

# European Sustainable BIO-based nanoMAterials Community

**BIOMAC** is a Horizon2020 project that will establish an Open Innovation Test Bed (OITB), a true collaborative ecosystem where technologies and solutions utilizing nano-enabled bio-based materials (NBMs) will be upscaled and prepared for market applications.



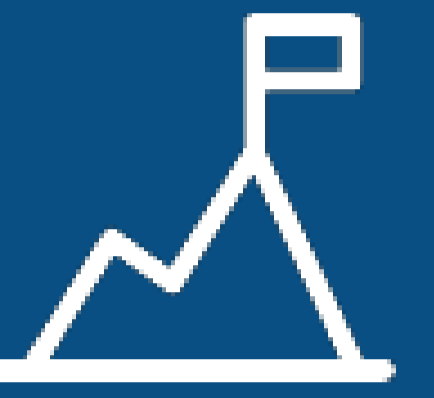
## THE BIOMAC OITB

- The BIOMAC Open Innovation Test Bed (OITB) will develop tailor-made solutions for producing and integrating nanomaterials across the bio-based value chain.
- The BIOMAC OITB will offer services that cover the assessment of regulation and safety, sustainability, circularity, market potential along with modelling, process control, standardization and characterization.
- BIOMAC will provide open access to the physical facilities and services required for the development, testing and upscaling of materials and products in the field of nano-enabled bio-based products via a single-entry point (SEP).

## GOALS AND IMPACT

The ultimate goals of the BIOMAC OITB are to help:

- Tackle obstacles that hinder the evolution of concept development in the field of nano-enabled bio-based materials and products
- Industrialize a new generation of nano-enabled bio-based materials



### Expected impacts



- Acceleration of bio-based concepts development
- Reduction of concept to prototype component to under eight months
- Enabling of the cost-effective production of high-value nano-enabled
- Elimination of the barriers for the realization of new ideas accessing and creating new markets

## TEST CASES



**Printed Electronics**  
Test Case



**Agriculture**  
Test Case



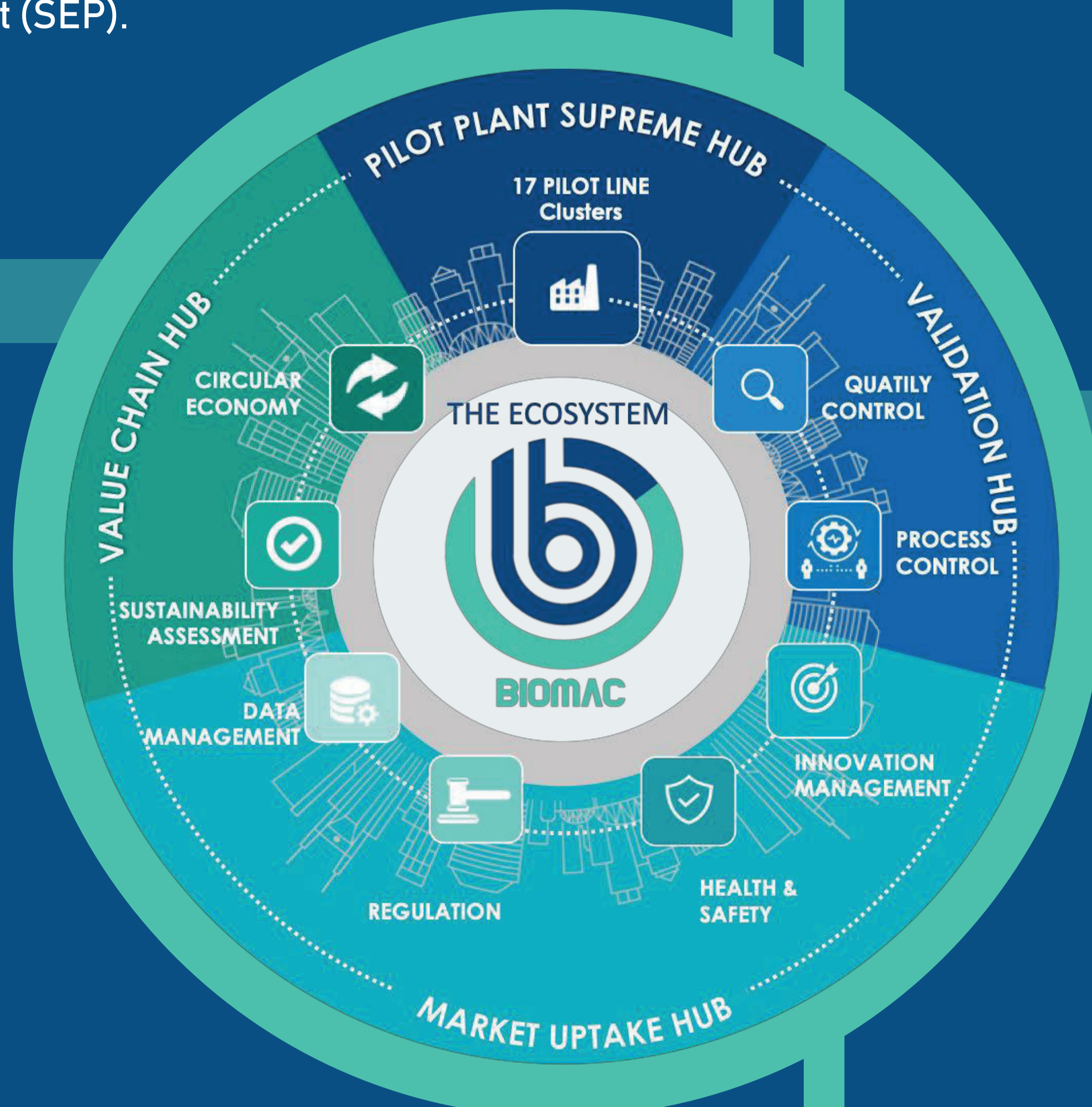
**Construction**  
Test Case



**Automotive**  
Test Case



**Food Packaging**  
Test Case

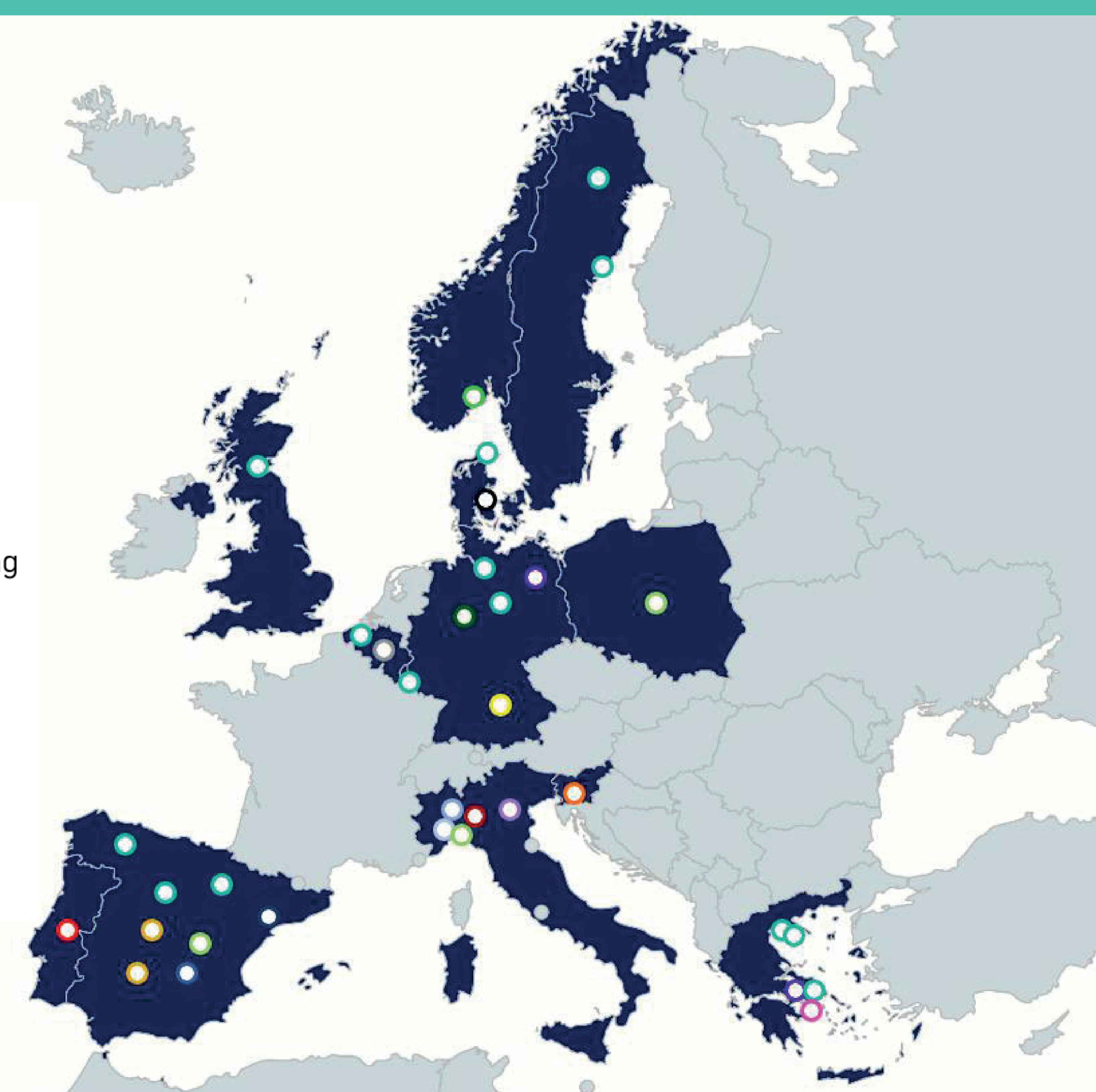


## OBJECTIVES

- Establishment of a self-sustainable OITB
- Upgrade and modify 17 pilot lines
- Validation of the the operation of the OITB through creating and demonstrating 5 novel manufacturing supply and value chains (Test Cases-TeCs)
- Launch of an open call to invite 5 more test cases
- Post-project sustainability of the ecosystem and creation of a sustainability plan

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- Pilots
- Characterization
- Modelling
- Monitoring
- Innovation
- IT Platform
- LCA, LCC
- Decision Support Tool
- Dissemination & Clustering
- Biomass Provider
- Business Development
- Standardization
- TeC1 Automotive
- TeC2 Agriculture
- TeC3 Food Packaging
- TeC4 Construction
- TeC5 Printed Electronics



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