ExzellenzNRW
Cluster Nordrhein-Westfalen

CHEMIE.NRW

Clusters in chemical regions: provision of infrastructure open for innovation: Chemistry Cluster in North Rhine-Westphalia

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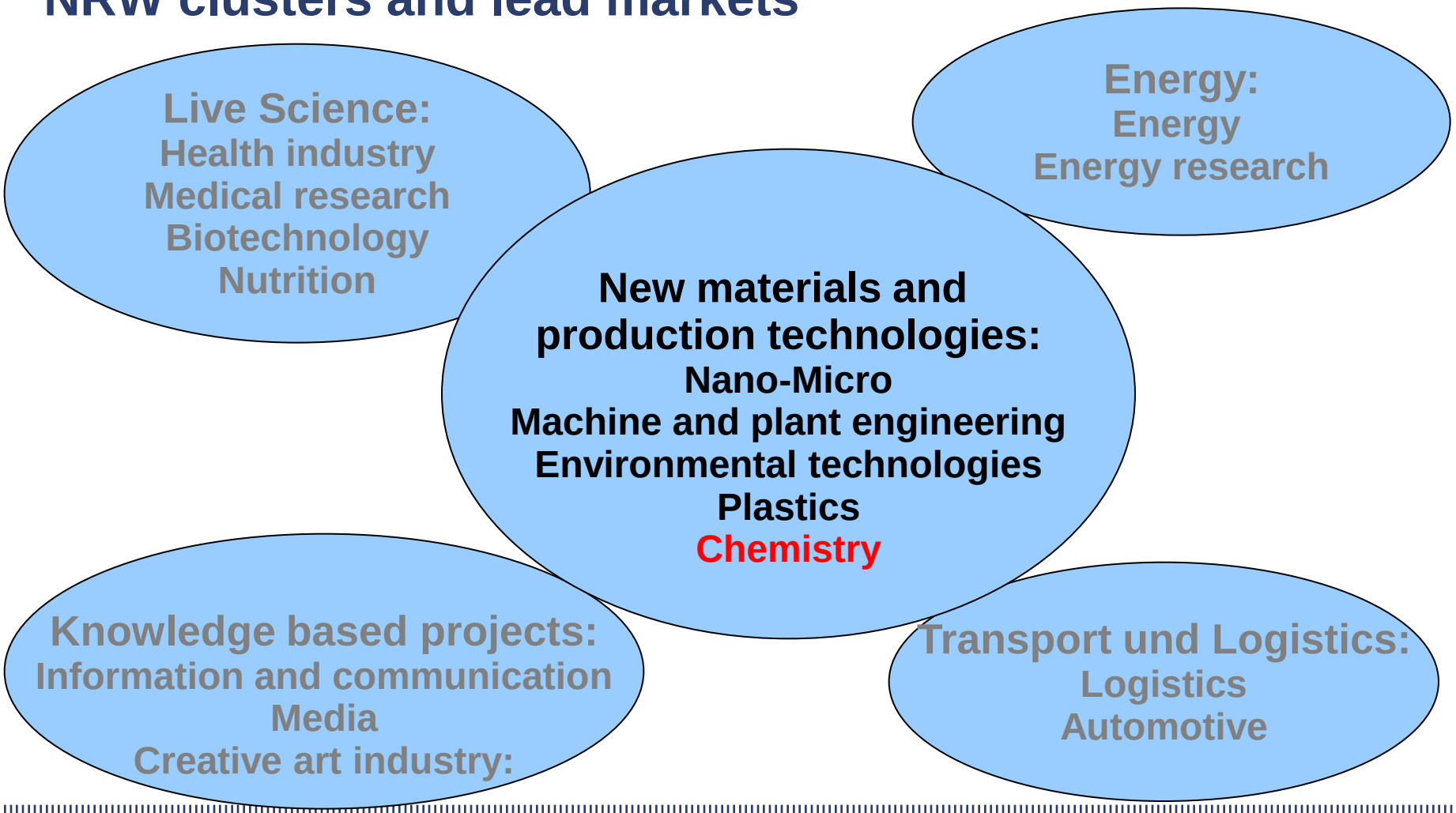
Goals and objections of NRW cluster politics

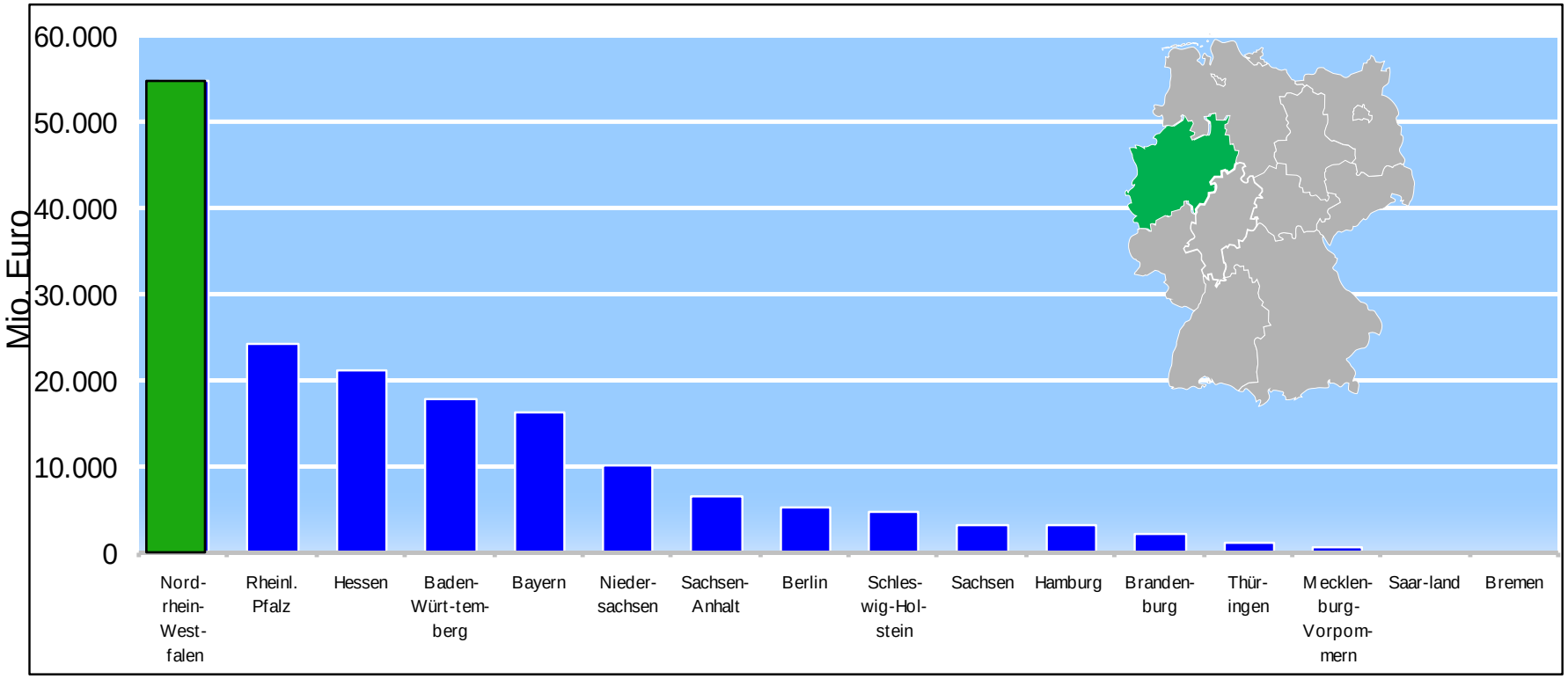
By supporting and funding 16 NRW clusters, the NRW government aims to strengthen the economical position and improve the competitiveness of NRW:

- Create a favorable environment for innovation
- Strengthen the growth potential of NRW's industry
- Stimulate economical growth and employment
- Improve the network between industry and the scientific community

NRW clusters and lead markets



NRW is the number 1 chemistry area in Germany



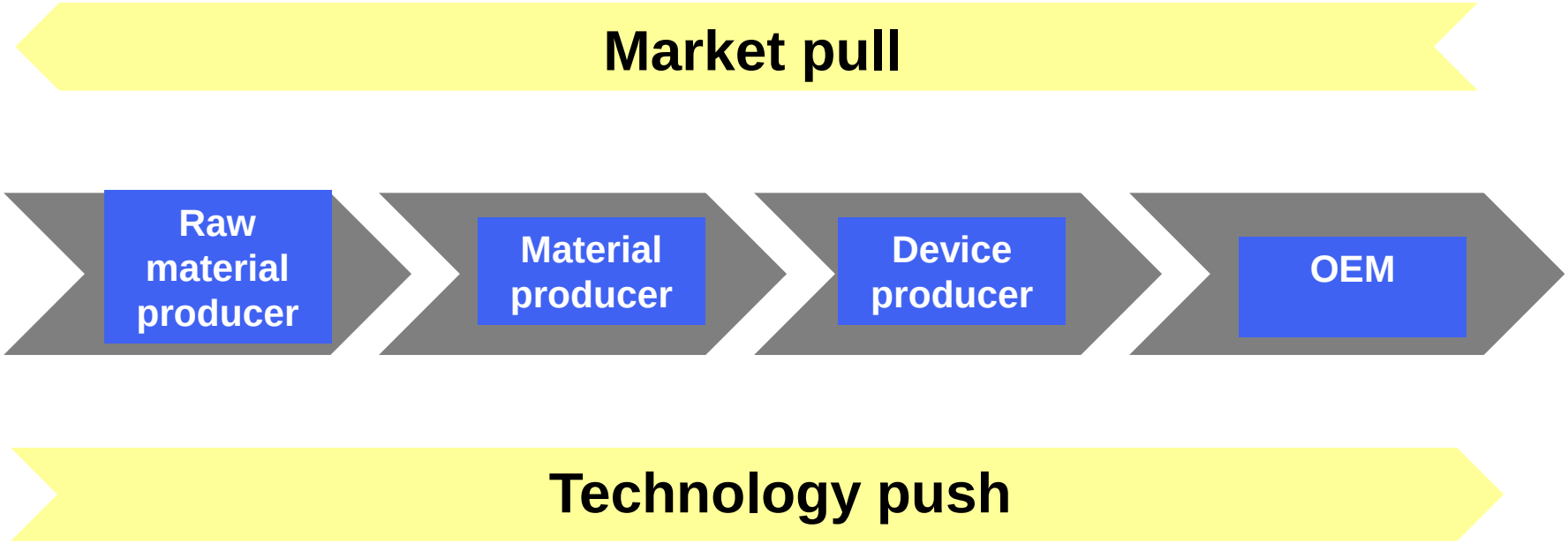
- NRW companies stand for 1/3 of the chemical turnover in Germany
- NRW forms together with the BENELUX the industrial heart of Europe

Goals and objectives of the Cluster Chemie.NRW

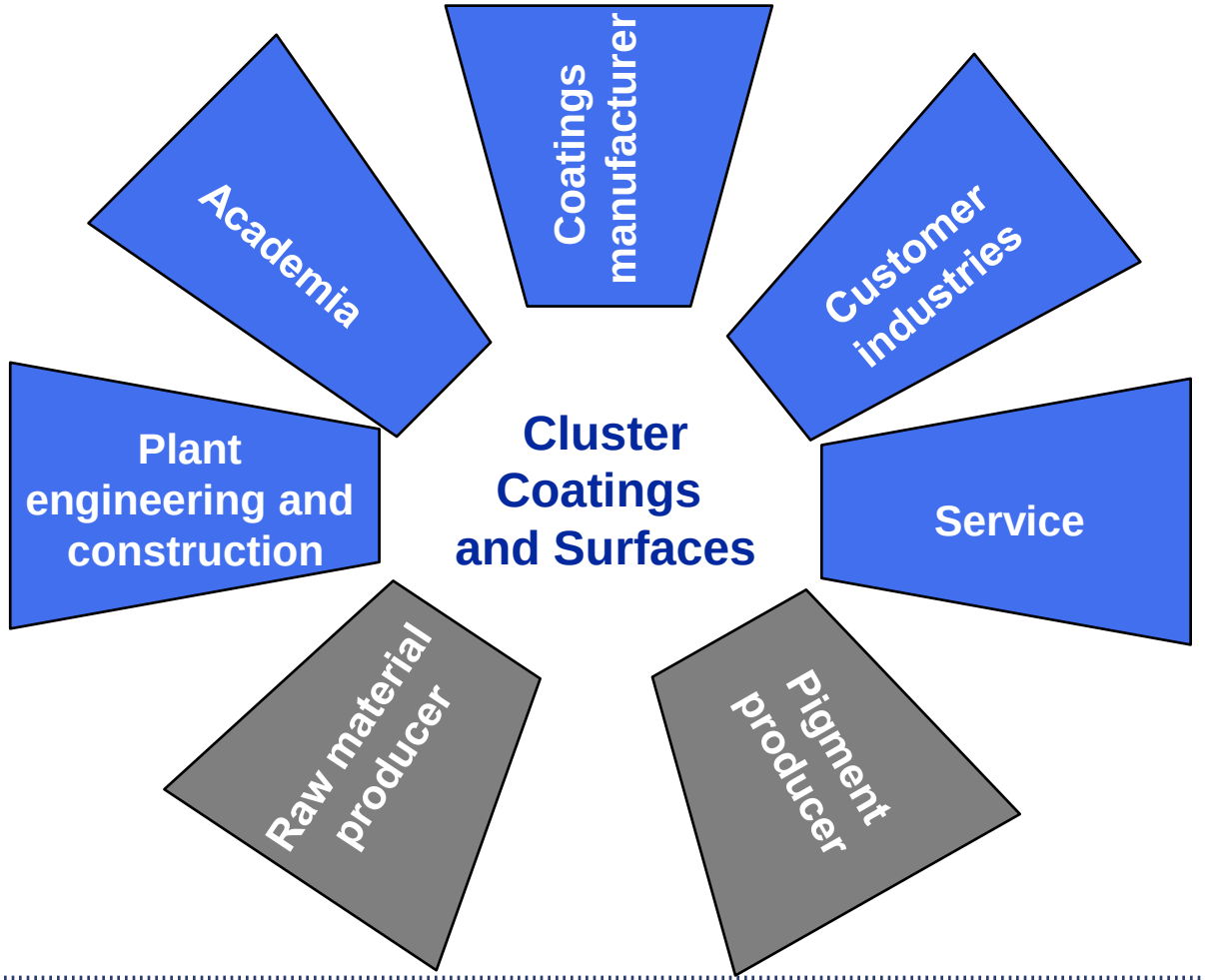
- Support the innovation initiative of the NRW government:
- Build a strong network of all potential cooperation partners: Academia, research institutes, SMEs and industry.
- Build cross innovation activities with the sister clusters on **Plastics, Nanotechnology, Biotechnology and Energy**

Make ideas turn into innovations!

Involve the value chain – Balance market pull and technology push



Example: Chemistry Cluster activity “Coatings and Surfaces”



Strategic network, covering the value chain, to develop and implement new technologies and products

Strengths

- Agglomeration of chemical enterprises along the value chain from petro chemicals to chemicals processing
- Agglomeration of the most important customer industries
- Large potential of human resources
- Well developed science landscape
- Existing and well functioning clusters in plastics and biotechnology

Opportunities

- Maintain the chemical value chain through improvement of the general conditions for basic chemistry
- Accelerate innovation dynamics by strengthening the network of the chemical value chain
- Improve quantity and quality of chemistry related education

Weaknesses

- Basic chemistry is disproportionally large
- Pharma industry is disproportionally small
- Industry and living quarters are close
- Some site disadvantages (to be determined in a ongoing project)

Threats

- Migration of the basic chemistry industry causes the next chain links of the value chain to follow
- Public and local political resistance against the improvement and expansion of industry and infrastructure
- Site disadvantages impede site strengthening

Tasks

Improve and accelerate the knowledge transfer from academia to industry, especially to SMEs

- Analyze core competences of universities, applied universities and research institutes and correlate to the structure and core competences of the industry
- Identify future business opportunities for the NRW chemical industry based on the competences of the NRW scientific community
- Identify possible bottlenecks in the education of engineers and scientists

Identify new cluster activities to build more value chain networks

Strengthen the site marketing for ChemSite (northern Ruhr area) and ChemCologne (Rhine area)