demo cases
- Promote the participation of additional regions and actors
- Increase visibility of the Bioeconomy Pilot at European level

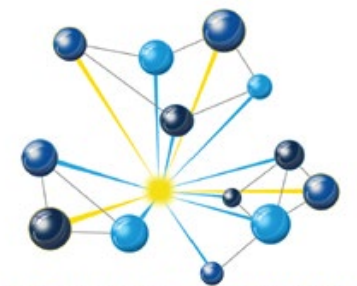


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## Overview of demo cases

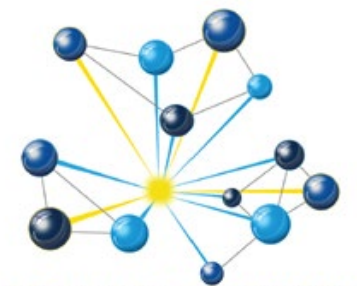
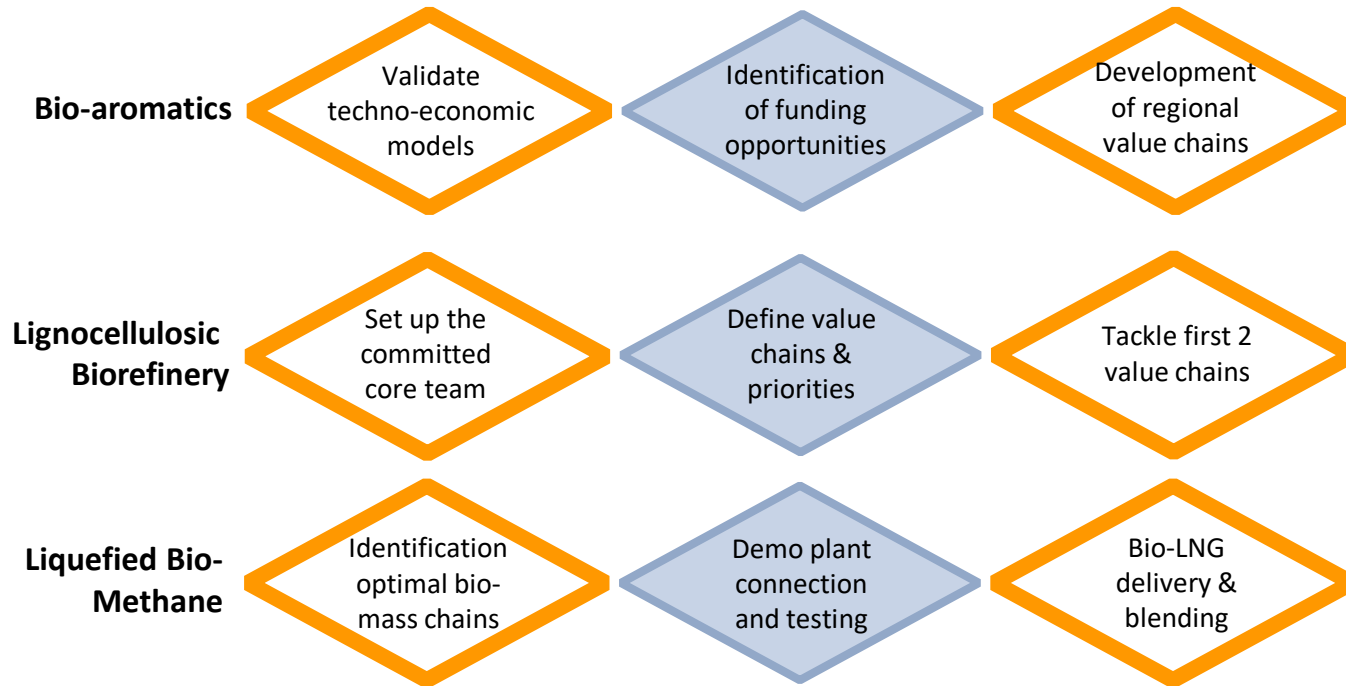
**The Bioeconomy pilot is currently composed of three demo cases,** with different levels of development, scope and nature:

- Bio-aromatics
- Lignocellulose refinery
- LNG Blue Corridors



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# Where are we now?



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# Bio-aromatics

## Bio-aromatics

### Objective:

- Set up several value chains from feedstock to the production of drop-in and innovative molecules, to new applications in the field of chemicals, materials and products
- Final goal is to go to commercial in 2025
- Strong collaboration with the lignocellulose biorefinery case and with additive manufacturing (bio-based materials for 3D-printing)

### Leading regions:

Flanders, South Netherlands, Nordrhein-Westfalen

### Participating regions:

Emilia Romagna, Scotland, Wallonia, Brandenburg, Värmland, Central Finland, Upper Austria, Slovenia and the Basque Country

### Contact person:

Ludo Diels ([ludo.diels@vito.be](mailto:ludo.diels@vito.be))



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# Lignocellulose Refinery

## Lignocellulose Refinery

### Objective:

- Establish new European value chains starting from lignocellulosic feedstock and using biorefining
- Achieve large scale conversion of lignocellulose into chemicals and fuels
- Set up an effective European expert group from the participating regions to promote and accelerate lignocellulosic biorefining into viable, sustainable end products

### Leading regions:

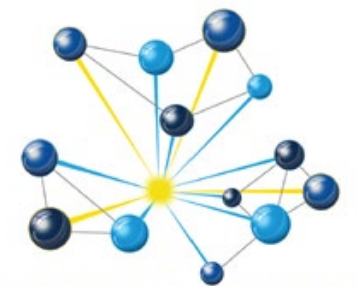
Province of Zuid-Holland – Biobased Delta, Flanders, Scotland, Wales

### Participating regions:

Brandenburg, Flanders, Wallonia, Baden-Württemberg, Scotland, Upper Austria, Navarra, Värmland, Skåne, Emilia Romagna

### Contact person:

Willem Sederel (willem.sederel@biobaseddelta.nl)



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# Lignocellulose Refinery

## LNG Blue Corridors

### Objective:

- Enhance a wide diffusion of bio-LNG at Vanguard level by creating a “Vanguard Regions Blue Corridor” crossing the Vanguard Regions associated to the demo case
- Increase knowledge and skills on bio-LNG among professionals and policy makers
- Increase competitiveness of industry and local biomass producers (bio-LNG)
- Support policy makers in the investment choice for a more sustainable public transport
- Provide reliable and scientific proven *well to wheel* analysis on bio-LNG

### Lead region:

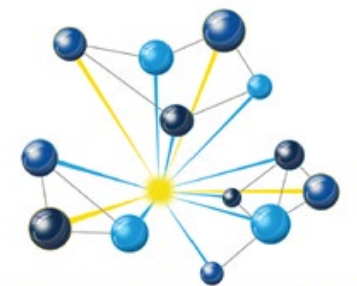
Emilia-Romagna, Lombardy

### Participating regions:

Emilia Romagna; Flanders; Lombardy; Nordrhein-Westfalen; Upper Austria

### Contact person:

Daniela Sani ([daniela.sani@aster.it](mailto:daniela.sani@aster.it)) - Daniele Colombo ([daniele.colombo@mi.camcom.it](mailto:daniele.colombo@mi.camcom.it))

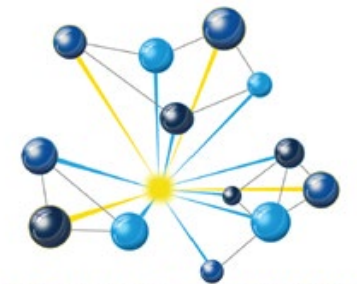


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Thank you for your attention!

For any questions, please contact the leading regions of the Bioeconomy Pilot:

Leading regions	Organisations	Contact persons
Lombardy (IT)	Lombardy Green Chemistry Cluster	Daniele Colombo <a href="mailto:daniele.colombo@mi.camcom.it">daniele.colombo@mi.camcom.it</a>



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