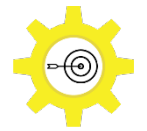




ReBAU Messe – Bauprodukte als Ressourcen

Vernetzung der Forschung – Interdisziplinäres Zusammenspiel für eine Circular Economy

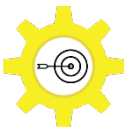


Circular Economy – The Basis of a Sustainable Future



- ▶ Circular **Economy** is now replacing and operationalizing the previous **sustainability strategies**
- ▶ CE is highly topical and promoted by politics. The European Union and Germany's government understands **CE as a priority** for the next decade
- ▶ CE is strongly **linked to society** because of its impact on the everyday lives of the citizens
- ▶ CE requires the **collaboration** of ALL different research areas

The Vision

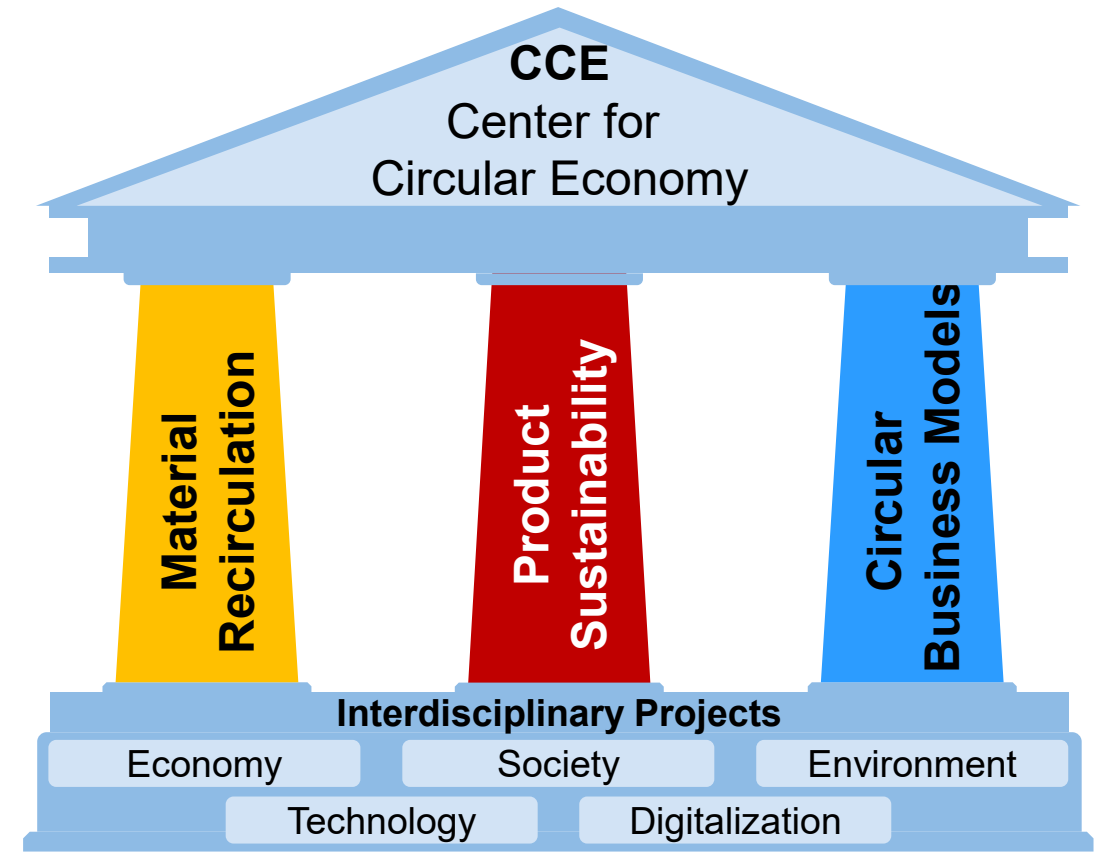


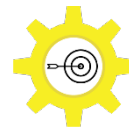
A **multidisciplinary** and **interconnected** approach to **Circular Economy** combining expertise from **ALL** faculties at **RWTH Aachen University**

CCE is an enabler for a transformation of research, teaching and finally society, acting as a lighthouse for internal and external partners.

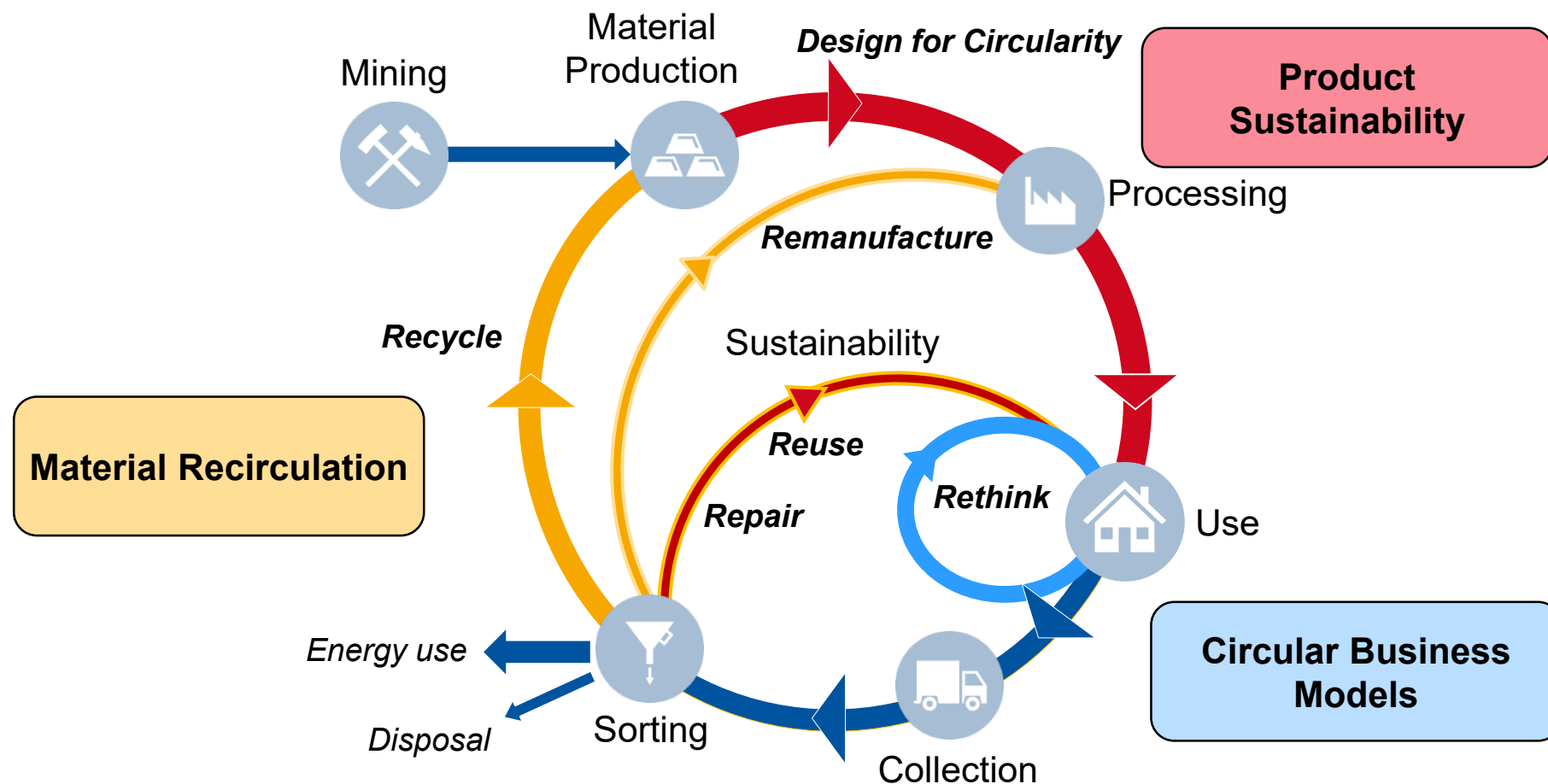


- ▶ **Value retention**
- ▶ **High user acceptance**
- ▶ **Economical return** with **minimal energy use and emissions** by products and materials Design
- ▶ **Research, development and knowledge transfer**
- ▶ Together with research, industry, politics and the society, the CCE develops innovative solutions for the **circular value creation of the future**





The Aspects Circular Economy





Network & Community – Within the RWTH Aachen





Network & Community – Stakeholders and Players





An Education Institute

Master Program – Workshops – Seminars – Trainings



An Inter- and Transdisciplinary Research and Innovation Center

Circular Economy-Related Projects



A Network and Mesh

University – City – Regional – National – European – International



An Awareness Demonstrator

Students – Citizens – Politicians – Stakeholders



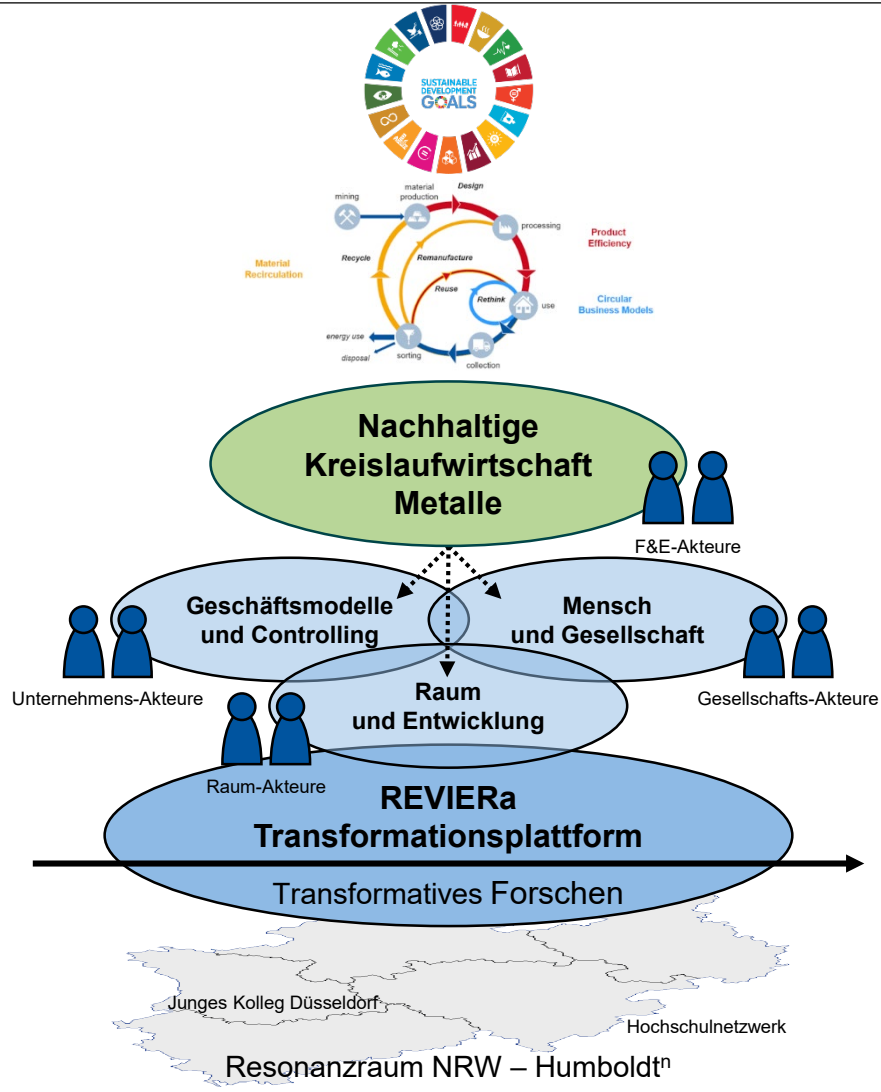
An Unit for Transfer

Accelerator – Incubator – Ideas – Startups – Spinoffs

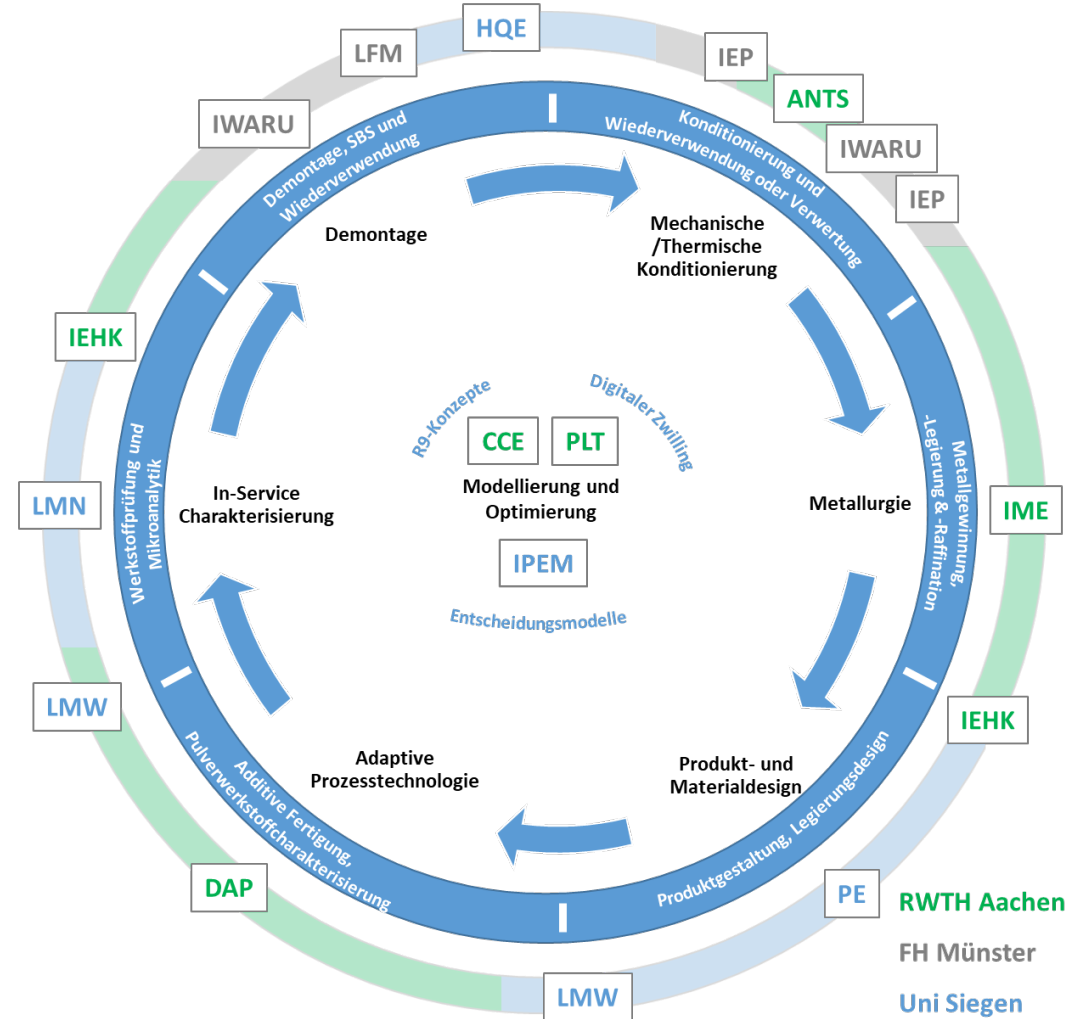


IMPLEMENTATION

Circular E-Cars



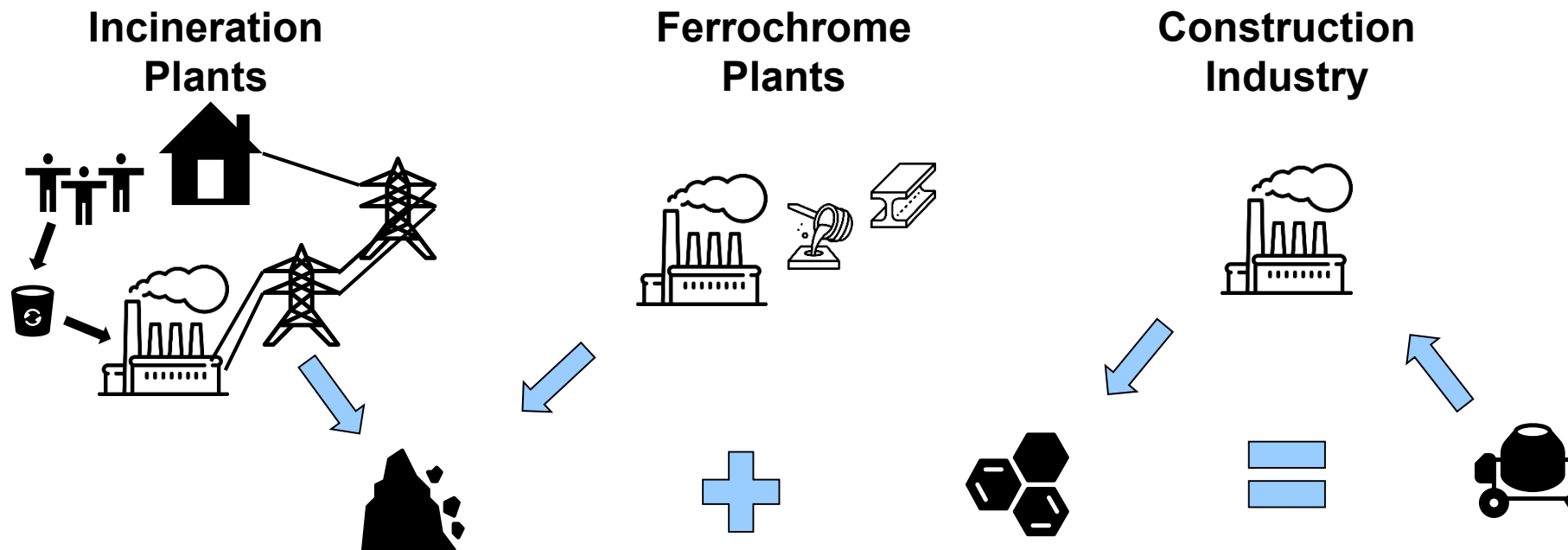
Begleitforschung





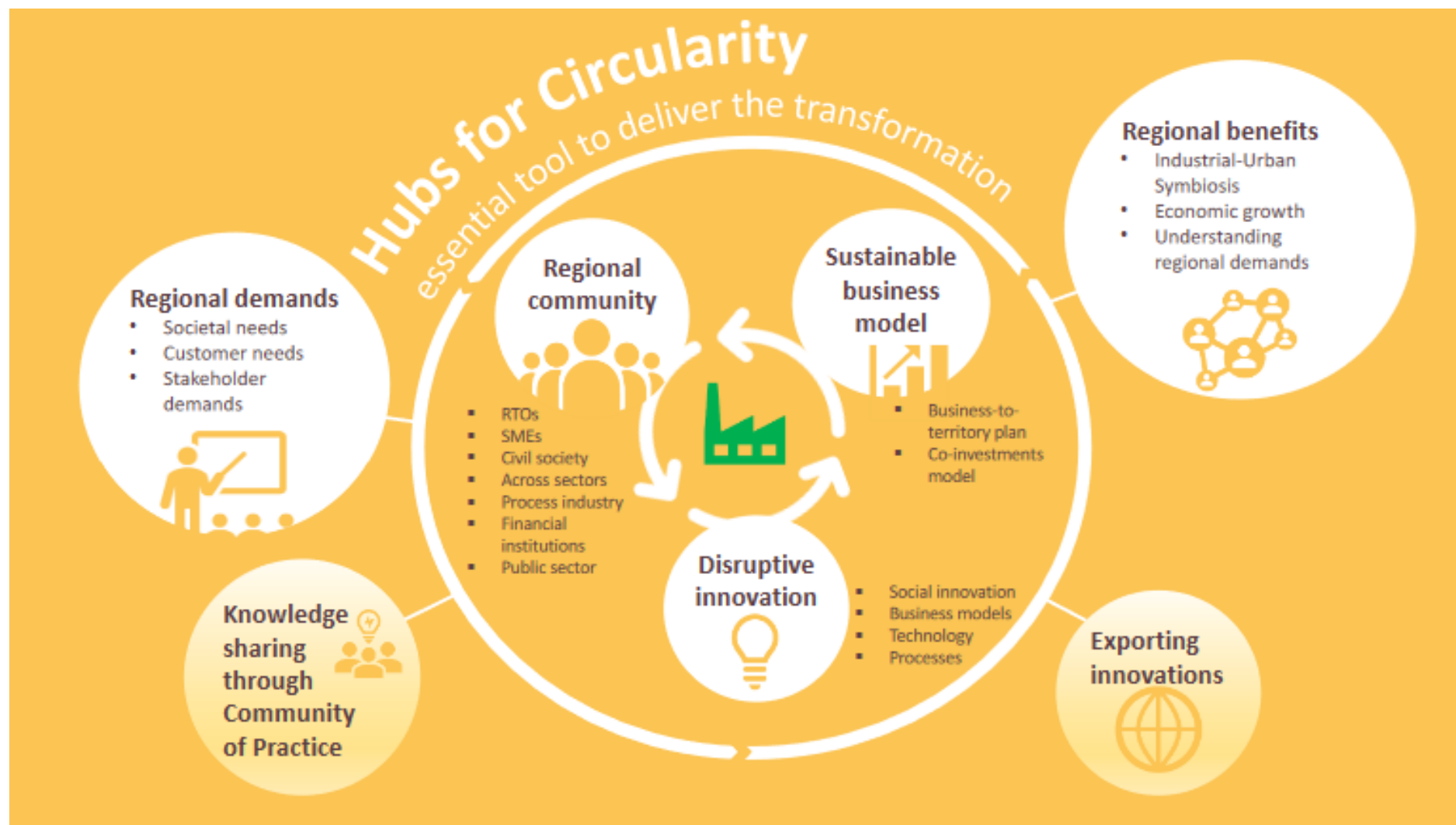
Hubs for Circularity

- ▶ A **lighthouse** for the region, Germany and Europe
- ▶ **Industry symbiosis** between metallurgy, waste processing and concrete industries
- ▶ Involvement of energy intensive industries
- ▶ Potential in scaling nationally and internationally

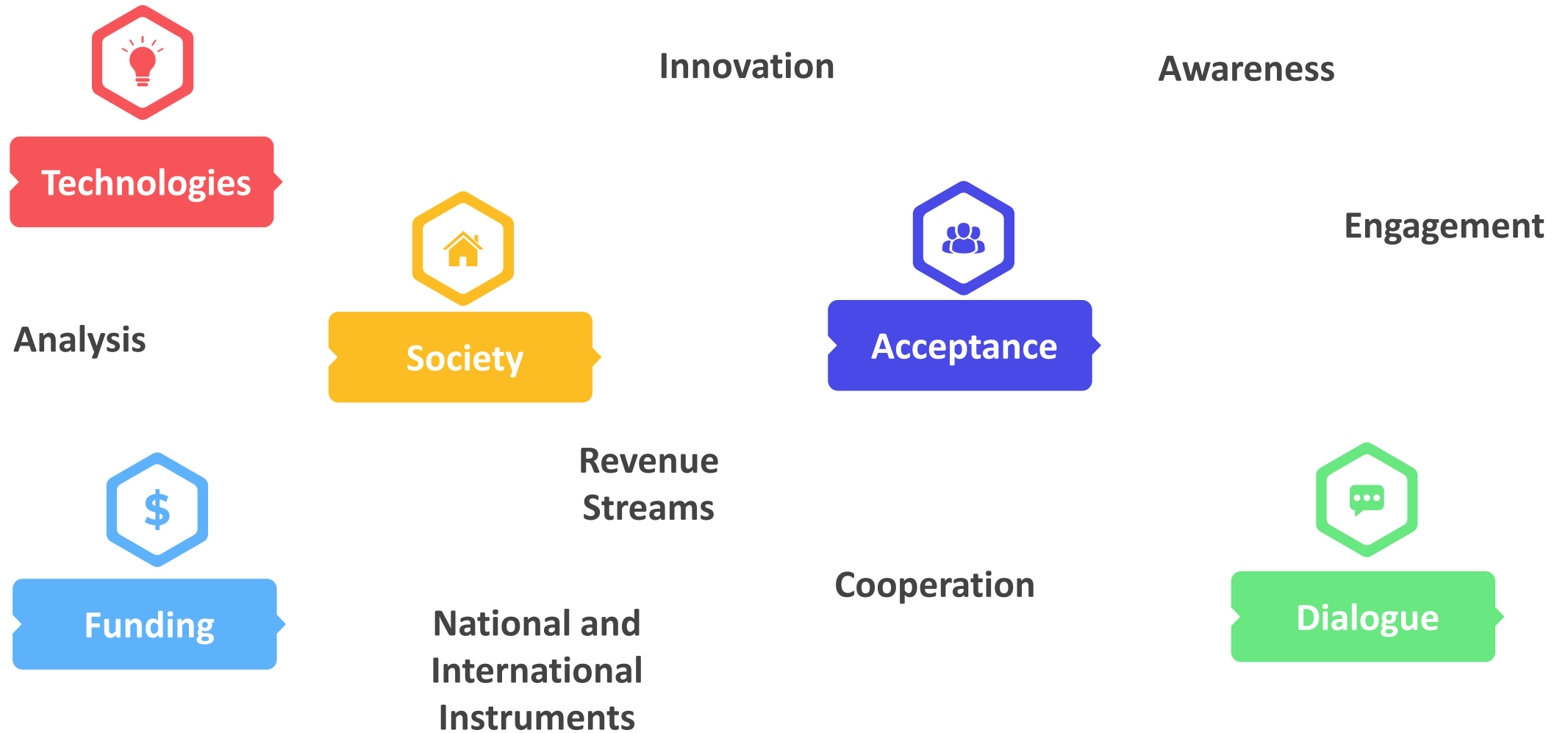




Hubs for Circularity



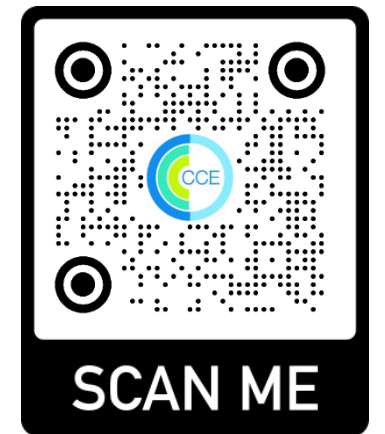
The Circular Economy





Thank you for your attention!

Dr.-Ing. Mohammad Chehadé
Manager des Centers for Circular Economy
Chehade@cce.rwth-aachen.de

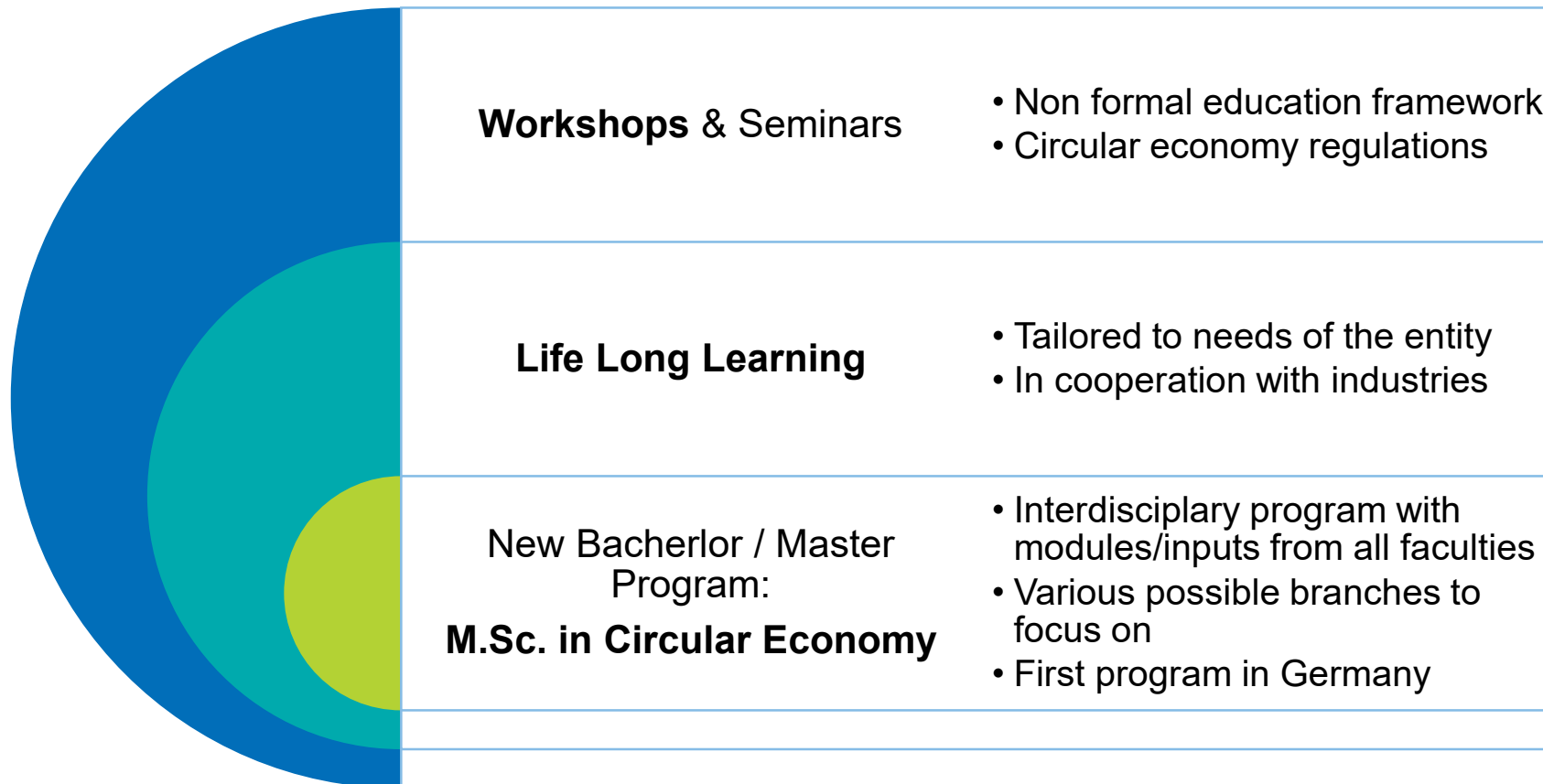




BACKUP SLIDES



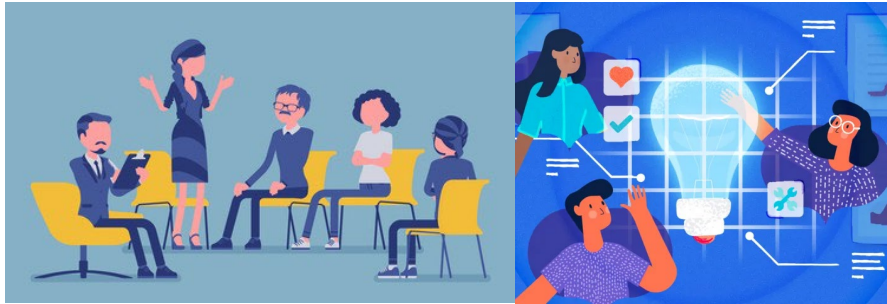
The CCE as an Education Institution



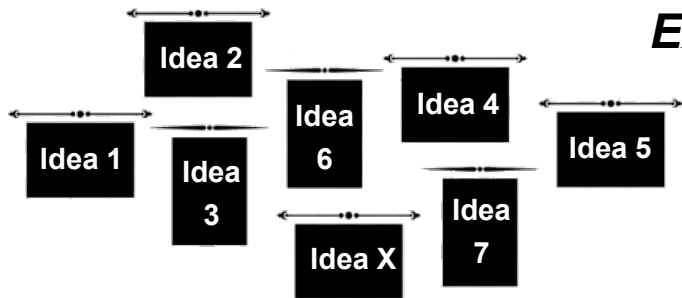


An Inter- and Transdisciplinary Research and Innovation Center

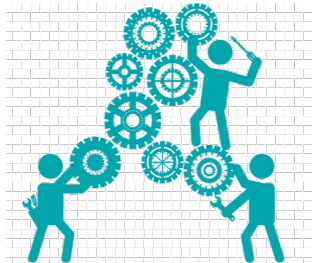
The Marketplace for Circular Perspectives



Wall of Aim



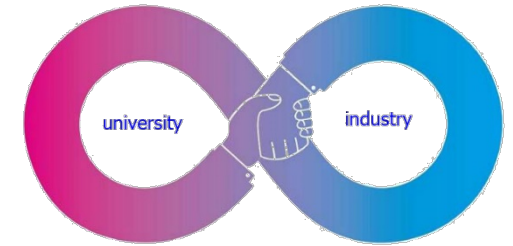
Exploring Potentials



Deals / Contracts Funding / Initiatives



Cooperation and Collaboration

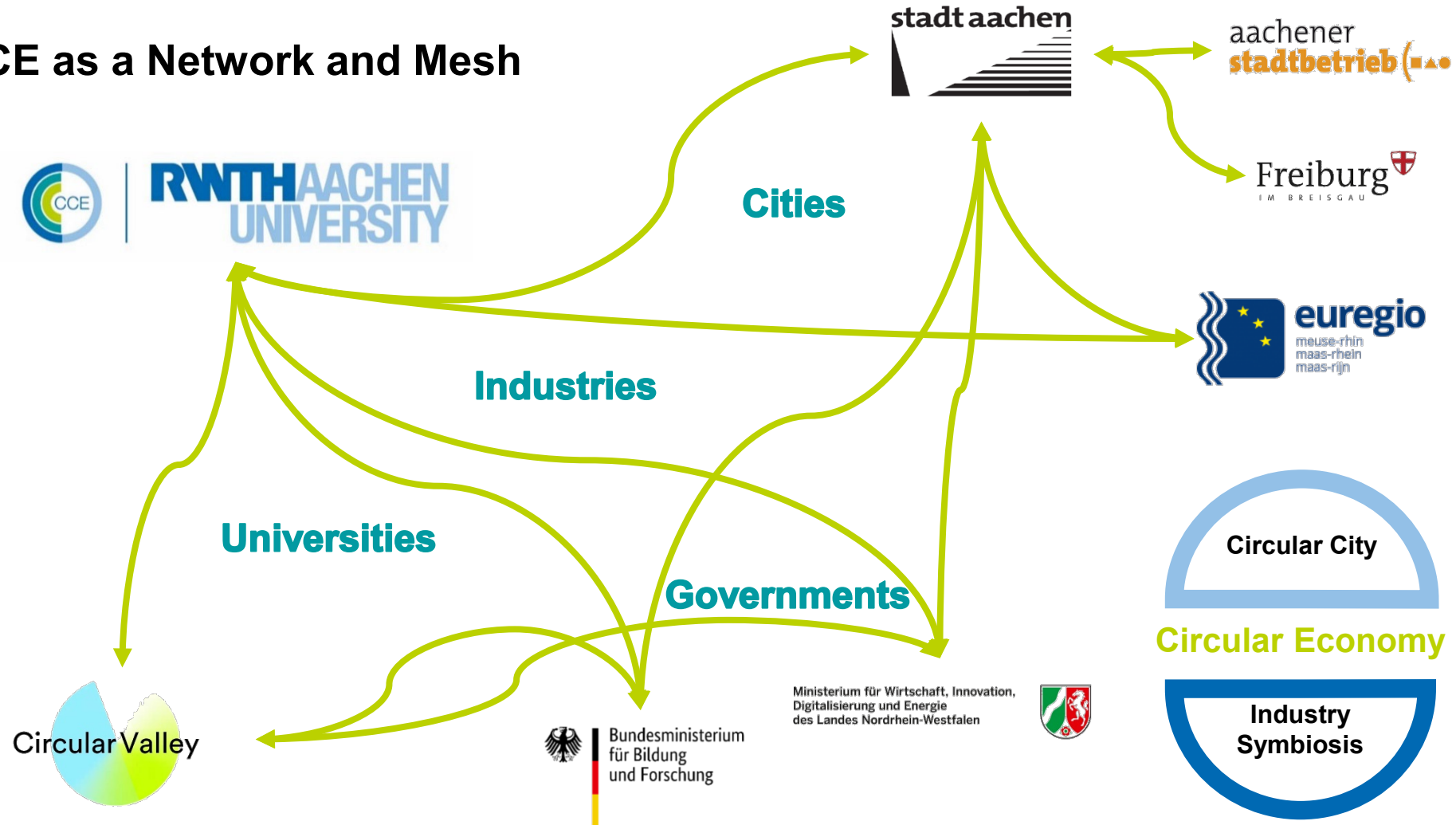


Projects / Hiring Results / Accomplishments



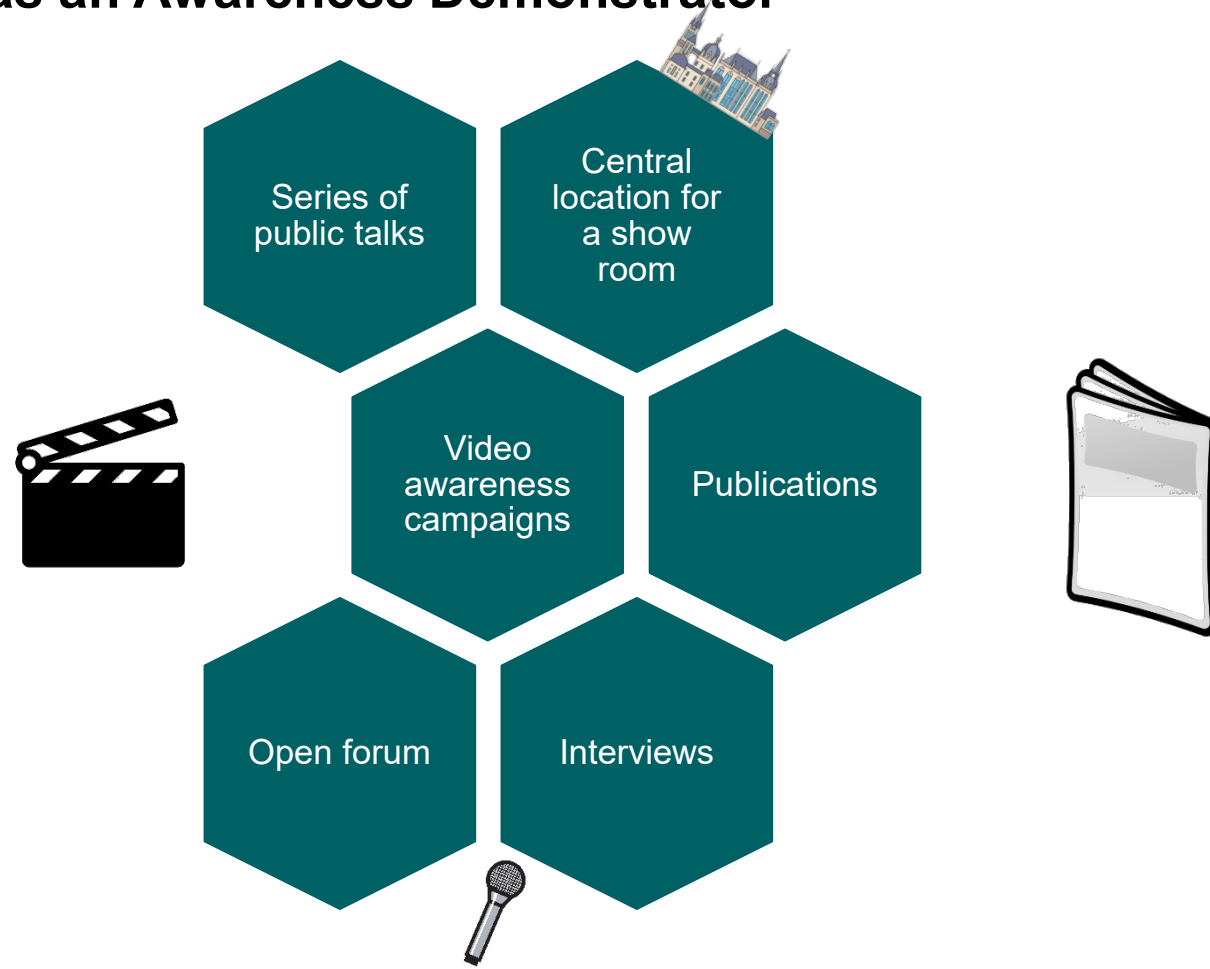


The CCE as a Network and Mesh





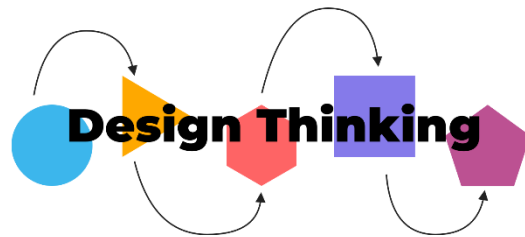
The CCE as an Awareness Demonstrator



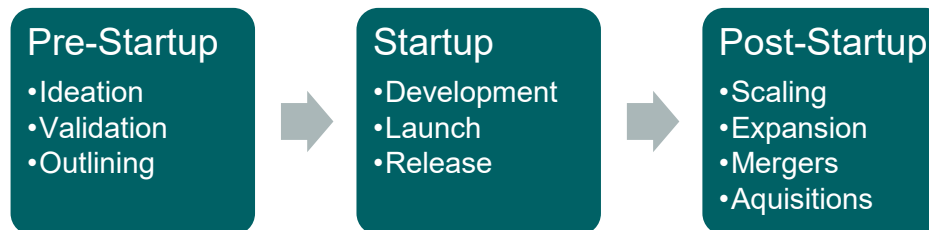


The CCE as a Transfer Unit

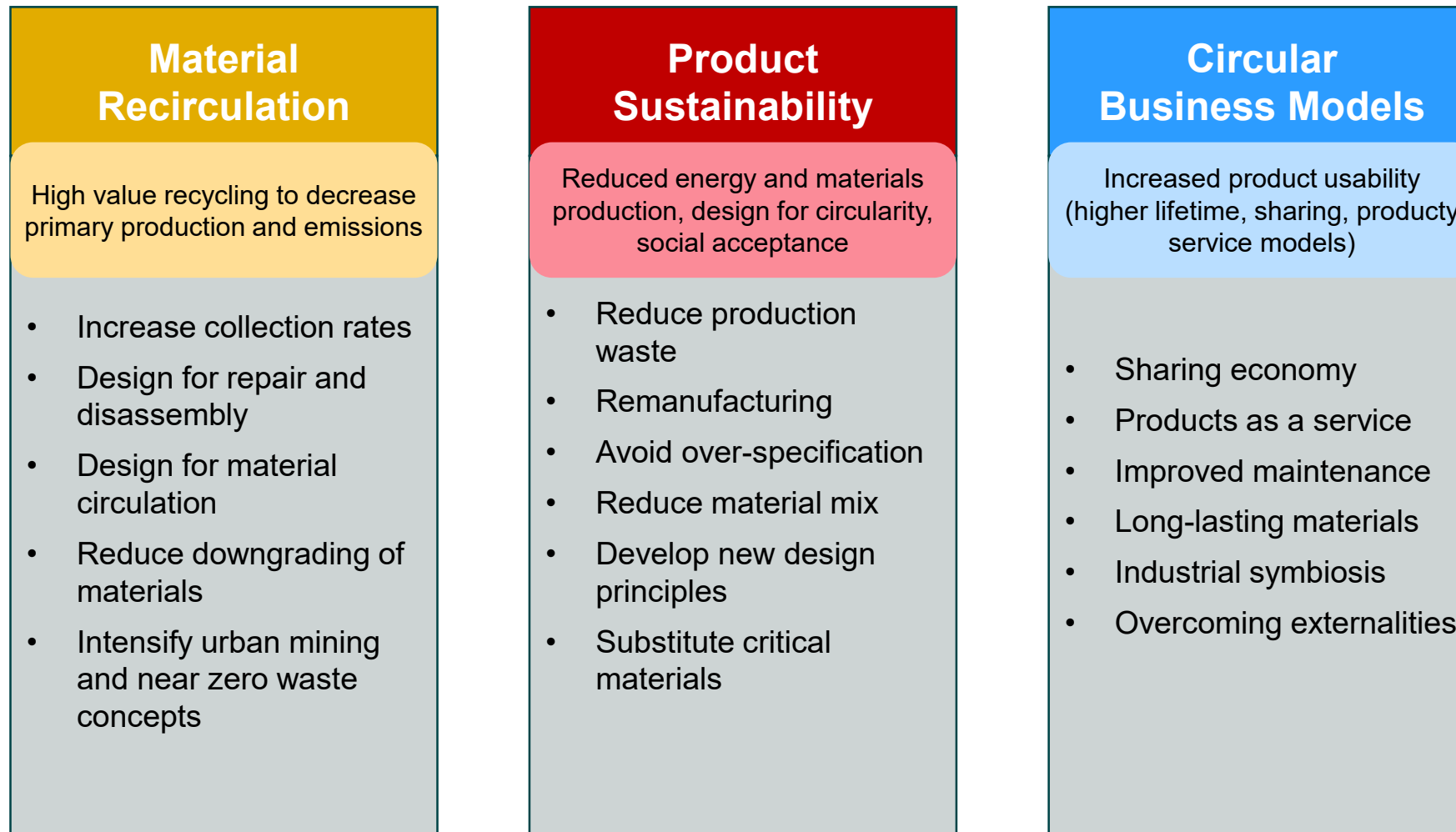
- Two Programs:
1. „Know“ your City
 2. „Circle with“



- Access to **Stakeholders** (experts, institutes, cities, industries, citizens, etc. via the network)
- Shared working **space**
- Access to **tools**, labs, etc.
- Rich **topics and implementation possibilities** through the network and suggested use cases (hospital of the future, circular city, usw.)



Thematic Pillars of the CCE



Integration into the RWTH's Center structure

The CCE fits RWTH's current EXU targets

Center for Circular Economy		
<i>Research Oriented Teaching</i>	<i>Interdisciplinary Research</i>	<i>Translation</i>
<p>Establish new integrated Master's programme with focus on Circular Economy research fields</p> <ul style="list-style-type: none"> ▶ General modules for building common knowledge base ▶ Specialization modules according to research fields ▶ Integration of teaching and research through involvement in projects ▶ Integration of Entrepreneurship modules to promote CE-oriented startups ▶ International focus 	<p>Research focus built on various wide-spread interdisciplinary pillars</p> <ul style="list-style-type: none"> ▶ Engineering meets Economy & Society & Environment ▶ Strong synergy between research pillars to cover the full value chain ▶ Identification of fundamental research needs ▶ Linking institutions in a unique Center structure ▶ A unique collaboration motivated by the 9 faculties at the university driven by strong interest and potential expansion 	<ul style="list-style-type: none"> ▶ Research and implementation via "use cases" (Hospital of the Future, DKR^2) ▶ Developing EU-wide partnerships (e.g. for H2030 Call "Hubs for Circularity") ▶ New CE-dedicated professorships ▶ RWTH Portfolio Intelligence and external lobbying ▶ Submission SFB proposal
<i>Infrastructure</i>		
<ul style="list-style-type: none"> ▶ World-class laboratory and equipment infrastructure across faculties eases integration ▶ Open Lab building for an urban - research symbiosis will allow direct contact between society, industry and research ▶ Application for a 91b building to develop the Center into a cluster and accelerator on Campus West 		

CCE Roadmap

