



# *POLYMERIS*

## Competitiveness Cluster for Polymers Industry

General presentation – July 2021



# Polymeris: Integrated value chain for innovation in polymers industry



- Established since 2005
- **Plastics, composites, rubbers & polymers**
- **500 partners including**
  - ✓ 380 active members
  - ✓ 280 companies
- **300 achieved or ongoing projects for 600 M€**
- **40 European projects**
- **European gold label since 2013**

### Technology strategic domains



Circular economy



Digital factory & industry 4.0



Advanced materials



Performant and innovative processes



Functionalized products



# Polymeris

Creation in 2020 by the merger of Plastipolis and Elastopole

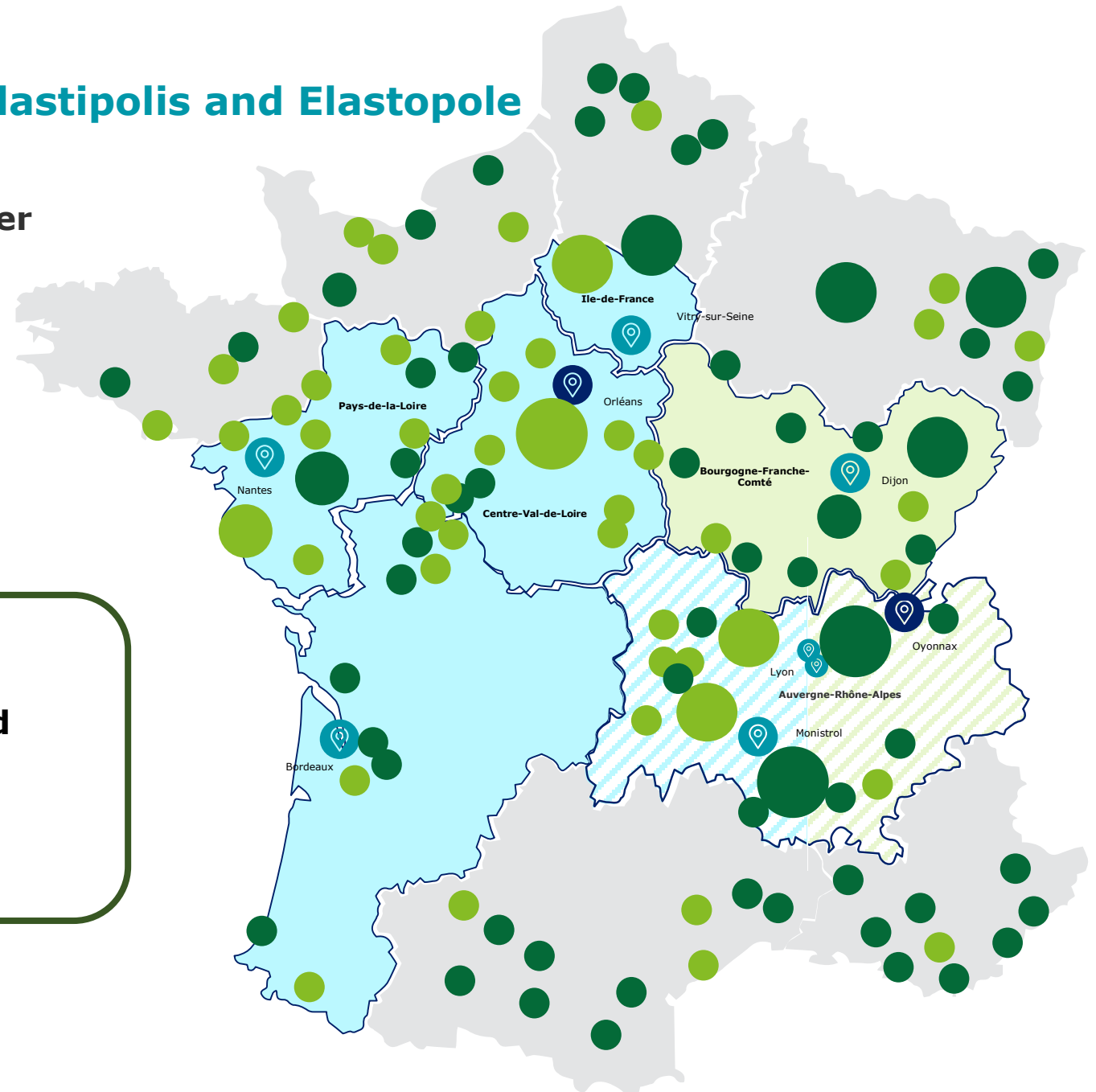


**500 partners including**

- **380 active members** and
- **280 companies**



**6 main Regions**



# Polymeris

## Main pillars of the technology and industrial roadmap

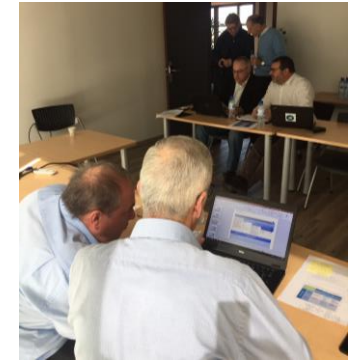




# Polymeris

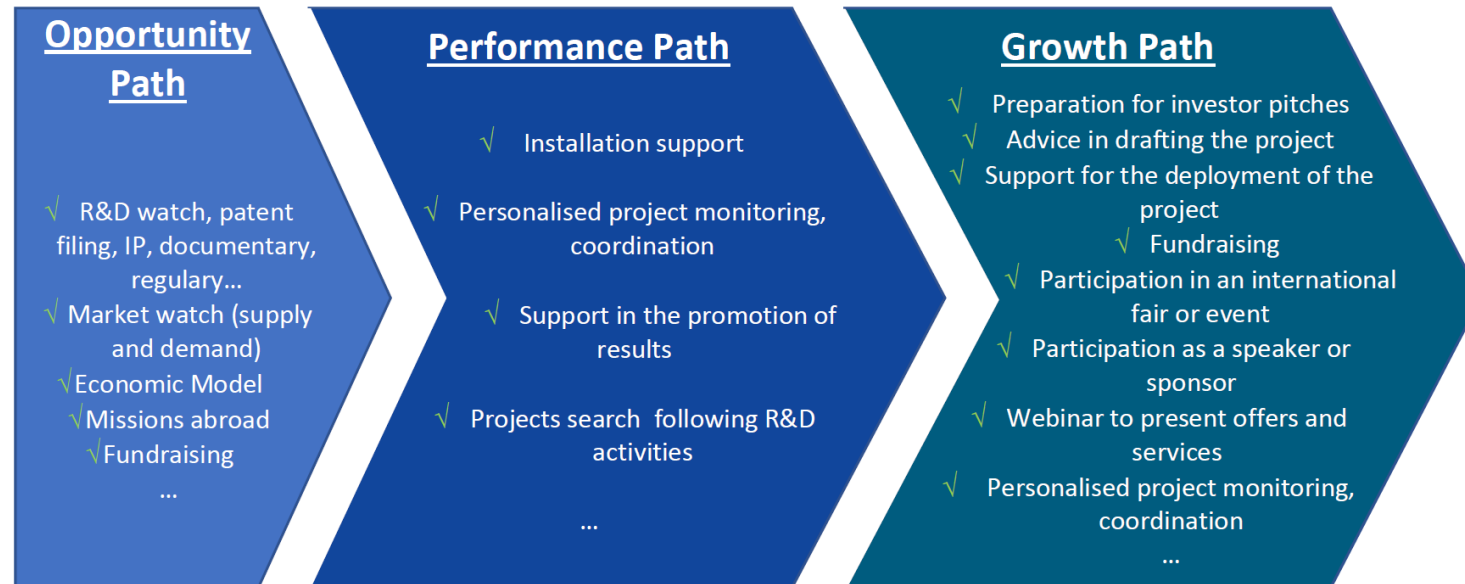
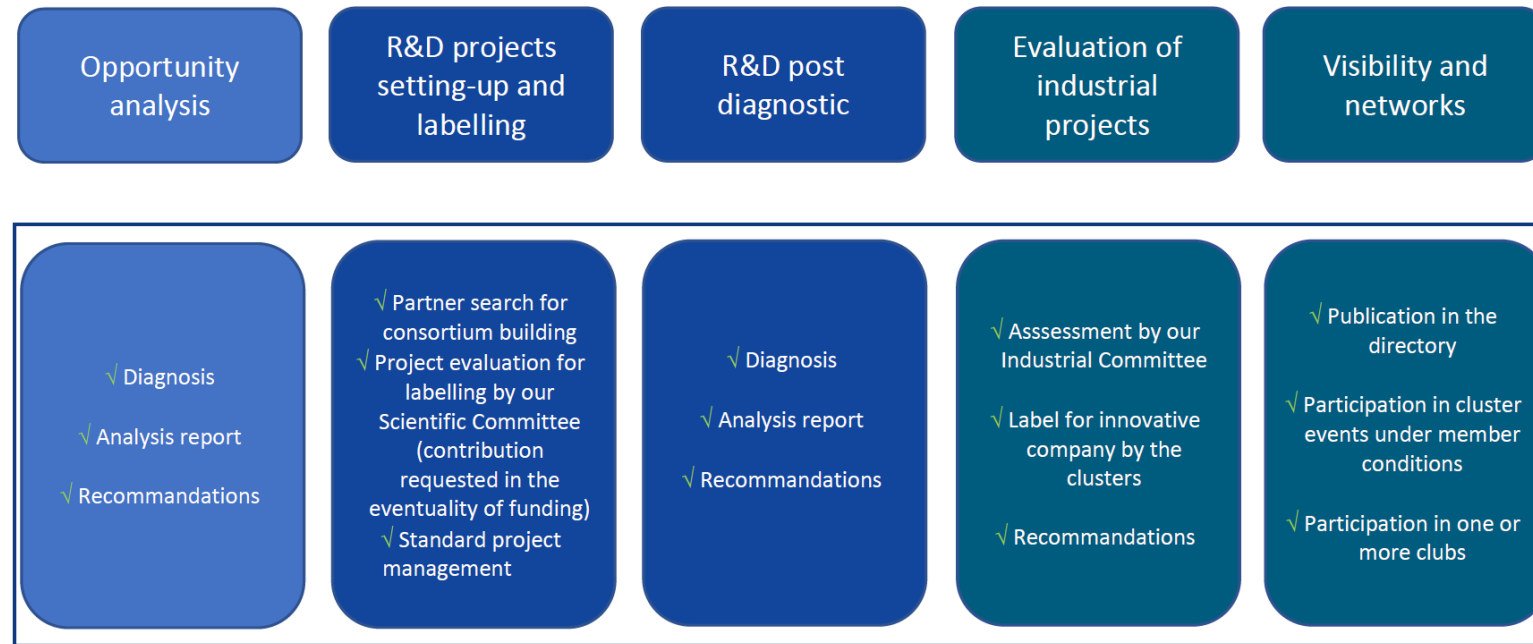
## A technology roadmap focusing on digital and green transitions

Roadmap building blocks		Generic strategic domains (SD)		
		SD 3: Materials	SD 4: Processes	SD5: Functionalized products
Cross sectoral strategic domains (SD)	SD 1 : Circular economy	<ul style="list-style-type: none"> <li>Charges and additives</li> <li>Biobased materials</li> <li>Vitrimers</li> <li>High performance composites</li> <li>Sustainable composites</li> <li>Formulation/compounding</li> </ul>	<ul style="list-style-type: none"> <li>Chemical recycling</li> <li>Mechanical recycling</li> <li>Waste management</li> <li>Efficiency of processes</li> <li>Assembly and sorting</li> </ul>	<ul style="list-style-type: none"> <li>Ecodesign and LCA</li> <li>Aging and durability</li> <li>Identification and traçability</li> <li>Surface fonctionnalisation</li> </ul>
	SD 2: Digital factory & Industry 4.0	<ul style="list-style-type: none"> <li>Materials data base</li> <li>Simulation and behaviour prediction</li> </ul>	<ul style="list-style-type: none"> <li>High added value processes</li> <li>Digital factory</li> <li>Control and monitoring of processes</li> <li>3D printing</li> <li>Zero defect production</li> </ul>	<ul style="list-style-type: none"> <li>Functional and usage simulation</li> <li>Structural and printed electronics</li> </ul>



Scientific committee meetings in March, September and December 2020

# Services portfolio to members



# Polymeris

## Examples of industrial clubs

### 3D printing



- Radiall
- DPH
- International
- Visiativ
- Microlight 3D
- Mecerlec
- Delfingen
- Schneider
- Solvay
- Elixance

### Smart Polymers



- S2P
- Sintex NP
- Faiveley
- Schneider Electric
- Plastic Omnium
- Technoflex
- Arc en Ciel
- Sérigraphie

### Packaging



### Tooling & composites



- |             |                  |             |             |           |           |            |
|-------------|------------------|-------------|-------------|-----------|-----------|------------|
| • Addiplast | • CGP Flexibles  | • Leygatech | • Sigoplast | • Solvay  | • Pernoud | • AMG74    |
| • Barbier   | • Colly & Martin | • MCS       | • Sedem     | • SDC     | • Secam   | • Prodways |
| • Bobino    | • Guerin         | • Ribeyron  | • Velfor    | • Compose | • MG2     | • Prodways |

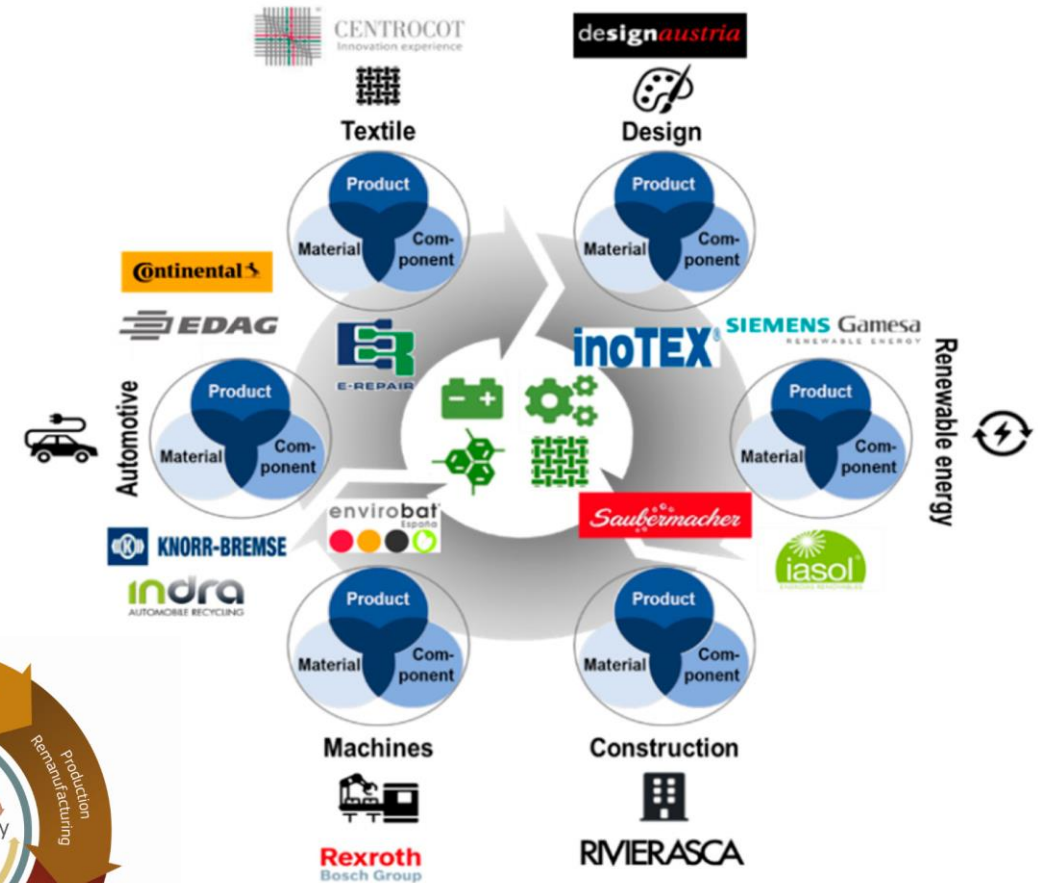
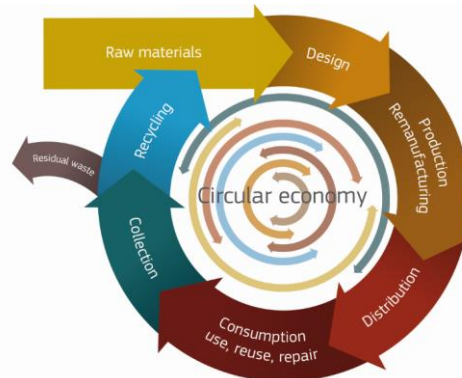
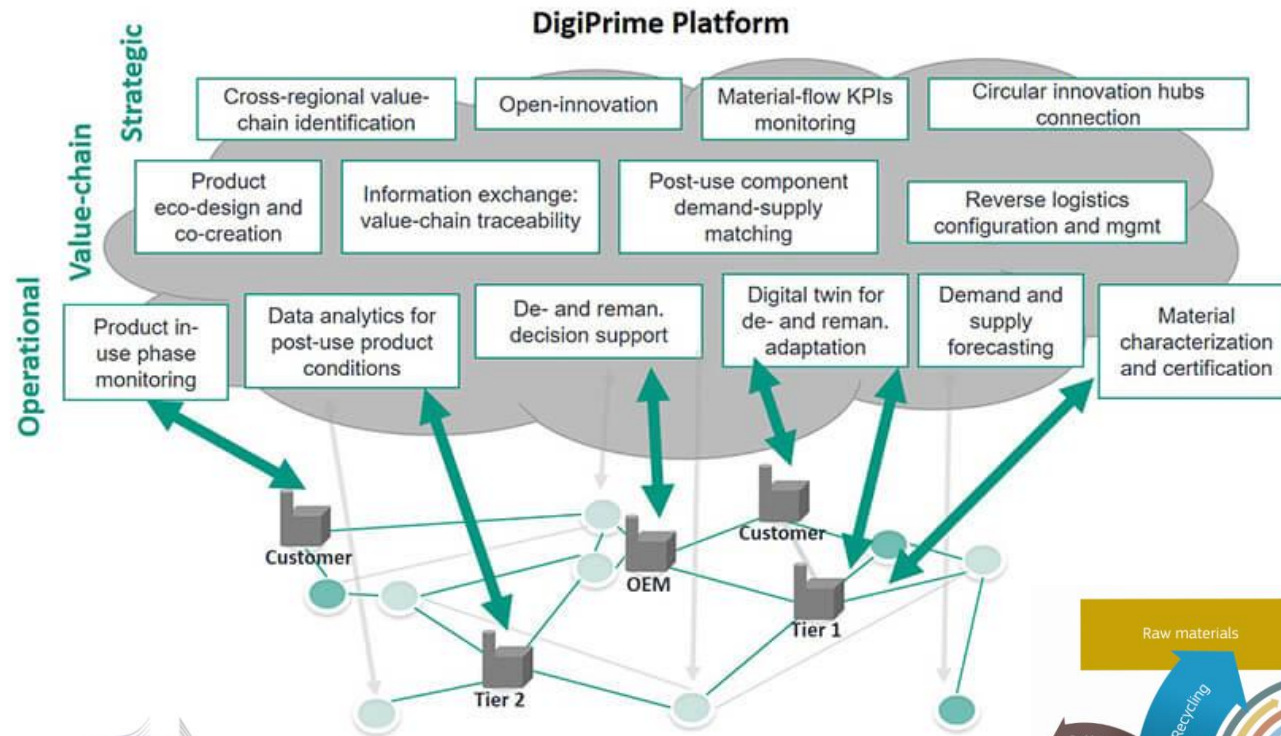


# Example of projects

## DIGIPRIME – Cross linking different value chains



DIGITAL PLATFORM FOR CIRCULAR ECONOMY IN  
CROSS-SECTORIAL SUSTAINABLE VALUE NETWORKS



[www.digiprime.eu](http://www.digiprime.eu)

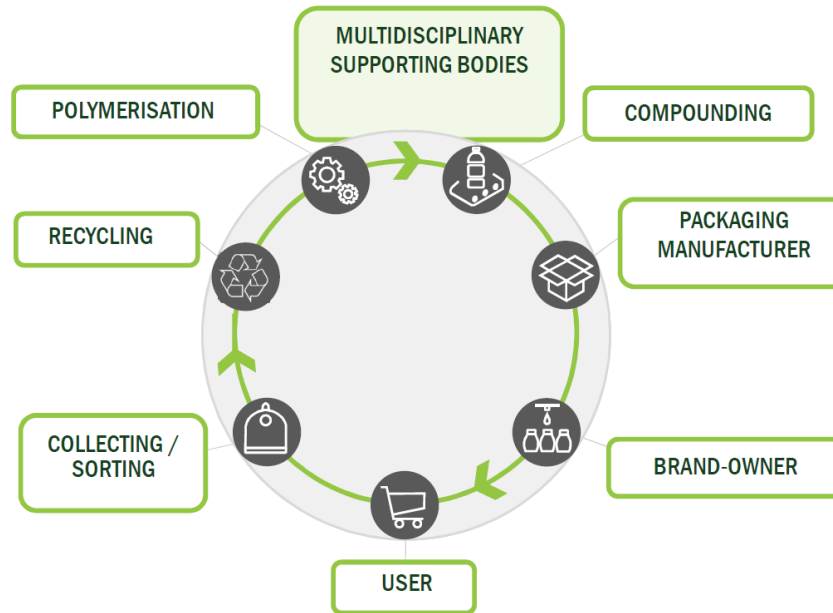


# Example of projects

## CIRCPACK – Cross-regional value chains for a bio-based circular economy

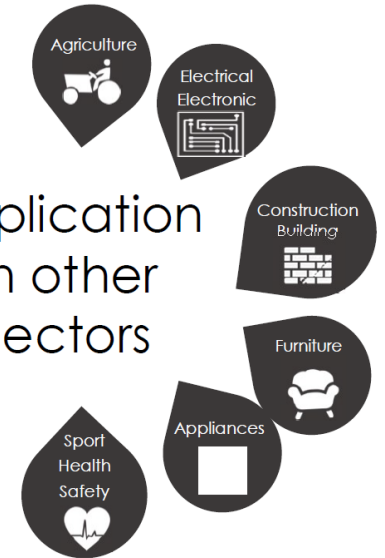


<https://circpack.eu/home/>



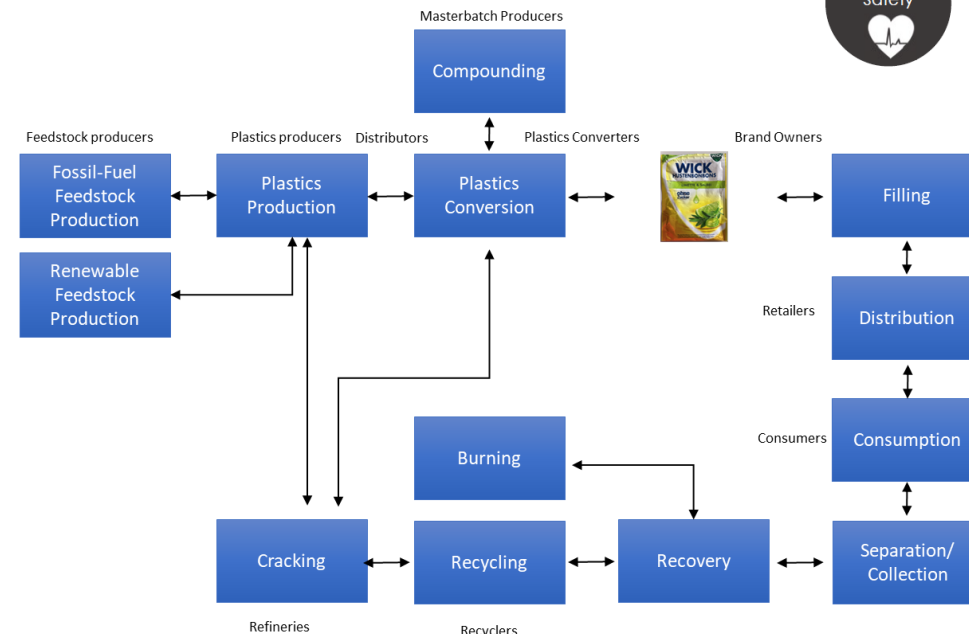
Secondary market  
for recycled  
materials

Replication  
in other  
sectors



**Create new cross-regional value chains  
for a bio-based circular economy:**  
Four pilots value chain: wood, chemistry, food-  
pharma packaging, agrofood.

<http://www.alpine-space.eu/projects/alplinkbioeco/en/home>

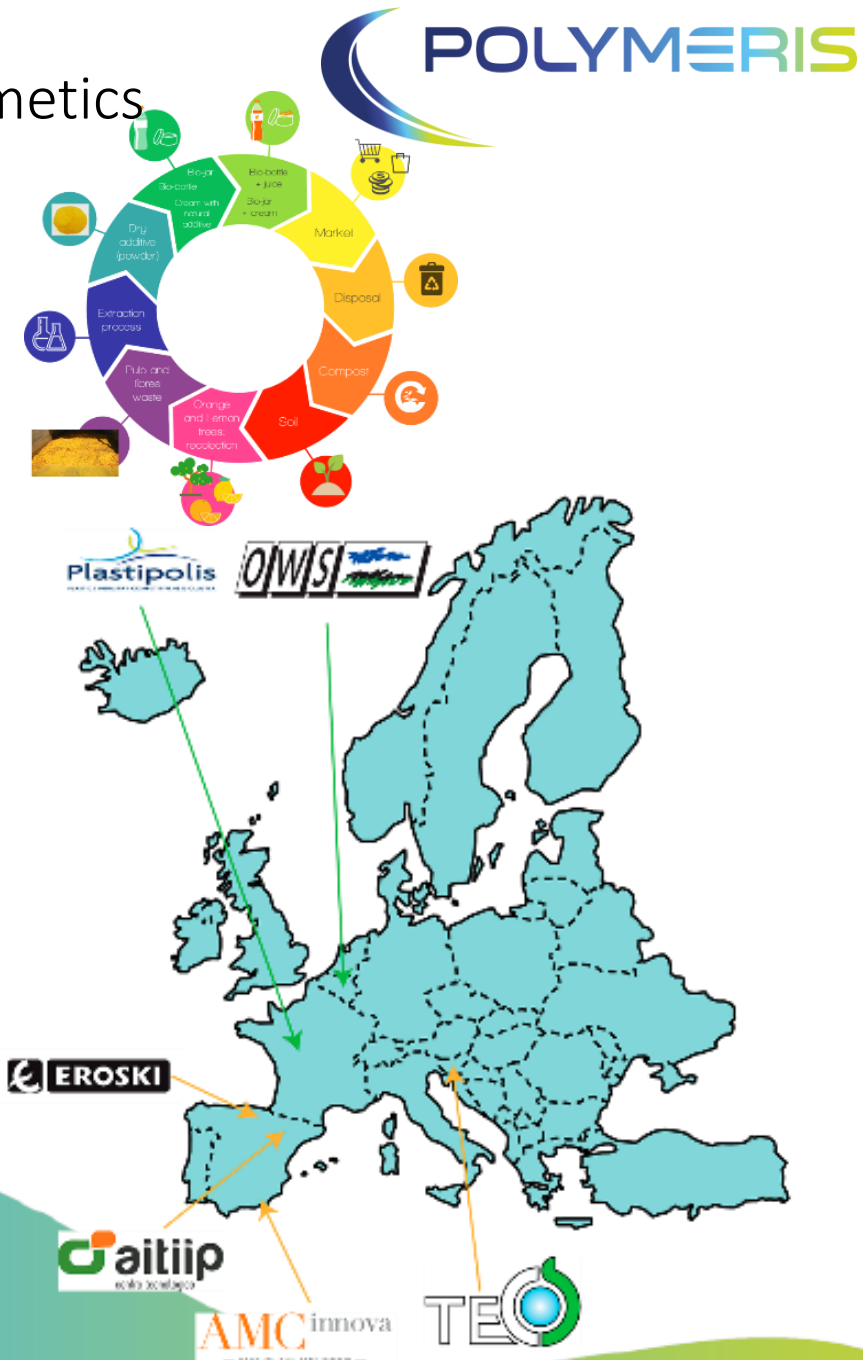


## Example of projects

### CITRUS Pack – circular economy for green packaging and cosmetics



- **Project name:** CITRUSPACK. Revalorization strategies within the circular economy for the use of citrus waste in green packaging and cosmetics.
- **Programe:** Life Programme. LIFE16 ENV/ES/000171
- **Implementation date:** 01/07/2017 - 30/06/2020
- **Total project budget:** 1,709,664 Euro
- **EU financial contribution:** 1,025,795 Euro (= 60.00% of total eligible budget)
- **Objective:**
  - Revalorising at least 80 % of the final fruit agrowaste (orange, lemon and clementine).
  - Becoming a competitive market solution for biobased and biodegradable plastics



## Example of projects

AI REGIO - Alliance for AI-driven digital transformation of Manufacturing



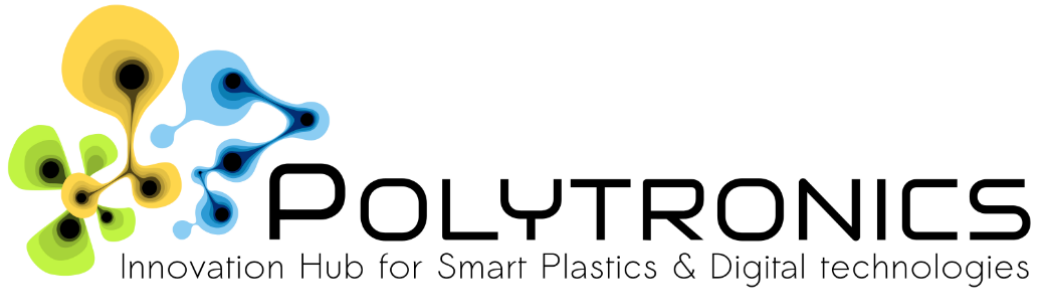
[www.airegio-project.eu](http://www.airegio-project.eu)



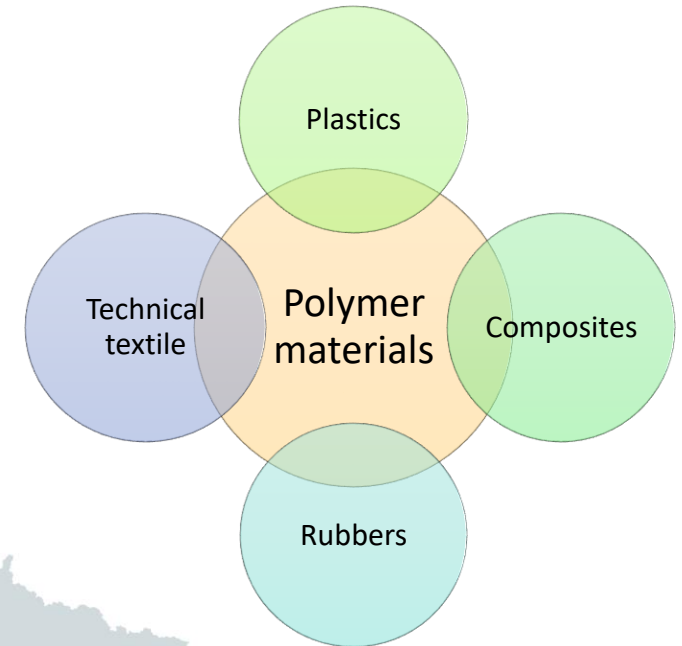


## Example of projects

### POLYTRONICS – Digital Innovation Hub for the industry of Polymers

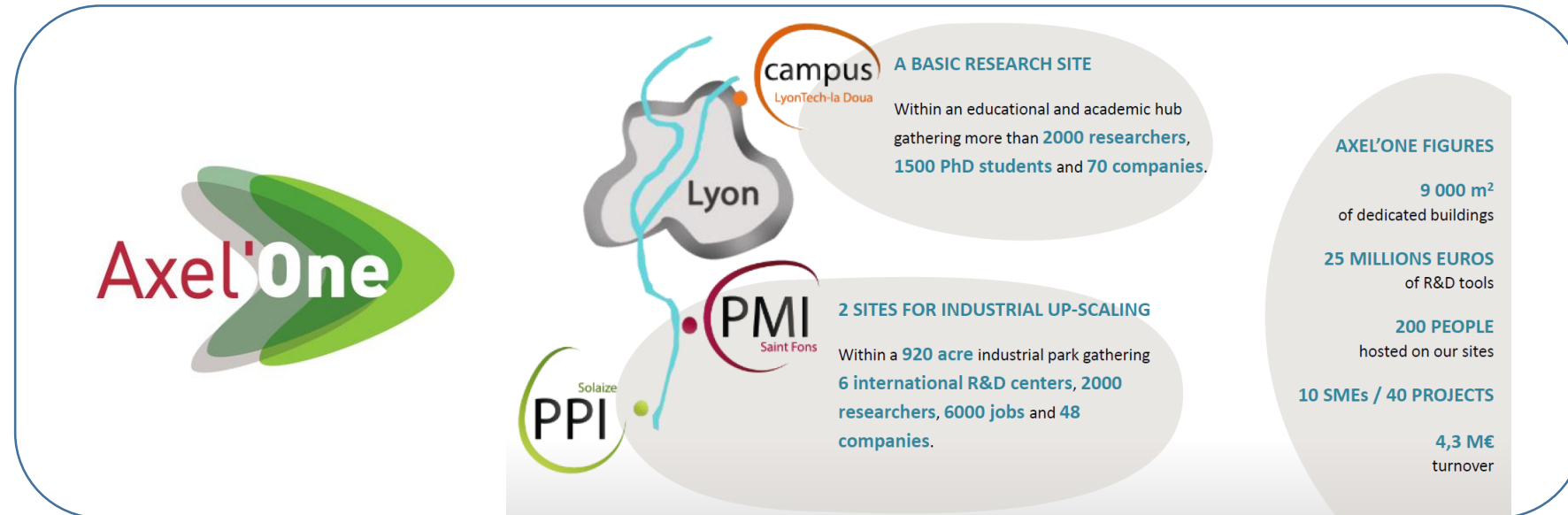


- Smart Polymers European Digital Innovation Hub
- Artificial Intelligence on sectorial domains on Plastics, Composite, Rubber and textile
- 3 main Regions in France : Auvergne-Rhône-Alpes, Bourgogne Franche Comté, Centre Val de Loire



# Examples of partnership with industrial hubs

- Cross link of board members
- Common roadmaps
- Joints events
- Promotion of resources and services to industry





**INNOVATION  
PLASTURGIE  
COMPOSITES**

**THE INDUSTRIAL TECHNICAL CENTRE  
FOR PLASTICS AND COMPOSITES**



# Examples of cooperations at international level

- **ELCA : European Lightweight Cluster Alliances**

- Internationalisation strategy to promote European lightweight expertise in railways, maritime, aeronautics and automotive



- **PERCY : International Cluster Cooperation for Recycling of Polymers**

- Internationalisation strategy to support recycling companies outside EU





# DISCOVER POLYMERIS

## THE POLYMERIS DYNAMIC AGENDA

## BRING YOUR EUROPEAN AMBITION TO LIFE

## CIRCULAR ECONOMY

Rovip et Millet-Forestier  
créent Hyléance  
19 juillet 2021 - Emballages  
Magazine

Hexcel Showcases Carbon  
Fiber Prepreg Capability for  
UAV Applications With  
Sponsorship of Austrian  
University Camera Drone

19 juillet 2021 - Commercial  
Drone Professional



14 SEPTEMBER 2021  
THE CIRCULAR ECONOMY AT THE  
DISPOSAL OF THE COSMETICS  
INDUSTRY



13 OCTOBER 2021 - 13 OCTOBER  
2021  
MORE INFORMATION ABOUT THE  
COMING SHOW ...



24 NOVEMBER 2021  
PROJECT EMERGENCE DAY :  
POLYMER MATERIALS &  
SENSORIALITY



31 DECEMBER 2021  
DISCOVER THE SPANISH CROSS-  
BORDER ECOSYSTEM IN A EUROPEAN  
APPROACH



14 SEPTEMBER 2021  
THE CIRCULAR ECONOMY AT THE  
DISPOSAL OF THE COSMETICS  
INDUSTRY



Bellignat (01) - Charbonnières-les-Bains (69) - Orléans (45)  
Bordeaux (33) - Dijon (21) - Laval (53) - Les Villettes (43)  
Lyon (69) - Nantes (44) - Vitry-sur-Seine (94)



[www.polymeris.fr](http://www.polymeris.fr)