

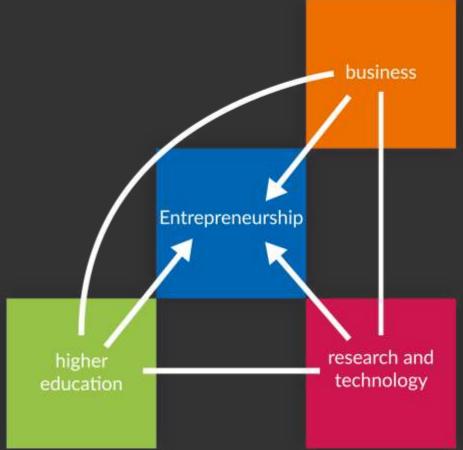
# Innovating the raw materials value chain

Didier Zimmermann, General Manager EIT RawMaterials Central CLC, Metz



## What is the EIT?

- EIT = European Institute for Innovation and Technology
- Building on the Innovation Triangle







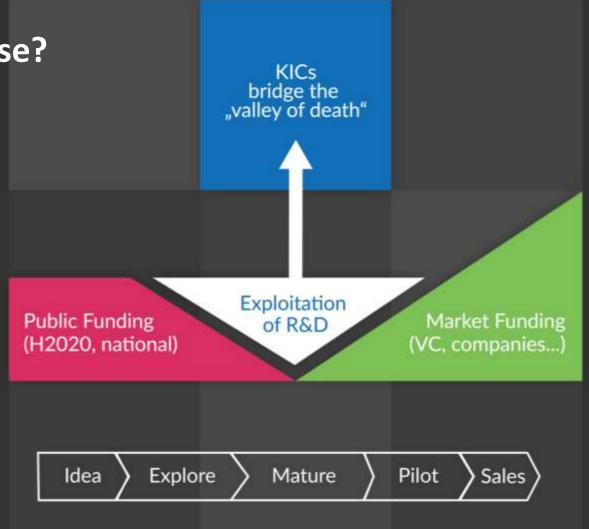
- Knowledge and Innovation Communities : KICs
- First wave
  - Energy
  - Digital
  - Climate
- Second wave
  - Health
  - Raw Materials





# What is the purpose?

- Bridging the valley of death
- Market introduction of products and processes
- Educate entrepreneurs





# **Funding Model**

No research funding



#### Portfolio of activities from:

- Education
- · Research and innovation
- Entrepreneuship
- Contributing to the integration of the knowledge triangle and the overall objectives of 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



# Challenges are opportunities

Rapidly increasing and diverse demand

Decreasing quality of resources

Vulnerable ecosystems



Unused material flows and stocks



Siloing across the value chain





### **EIT Raw Materials**

### Goals

- 1. Creating and developing new "game changing" businesses
- 2. Boosting the existing RM sector through the market introduction of new materials, investment in new production and processing units, system integration and the setting up of new partnerships
- 3. Achieving a "paradigm shift" in RM education by introducing entrepreneurship, supporting the effective transformation of ideas into businesses



## **Focus Markets**

- Material intensive
- Providing solutions for the raw materials sector





# A pan-European Network of Excellence

- Partner types:
  - Core
  - Associate
  - Task
  - Support

Well-balanced consortium with 115 partners

Partners in 22 EU countries with special focus on ESEE Northern CLC

Baltic Sea CLC

HQ

Eastern CLC

Southern CLC

Full coverage of value chains and commodities (especially CRMs) Business partners represent >700,000 jobs >200 billion € turnover

Partners' roles in EIP RM commitments: >75% participation 40% coordination



# **Knowledge and Innovation Themes**

- De-siloing
- Value Chain thinking
- Exploration and raw materials resource assessment
- Mining in challenging environments
- Increased resource efficiency in mineral and metallurgical processes
- Recycling and materials chain optimisation for End-of-Life products
- Substitution of critical and toxic materials in products and for optimised performance
- Design of products and services for the circular economy



### **Activities**

# Matchmaking & Networking

- 1. InfoCentre
- 2. Matches
- 3. Idea Camp
- 4. Intrapreneurship Facilitator

# Validation & Acceleration

- 5. Upscaling projects
- 6. Network of Infrastructure

# **Education** & Learning

- 7. PhD Education
- 8. Master Education
- 9. Lifelong Education
- 10. Wider Society Learning

# **Business Creation**& Support

- 11. Entrepreneurship Support services
- 12. Start-Up Booster
- 13. SME Growth booster
- 14. Kick-start Funding
- 15. Funding instruments



# EIT RM Central CLC

Location

ENIM, school of Engineers, Metz – Technopole



#### a hub of Innovation in the field of materials:

- IRTM2P
- C2IME
- CEA Tech
- Matéralia
- Metafensh
- Lafayette Institute
- LEM 3

#### Playground:

- France
- South & West of Germany



# EIT RM Central CLC

**Partners** 

#### Industrial:

Core: Arkema Eramet, Heraeus

Associate :
Arcelor Mittal,
Suez Environnement

Higher Education

Industrial

RTO:

Core : CEA

Associate:

#### **Higher Education:**

Core : Univ. de Bordeaux Univ. de Lorraine

Associate:
TU Darlmstadt
INP Grenoble



# EIT RM Central CLC

Mapping of interest

Survey among partners (Core & Associate)

on priorities regarding:

- Themes of Innovations &
  - Markets of interest



3 majors themes of Innovation

T5- Substitution of RM

T3 - Efficient processing of Resources

T4- Recycling of RM

With Circular Economy T6

#### Focus on 2 markets:

- Mobility
- Energy



## **Impact**

• Goals for 2022

+64
start-ups created
+80
Growth Booster projects

+50 new SMEs created that survived longer than 3 years +40 demos & protos

+180 Up-scaling projects

+5,000 students

+3,000

participants in educational workshops

+100 million €

industry savings due to higher resource efficiency

+8,000

entre- and intrapreneurshipminded people +8,000

jobs from all KPIs

+2,000

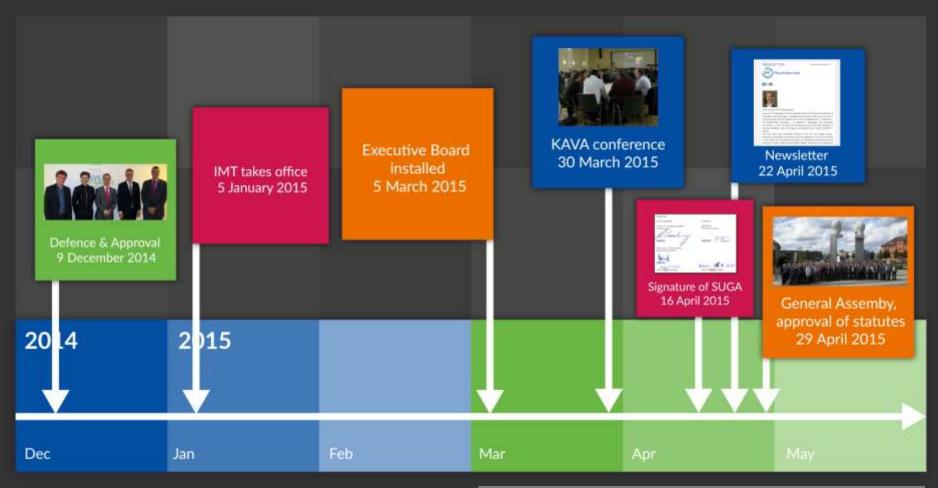
jobs from Perfect Job Track

+10,000

new jobs in the raw materials sector



## Q1 & Q2 –start-up year with implementation of the EIT RM

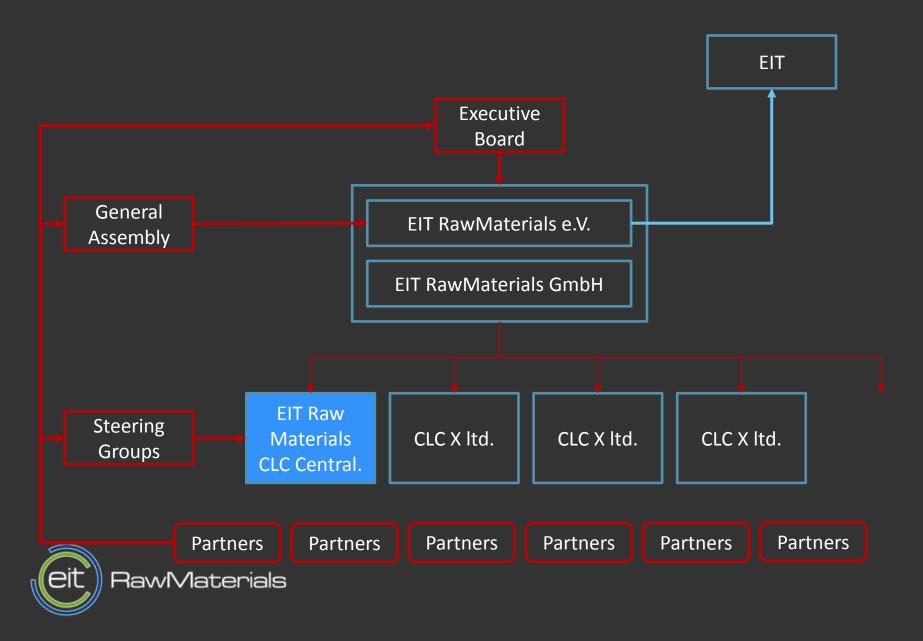




Q3 & Q4

followed by e.V. and GmBH implementation & the recrutment of the management staff at HQ

### Organization & Management of the EIT RawMaterials

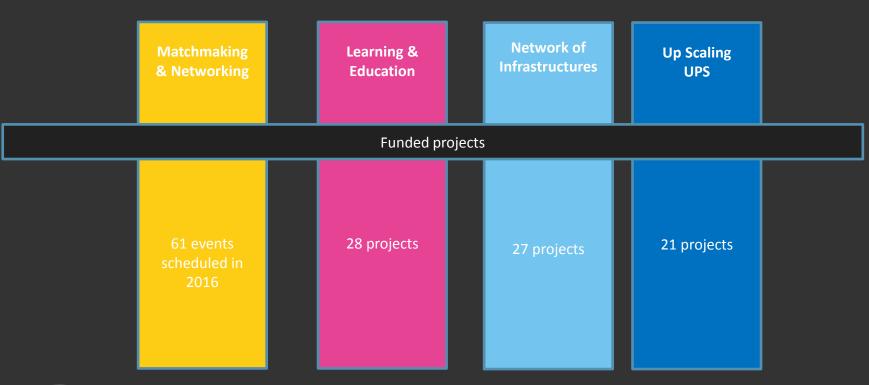


# **Launching of calls in 2015**

	Network of Infrastructures	Education (1 <sup>st</sup> )	Matchmaking & Networking	Education (2nd)	Up Scaling UPS	
Launching						
	April	May	May	July	July	
Deadline of submission						
	June	June	June	October	October	
Release of the decision						
	July	July	September (list)	December	December	

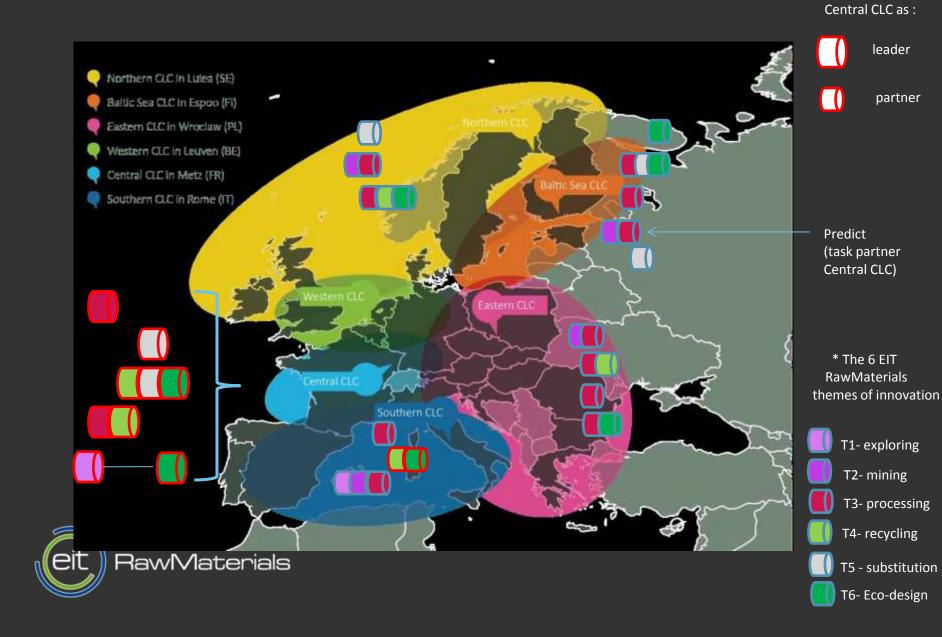


### Results – number of projects funded in 2016-2017





### As an illustration: results on UPS





# OUR VISION

To develop raw materials into a major stength for Europe

Thank you for your attention