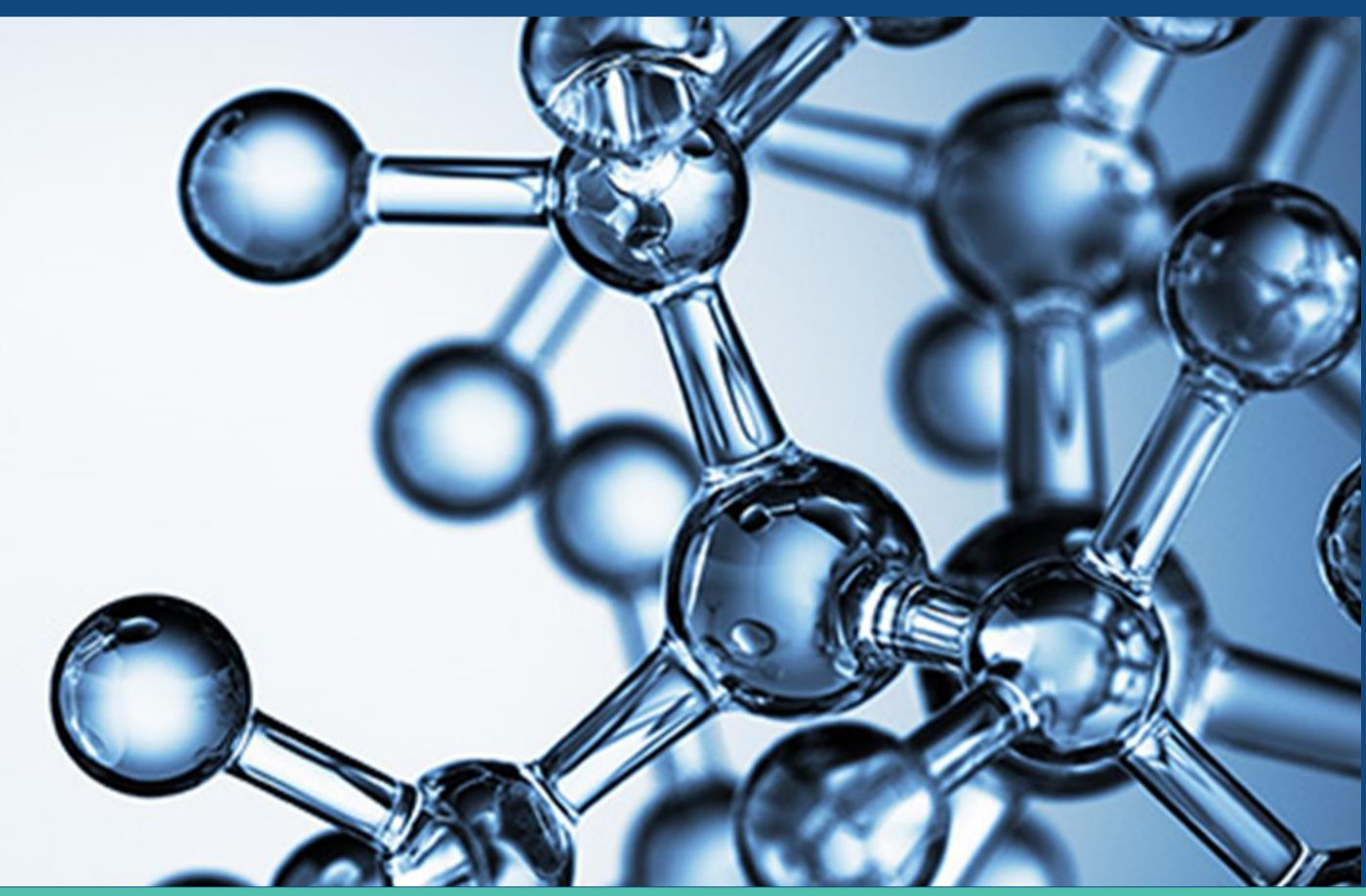


European Sustainable BIO-based nanoMAterials Community

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



Agriculture

Test Case



Printed Electronics

Test Case



Construction

Test Case



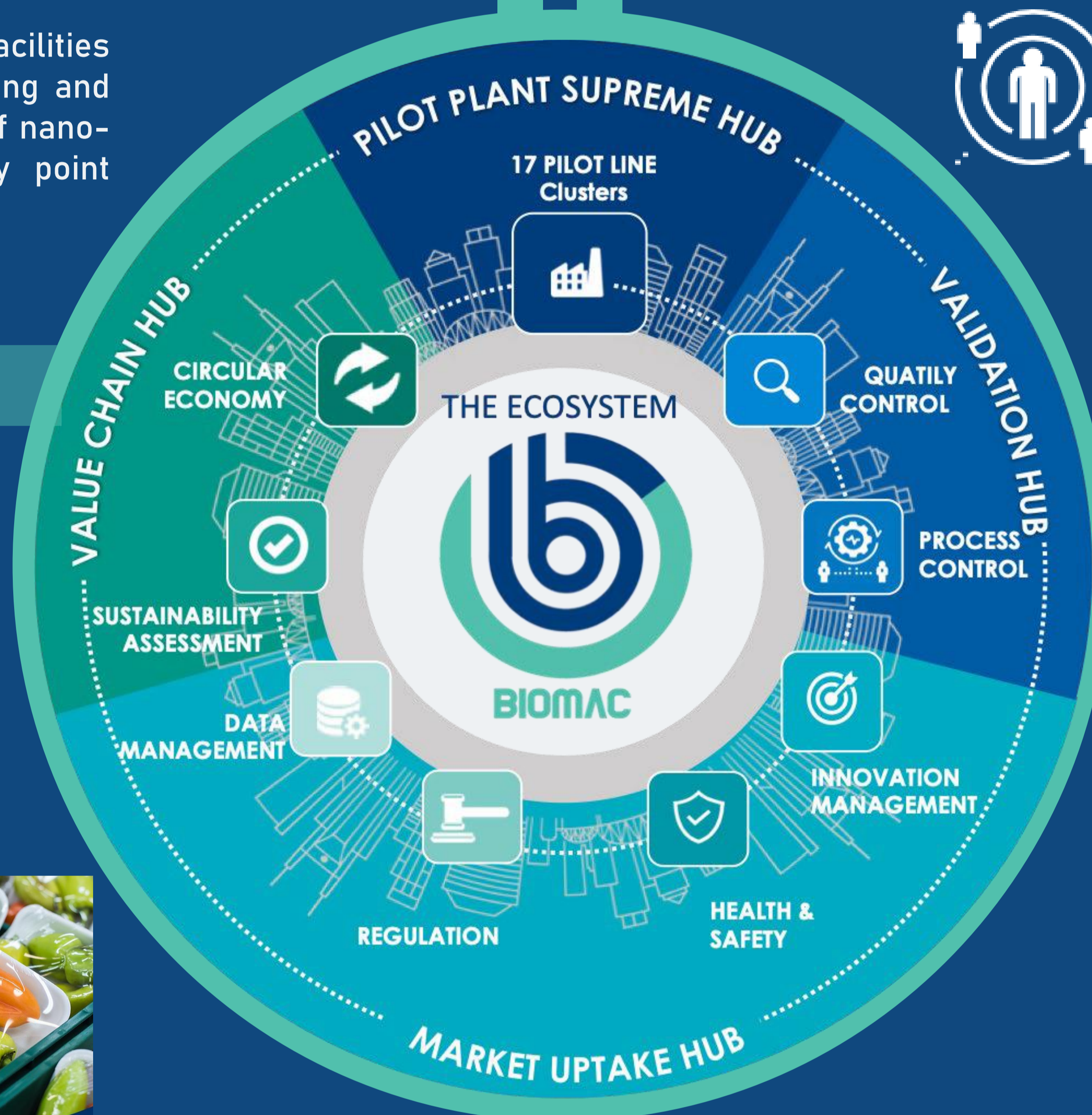
Automotive

Test Case



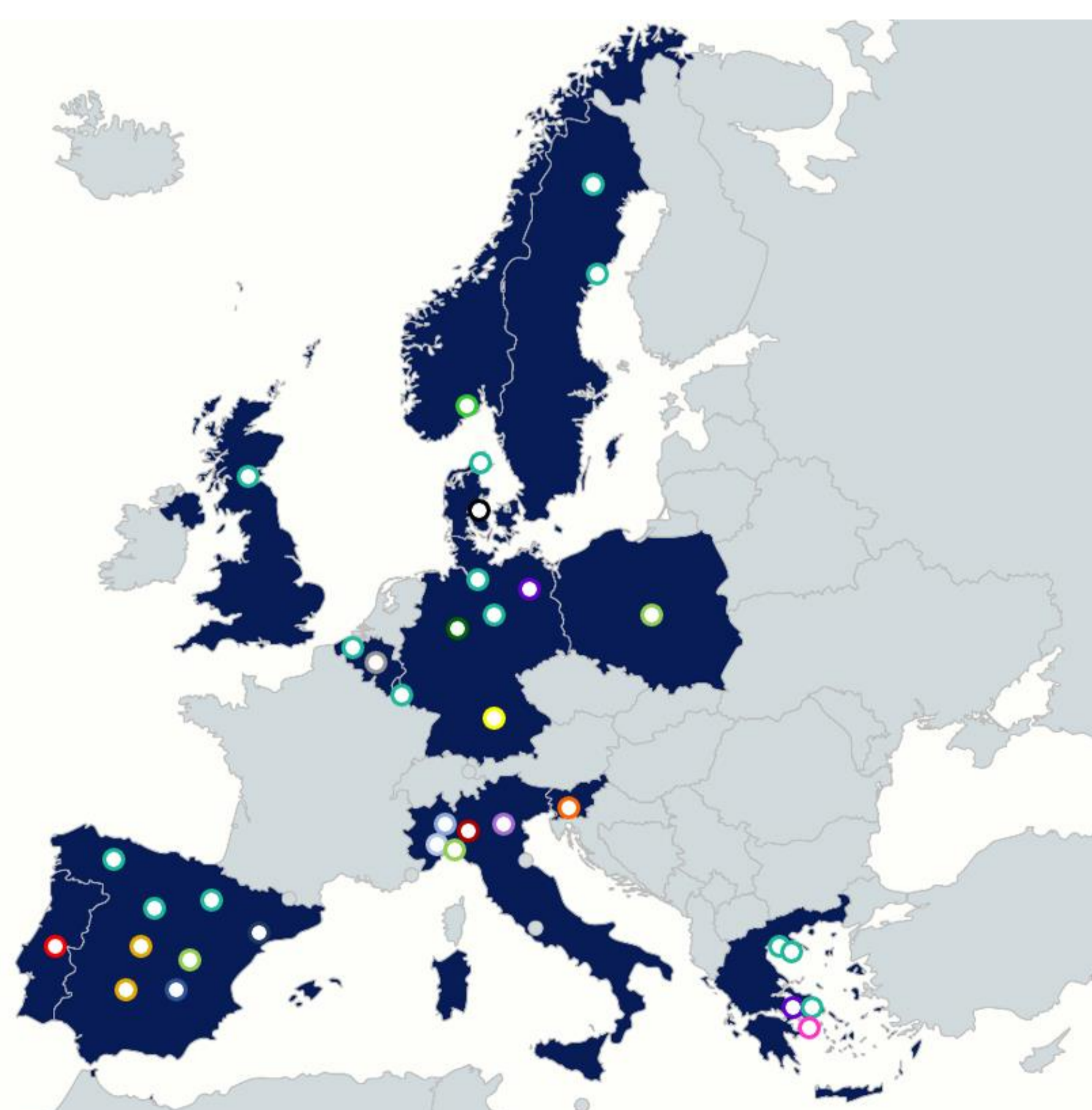
Food Packaging

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



- - 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



The project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 952941

biomac@chem.auth.gr

