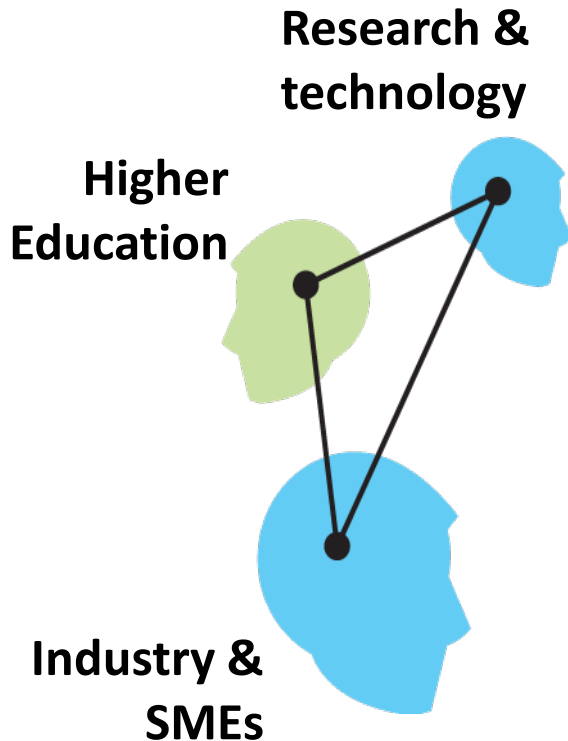


Programmes H2020 Recherche et Innovation Energie et Environnement

Présentation de la KIC Raw Materials

Frédéric Villiéras – Université de Lorraine

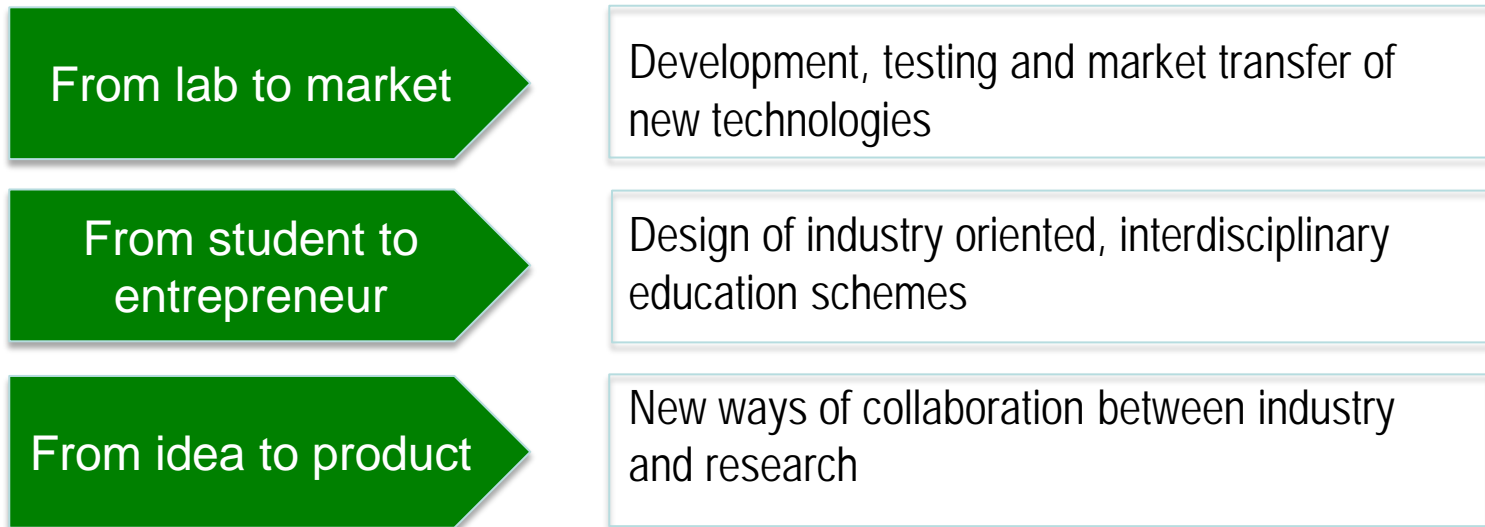
European Institute of Innovation and Technology (EIT)



- The EIT is an independent body of the European Union established in March 2008, part of H2020 with a dedicated budget of 2,7 billion €
- **“Bridging valleys of death”**
 - Mission: increase European sustainable growth and competitiveness by reinforcing the innovation capacity of the EU
 - Conceptual methodology: integrate higher education, research and business in areas of high societal need (the knowledge triangle)
 - Overcoming fragmentation via long-term integrated partnerships and achieving critical mass

What is a Knowledge and Innovation Community (KIC)?

- KICs are the operational part of the EIT
- KICs are long-term (min. 10 years) highly integrated, creative and excellence-driven partnerships gathering world-class partners from industry, research and universities
- KICs aim at implementing results from classic R&D projects and bring them to market readiness
- KICs receive a funding from the EIT to leverage ongoing projects towards market implementation

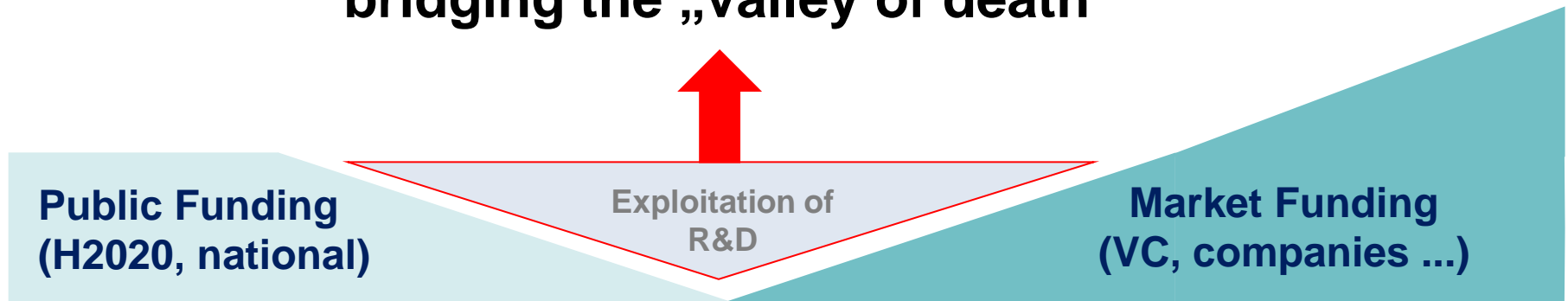


Contexte – KICs existantes et futures

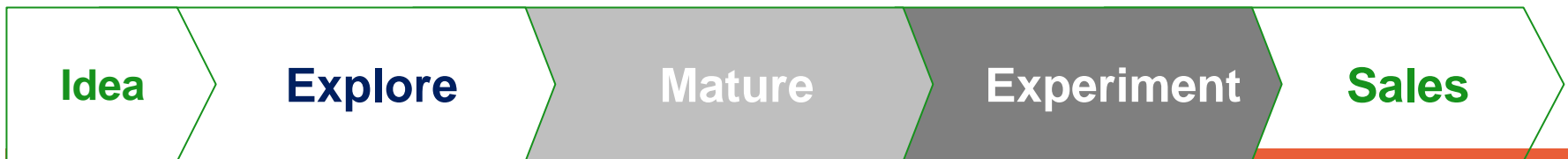
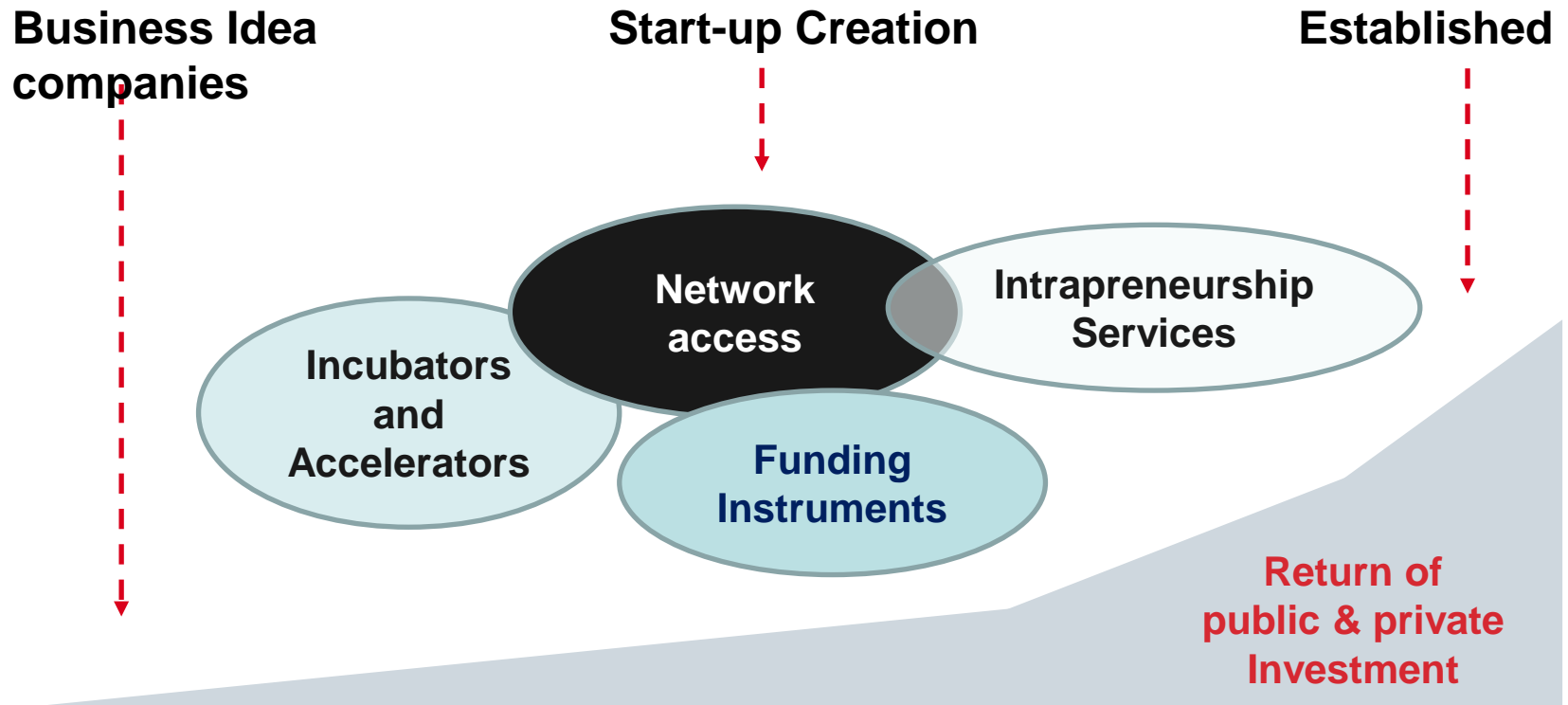


KICs build platforms to transfer R&D results to the market

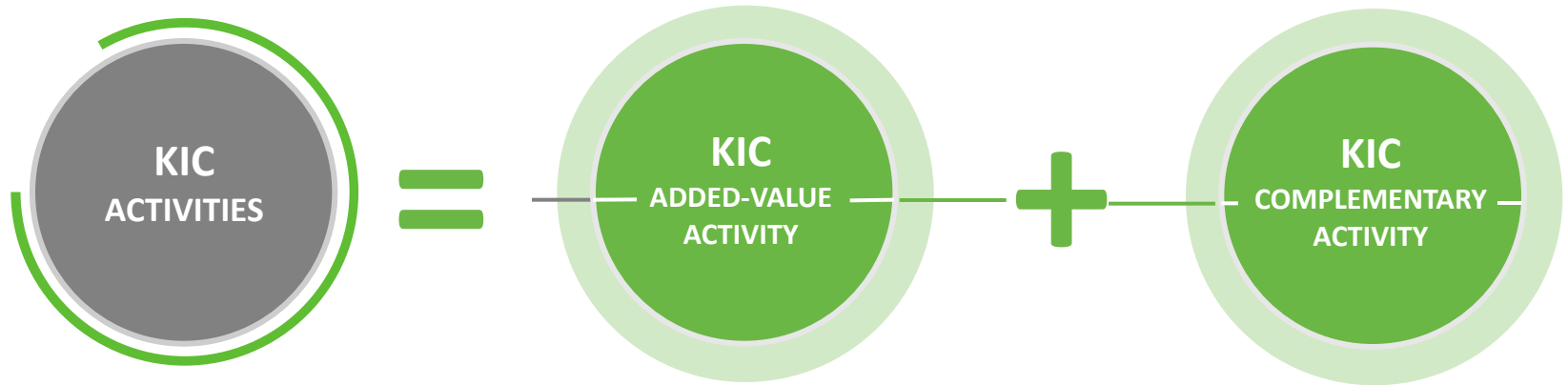
KICs
bridging the „valley of death“



KICs invests in entrepreneurial activity in Europe



KIC activities



Portfolio of activities from:

- Education
- Research and innovation
- Entrepreneurship

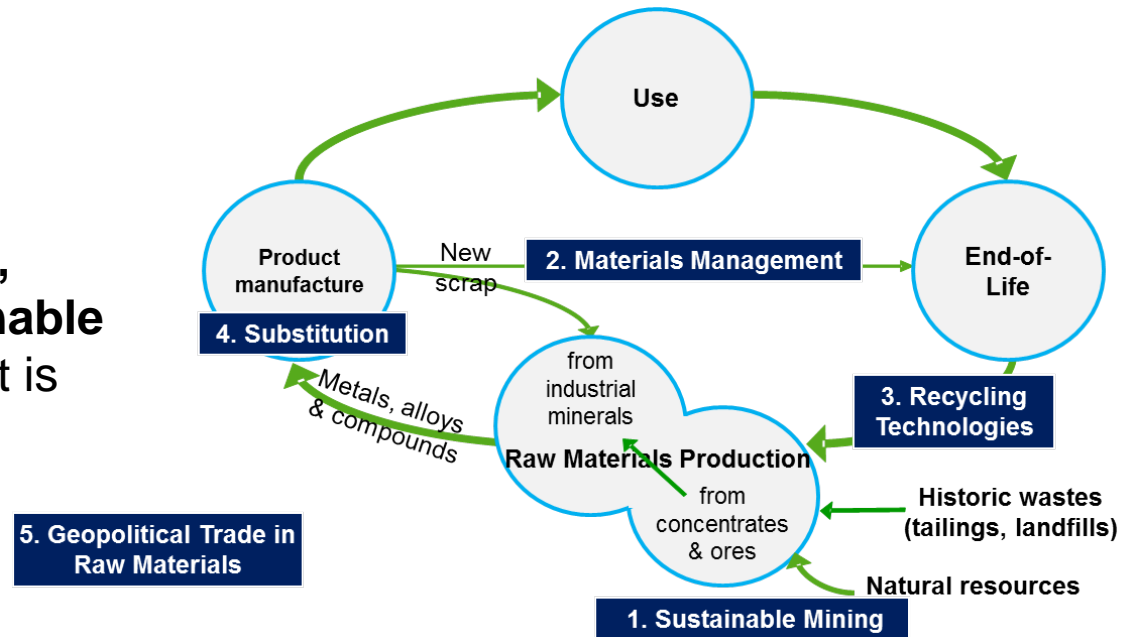
- Contributing to the integration of the knowledge triangle and the overall objectives of the EIT
- Establishment, administration and coordination of activities
- May be financed up to 100% by the EIT

- Having a clear and described link with at least one KIC added-value activity
- Not financed by the EIT

February 2014: EIT call for a KIC on Raw Materials*

The aim:

- To ensure **accessibility, availability and sustainable use** of raw materials that is and achieve a resource efficient economy



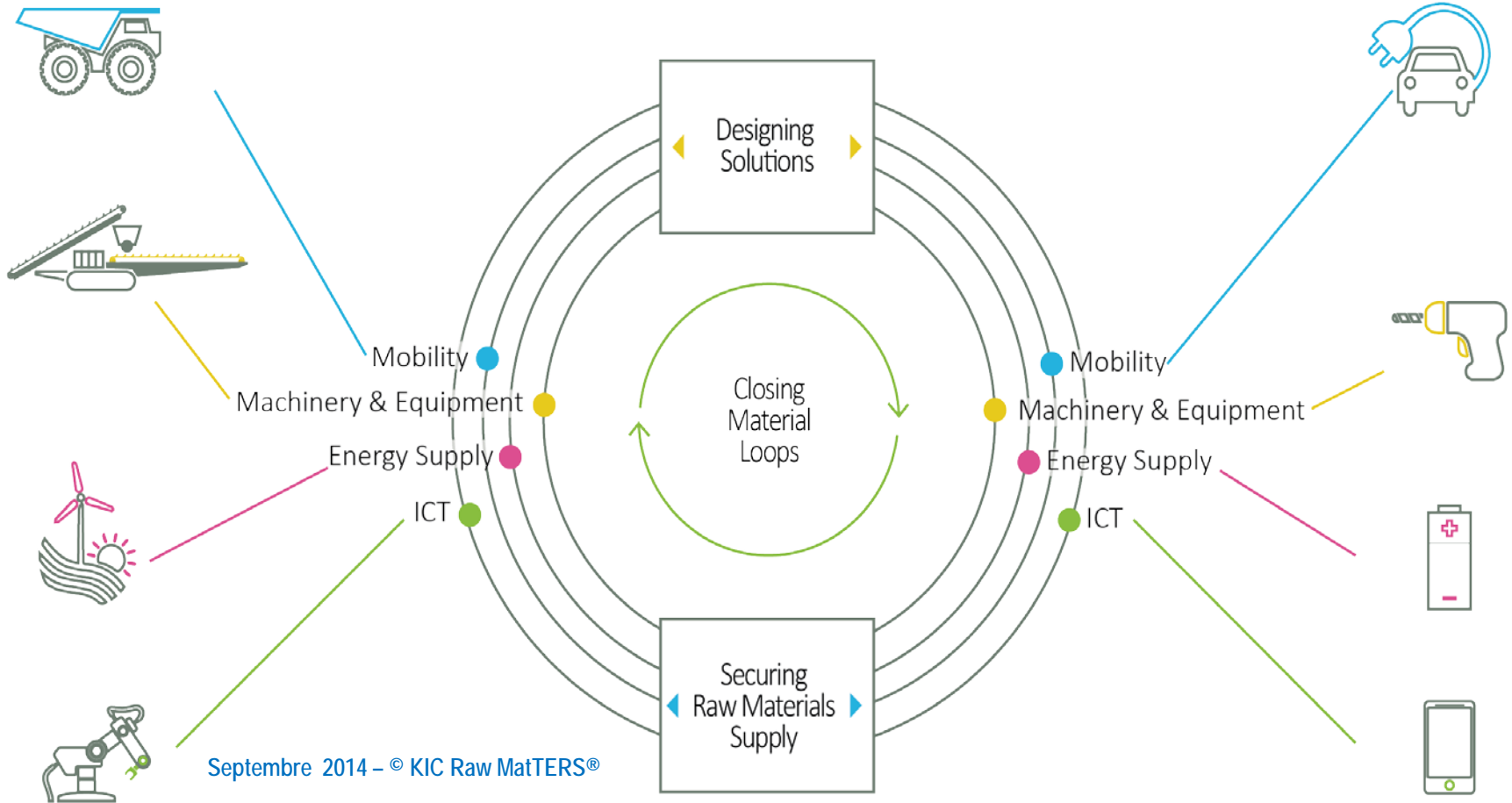
What it will achieve:

- KIC raw materials will be a knowledge hub and centre of expertise on academic, technical and practical education and research in **sustainable surface, subsurface, deep-sea, urban and landfill mining, material management, recycling technologies, end of life management, material substitution and open trade as well as global governance in raw materials.**

Strategic Perspectives and Focus Markets

... Solutions for Raw Materials

Raw Materials Solutions for...



6 knowledge & innovation themes

- New and renewed mining activities in Europe through innovative exploration methods and tools
- Mining in challenging environments
- Increased resource efficiency in metallurgical processes
- Material chain optimization for end-of-life products
- Substitution of critical or toxic materials in products
- Product and service design for the circular economy

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KIC Activities

4 pillars to develop knowledge-intensive community

Matchmaking & networking

Benefit: Connect with
the right people

Validation & acceleration

Benefit: Access to
research, test & demo
infrastructure

Business creation & support

Benefit: New market
opportunities &
business partners

Learning & outreach

Benefit: Access to
skilled workforce

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1. Matchmaking & networking

Benefit: Connect with the right people

- **Raw MatTERS Matches:** Facilitating the matchmaking between existing technologies and new business models & commercial partners, between students and jobs & internships, between SMEs and specific support & expertise
- **InfoCenter:** Service desk/network/database providing information on lab & test environment, research & expertise, business ideas & innovation
- **Idea Camp Event:** Event for idea exchange, starting event to generate ideas for other activities, such as Incubator & Accelerator services
- **Intrapreneur Event:** Event for generation and acceleration of intrapreneurship

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2. Validation & acceleration

Benefit: Access to research, test & demo infrastructure

- **Up-scaling:** Innovation projects to bring new developments with high technology readiness level to the market implementation phase
- **Demonstration Tools:** Creating tools that enable easy set-up of demonstration environments
- **Network of Labs:** Combining existing facilities to reach critical mass, opening up lab infrastructure to partners
- **Demos and Prototypes:** Building demonstration environments and prototypes for novel technologies

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3. Business creation & support

Benefit: New market opportunities & business partners

- **Incubator & Accelerator Services:** Supporting new spin-offs , start-ups and existing SMEs in creating their business, as well as providing entrepreneurship services (e.g. market analysis– business model definition – access to funding – access to technology – incubator services – access to pools of mentors & board representatives – coaching – pitching – patent screening – freedom-to-operate assessments, etc.)
- **Competitions for new business ideas and start-ups:** Annual KIC Raw MatTERS award to generate visibility for newcomers
- **Soft Landing:** Providing soft landing for SMEs expansion abroad and tailor made benchmarking and matchmaking of local/regional actors

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4. Learning & outreach

Benefit: Access to skilled workforce

- **PhD Modules:** Relevant course/seminar/workshop/game
- **Interdisciplinary Masters Modules:** Modules for Masters Programmes focusing on the Themes and Industry needs
- **Continuing Professional Education:** Lifelong learning approaches address the industry's needs for qualified professionals at all levels
- **Exhibition Bus/Trolley:** Raise society's and decision makers' awareness of raw materials-related issues and acceptance of related industrial activities

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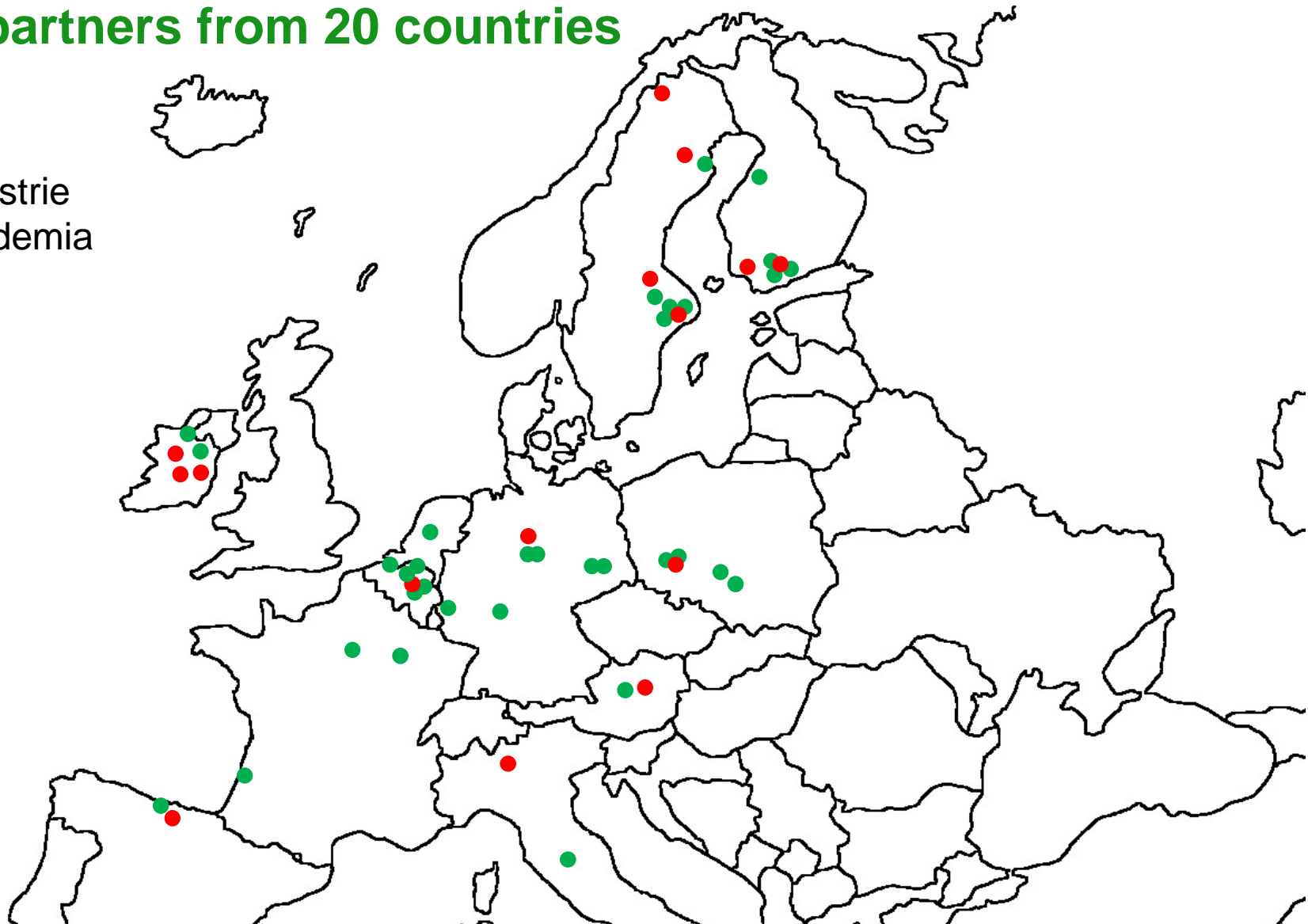
Membership

Categories	Rights
Core partner	<ul style="list-style-type: none">• Participation in decision bodies at KIC level (to define strategy, activity types, themes, societal functions)
Associate partner	<ul style="list-style-type: none">• Represented in regional steering group governing local KIC actions
Task partner	<ul style="list-style-type: none">• Participation in specific projects or activities• No decision-making power
Support partner	<ul style="list-style-type: none">• Supports the KIC through public or private funding, through providing access to local SME communities, etc.• Informed of all KIC activities

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A strong partnership with +/- 60 core-partners from 20 countries

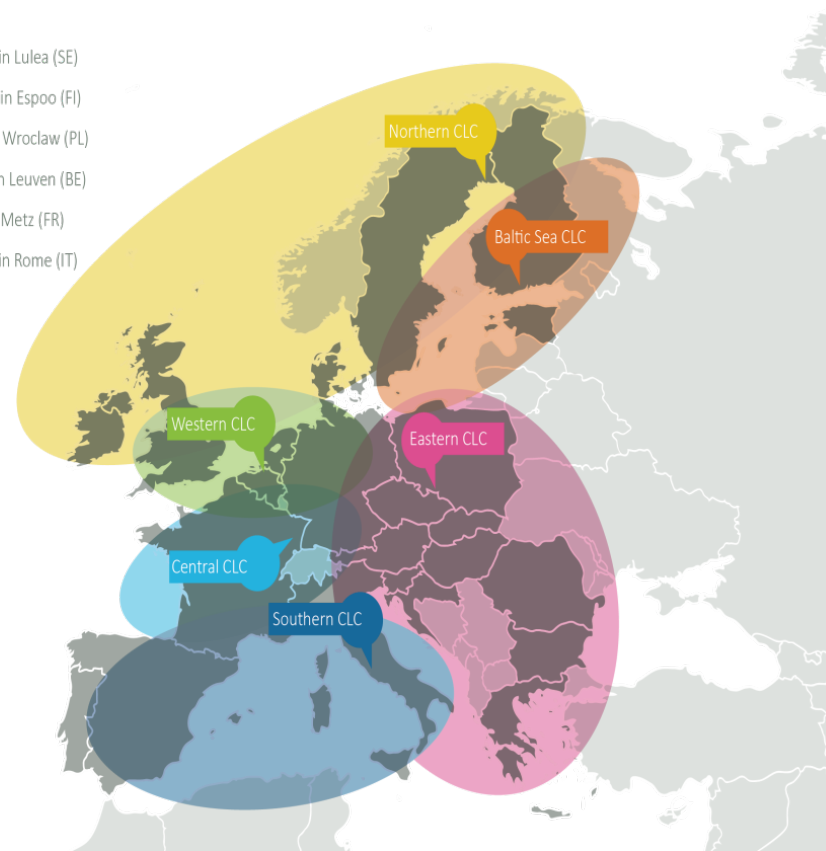
- Industrie
- Akademia



Local organization: CLCs

- Pan-European coverage
- Regional ecosystems covering the knowledge triangle
- Offer physical proximity and/or shared interest
- Transnational to stimulate cross-cultural networking and collaborations across Europe

- Northern CLC in Lulea (SE)
- Baltic Sea CLC in Espoo (FI)
- Eastern CLC in Wroclaw (PL)
- Western CLC in Leuven (BE)
- Central CLC in Metz (FR)
- Southern CLC in Rome (IT)



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KIC Raw Materials – Centres de co-localisation

Le rôle d'un CLC est de :

- Servir de hub
- Processus de remontée des propositions des partenaires du nœud
- Soutien du développement local
- Suivi et reporting sur activités KIC de la région
- Soutien aux activités entrepreneuriales
- Soutien / promotion / accompagnement des activités de formation
- Animation régionale

KIC Raw MatTERS – Le CLC central

CLC franco-allemand

- Couvre toute la chaîne de valeurs matériaux, avec forces particulières sur :
 - substitution (et réduction),
 - récupération et tri,
 - stratégies d'allègement,
 - matériaux multi-fonctionnels et intelligents,
 - traitements efficaces,
 - Métallogénie, Valorisation de minerais.
- Écosystème économique des deux pays dans le domaine des transports, du numérique, de la fabrication
 - Tissu de PME sous-traitantes de très grands groupes

KIC Raw Materials – CLC central

Recherche



Industrie



Enseignement supérieur



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KIC Raw Materials – CLC central

Soutien régional

Incubateur Régional d'Aquitaine

Créer, Innover, Entreprendre

cea | investissement
LABORATOIRES TECHNOLOGIQUES



Bayerisches Staatsministerium für
Wirtschaft und Medien, Energie und Technologie



Clusters et réseaux



Pôle de Compétitivité Matériaux



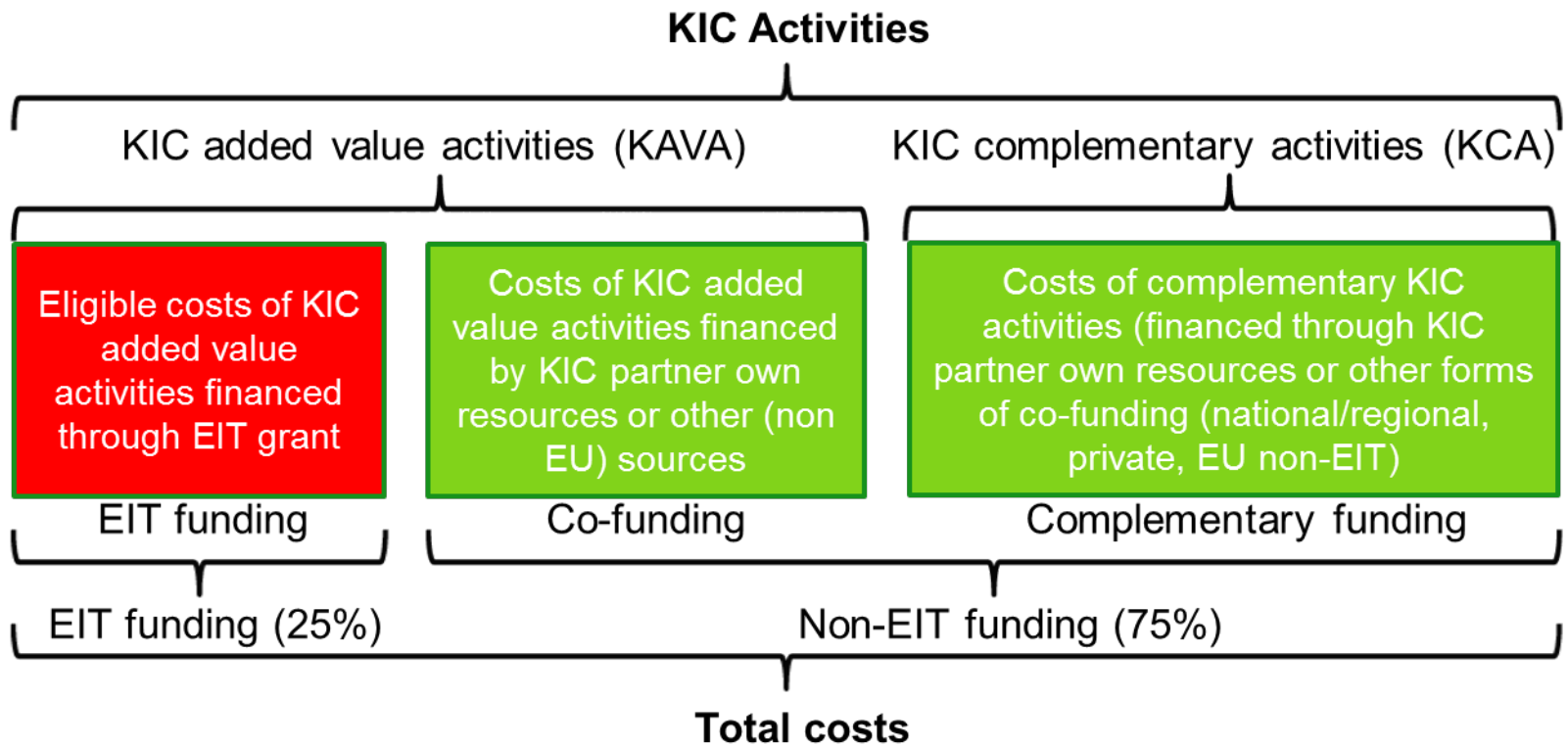
LE PÔLE ALSACE ÉNERGIVIE FOR POSITIVE ENERGY BUILDINGS



European Rare Earths Competency Network



Contexte – principe de fonctionnement d'une KIC



KIC Raw MatTERS – The Central CLC

