



Supporting Biopolymer Innovation

Insights from Chemie-Cluster Bayern

Future of BioPlastics 2026

June 25, 2026

Dr. Friederike Metze - CCB

Background

Founded in 2006 within the framework of the Bavarian Cluster Initiative initiated by the Free State of Bavaria in collaboration with the Chemical Industry Association (VCI).



Free State of Bavaria – Cluster Initiative

Initiator and Funder



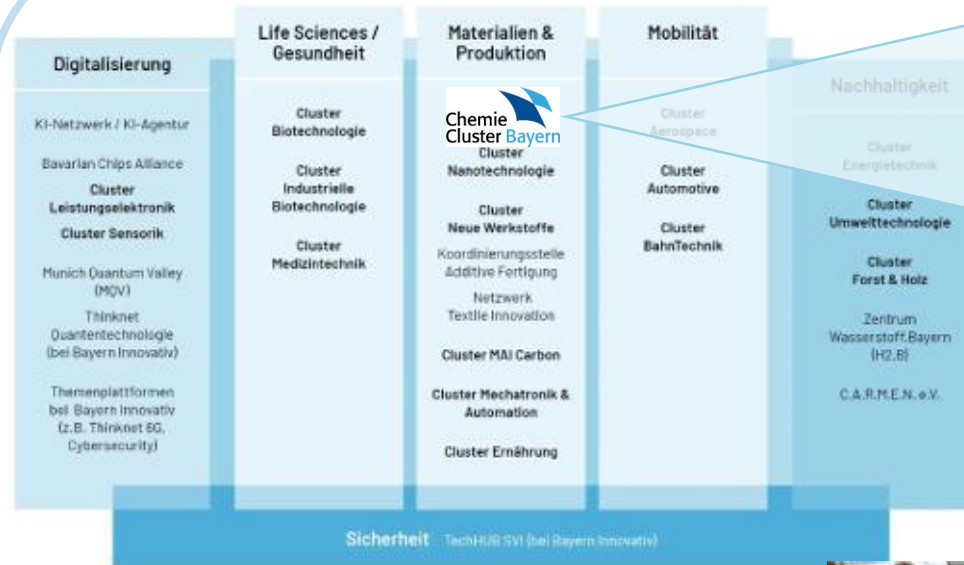
Association of the Chemical Industry (VCI)

Collaborator



Association of Bavarian Universities

Shareholder



Cluster Chemie

Das Chemie-Cluster Bayern verbindet Unternehmen, Start-ups und Forschungseinrichtungen der Chemiebranche, fördert Produkt- und Prozessinnovationen und unterstützt bei der Umsetzung neuer Technologien in industrielle Anwendungen.



Cluster-Offensive Bayern



Chemie-Cluster Bayern



Industry Cluster



Network of > 120 members from industry and academia



Start-ups, SMEs, Enterprises, Academia & Research Organizations



Cross-sectoral value creation - chemistry, indu. biotech, materials



Focus on defossilization, circular- and bioeconomy, digitalization



Cross-regional & international collaborations:



Innovation Network



Member Support & Consulting



Scouting, direct partnering & R&D collaboration support



Business development & Innovation management



Advice on subsidies & project development



Visibility & knowledge transfer



Contact Offices for research collaborations



Industry + Start-up + Research = Innovation

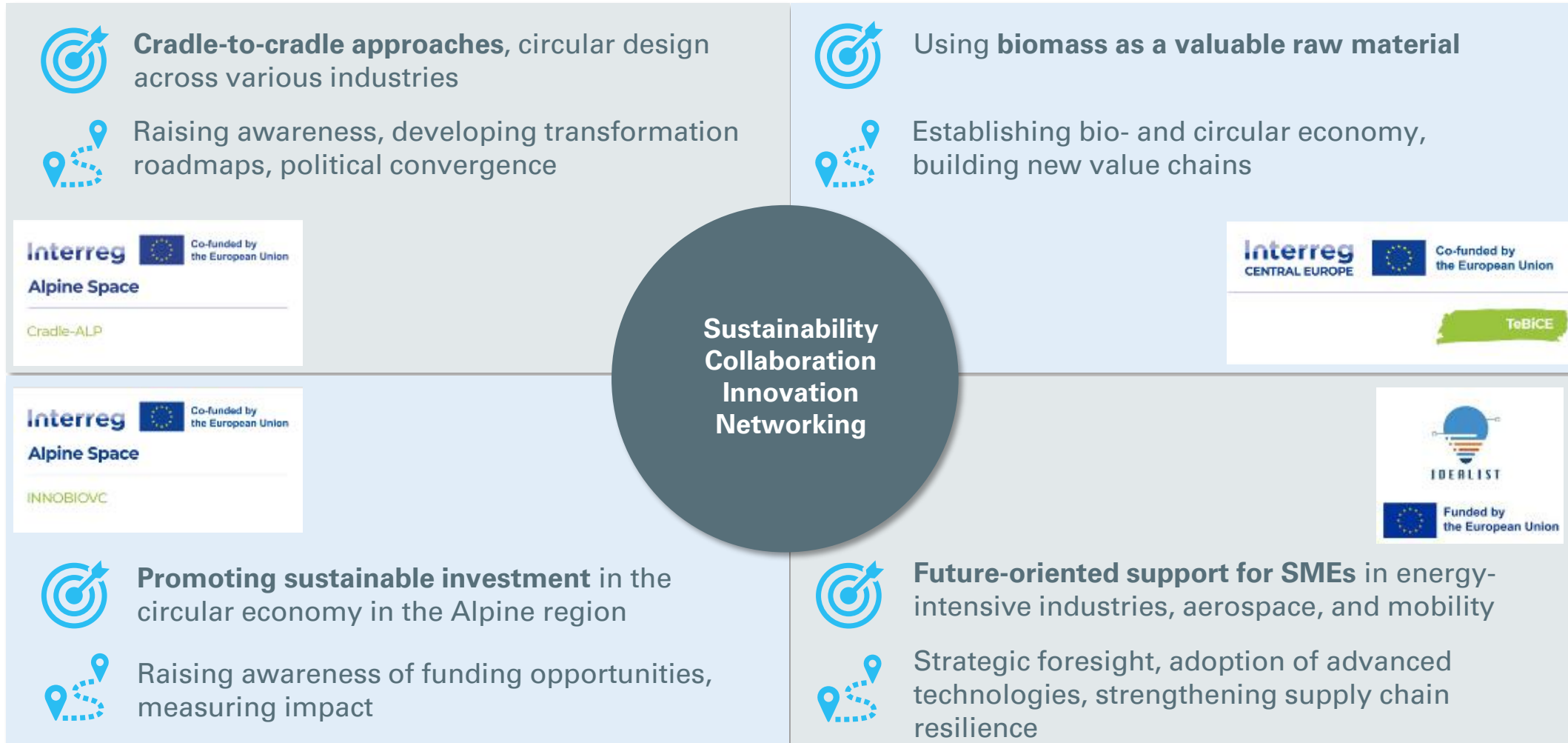
More than 120 members – diverse industries, regions, sizes

- Fine chemicals
- Agricultural industry
- Petro chemistry
- Engineering
- Surfactants & detergents
- Software
- Coatings
- Organic chemistry
- New materials
- Polymers
- Energy/environmental consulting
- Analytics



EU Projects: Horizon, Interreg

Where Innovation Meets Sustainability



Current projects in Germany

Participatory projects of CCB for stakeholders and cluster members



Focus: **Bioplastics/Biopolymers**

Partners: SKZ Würzburg, C.A.R.M.E.N.

Duration: 2025 – 2027

Funding: BMWK (Industrial Bioeconomy))



CO₂ as a renewable resource for material use

Focus: **Carbon Capture & Utilization**

Partner: C.A.R.M.E.N.

Duration: 2025

Funding: Cross Cluster, StMWi

BAMBI



Market potential of wood-based bioeconomy in Bavaria

Focus: **Wood-based Bioeconomy**

Partner: Cluster Forst & Holz C.A.R.M.E.N.

Duration: 2025 – 2026

Funding: Verbundprojekt, StMWi

ReFiberTech



Focus: **Recycling and Sustainability Processes in the Fiber Composite Sector**

Partner: MAICarbon, Environmental Cluster

Duration: 2025

Funding: Cross Cluster, StMWi

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Cross Cluster Project ReFiberTech

Recycling and Sustainability Processes in the Fiber Composite Sector



Quelle: Pioneering Sustainable Building Solutions with Green Polymer Composites, Arifuzzaman, Abdulrahman Alfuhaid & Enamul Hoque, 2026, https://link.springer.com/chapter/95-2469-3_4



Pool existing expertise and knowledge from companies and research institutions



Present information on current technologies & perspectives for future developments



Initiate cross-industry development of ideas for composites recycling or reuse

Target Group and Approach



- Manufacturers and users of **fiber-reinforced composites** (fiber/matrix components)
- Providers and developers of **recycling processes** (mechanical, chemical recycling, etc.)
- Users **seeking circular solutions** for their products



- Information compilation event on biocomposites and CFRP (carbon fiber-reinforced plastics)
- Innovation workshops with stakeholders

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Innovation workshops



WS 1: Open Scope Workshop on ReUse Cases

Out-of-the-box brainstorming to collect original ideas for the reuse of end-of-life composite materials/products (aircraft components, wind turbine blades, ...)



WS 2: Green Matrix Systems and Alternative Materials

Alternative, bio-based matrix components, use of natural fibers, lignin in fiber/matrix ...



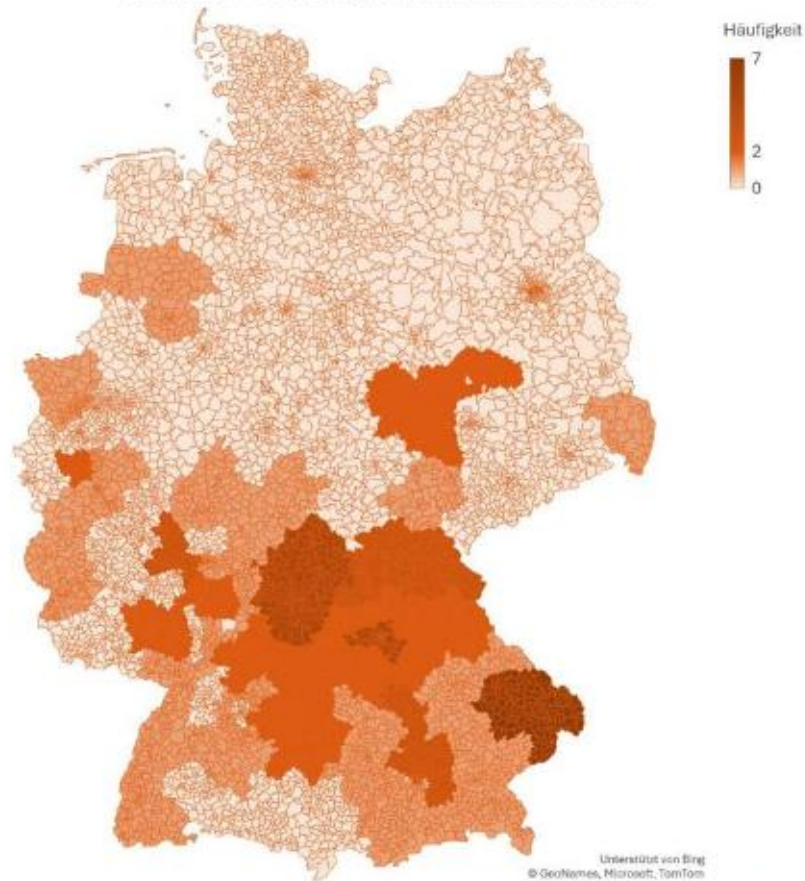
WS 3: Innovative Recycling Processes

Recycling of composites, use of recycled (carbon) fibers, partners for establishing a circular economy ...

Innovation Network Project



Räumliche Verteilung der teilnehmende Firmen



Innovation Cluster for Renewable Raw Materials in the Plastics Industry



Build an innovation & stakeholder network along the biopolymer value chain



Explore best-practices, barriers and market opportunities in thematic expert forums



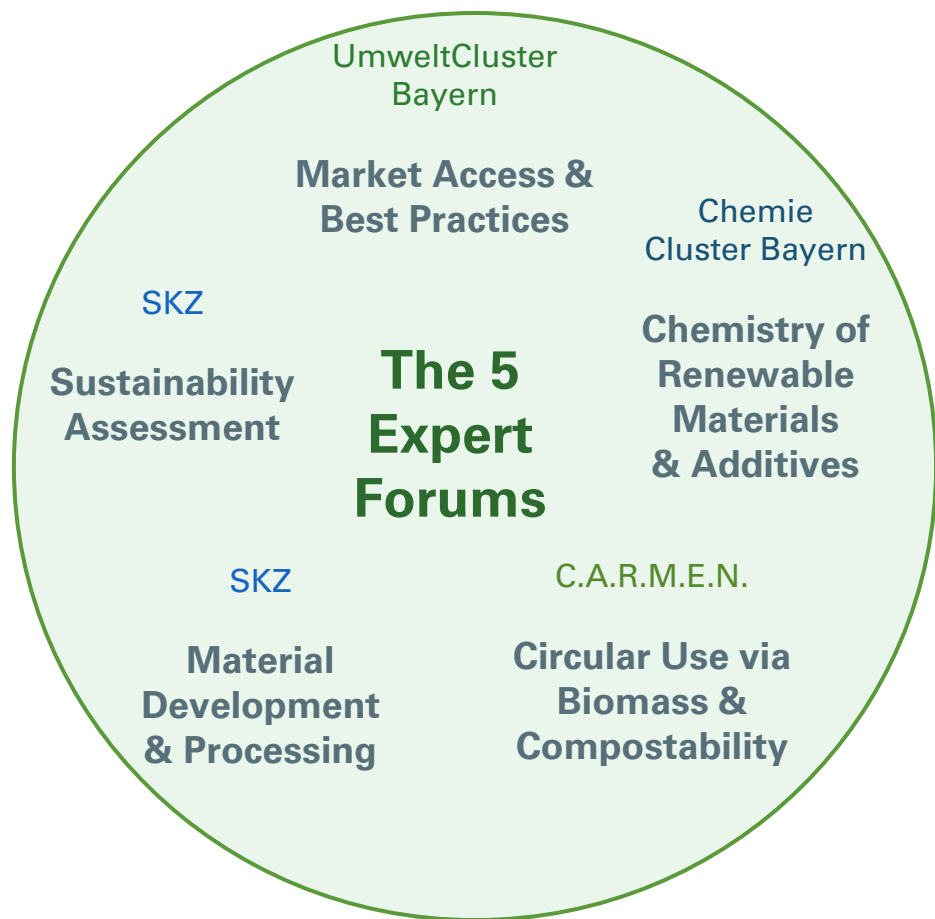
Consolidate and make available knowledge on the use of biobased materials in plastics production



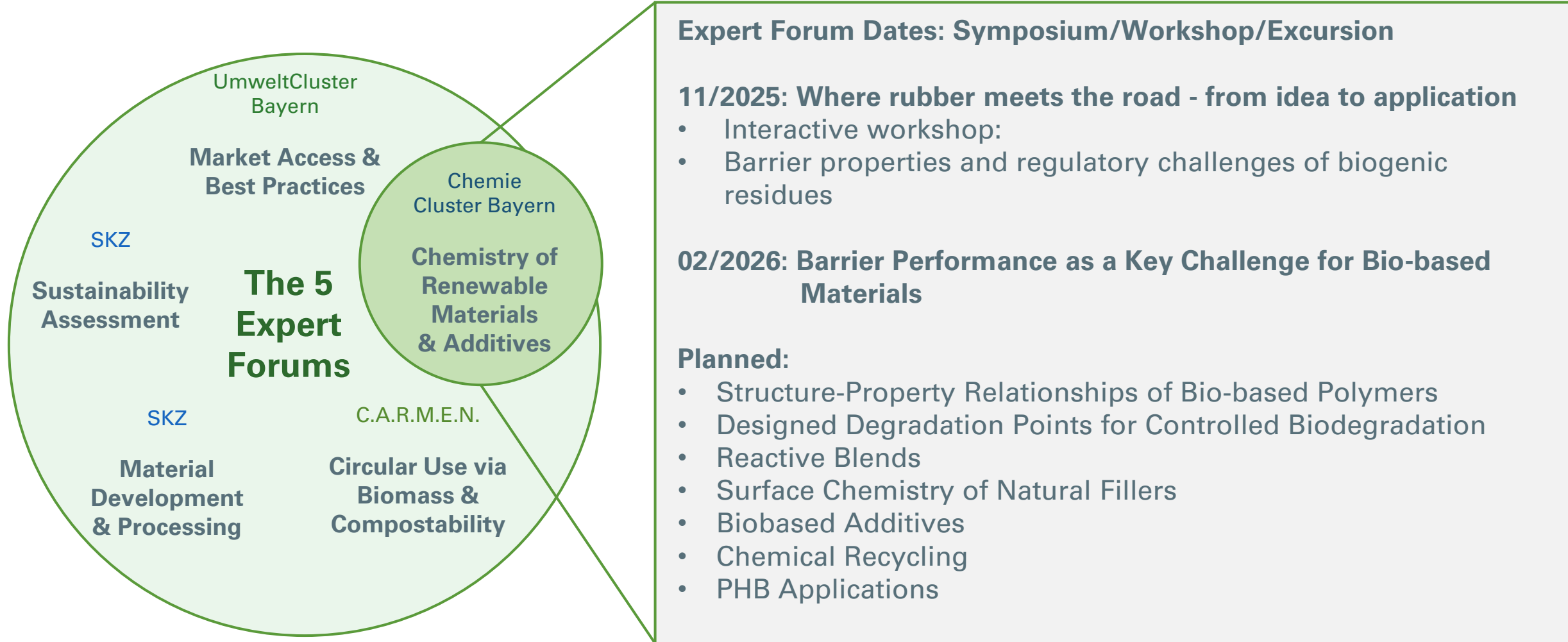
Close knowledge gaps and increase willingness to innovate through exchange



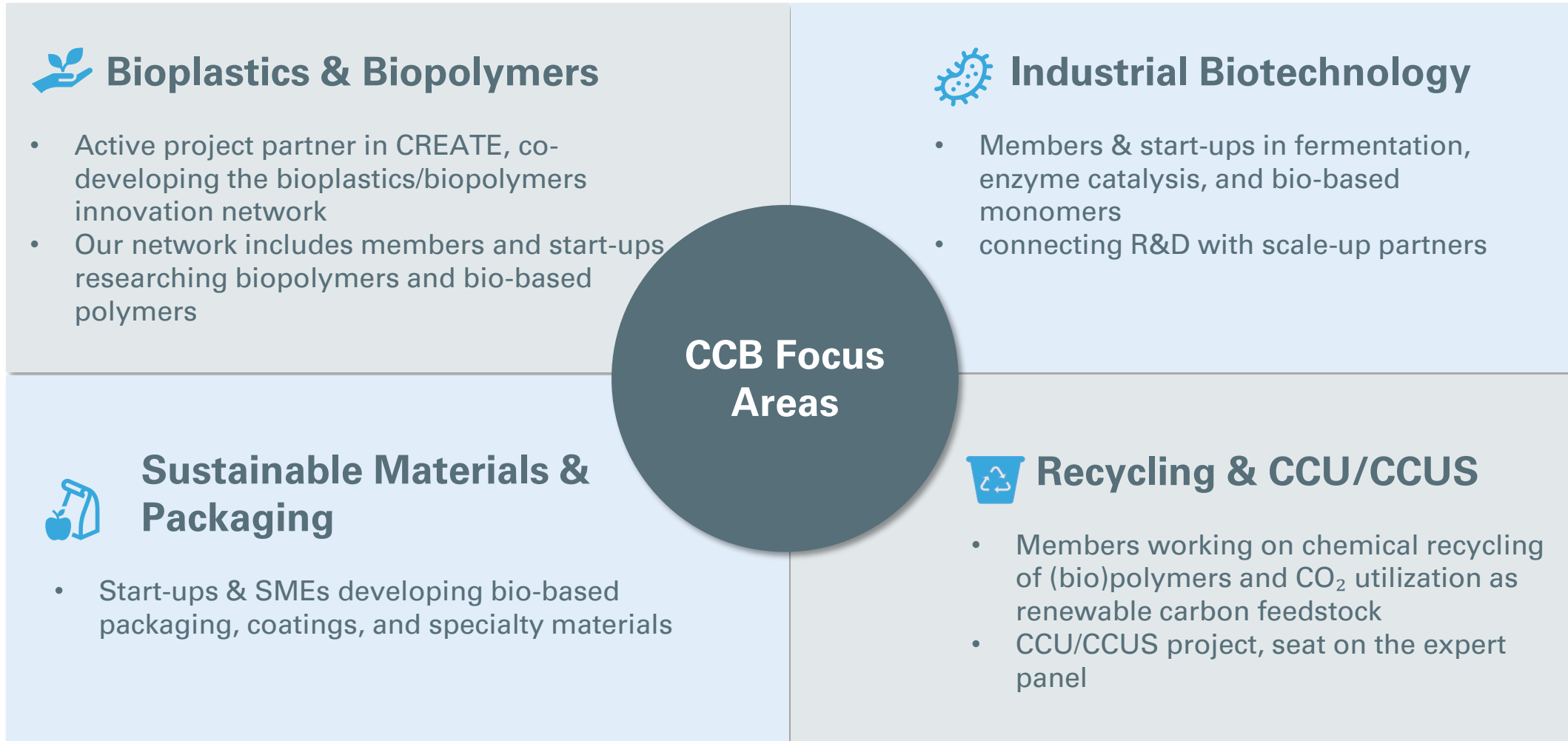
Approach – the 5 Expert Forums



Approach – the 5 Expert Forums



Our Focus Areas related to Biopolymers



Thank you.

Let's shape the Future of Chemistry together.



Dr. Friederike Metze

Head of New Technologies and Innovation

metze@chemiecluster-bayern.de

Chemie-Cluster Bayern GmbH

Kaulbachstr. 31 | 80539 München
Fürther Str. 246c | 90429 Nürnberg

www.chemiecluster-bayern.de



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