



RawMaterials

# Introduction to a new Knowledge and Innovation Community

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a body of the European Union

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# What is a KIC?

- KIC = Knowledge and Innovation Community: A European consortium where the partners represent the knowledge triangle: Universities – Research Institutes – Industry (business)
- The activities within a KIC are financed 25 % in cash from EIT (European Institute of Innovation and Technology, a part of Horizon 2020, with headquarter in Budapest), and 75% by the partners.
- Now 5 KICs are in operation (only one in each EIT call)
  - Climate KIC
  - EIT Digital
  - KIC InnoEnergy
  - EIT Health
  - EIT RawMaterials



# The EIT and the KIC Mission is to

- Increase European sustainable growth and competitiveness;
- Reinforce the innovation capacity of the EU Member States; and
- Create the entrepreneurs of tomorrow and prepare for the next innovative breakthroughs.



# The activities within a KIC

- KAVA: KIC added value activities (financed by Cash from EIT and in-kind from the partners) within the theme of the KIC
  - Activities that add value to already existing activities performed by the partners
- KCA: KIC complementary activities (financed fully by the partners) within the theme of the KIC
  - The activities performed by partners to which the KIC gives added value
- EIT funding/partner funding = 1/3



# Important:

- Excellence is a must!
- Traditional research is not financed by EIT (i.e. cannot be a KAVA) but can be a complementary activity (i.e. KCA).
- Activities shall have innovation and entrepreneurship in focus.



# EIT RawMaterials



62 Core partners  
54 Associated partners

Totally of the 116 partners:  
43 Universities  
34 Research institutes  
39 Business



Figure 5: Distribution of Core Partners over the Knowledge Triangle



# Establishing a pan-European network of excellence



RawMaterials



Well-balanced consortium with 116 partners

Partners in 22 EU countries with special focus on ESEE

(Eastern and South-East Europe)

Full coverage of value chains and commodities (especially CRMs)

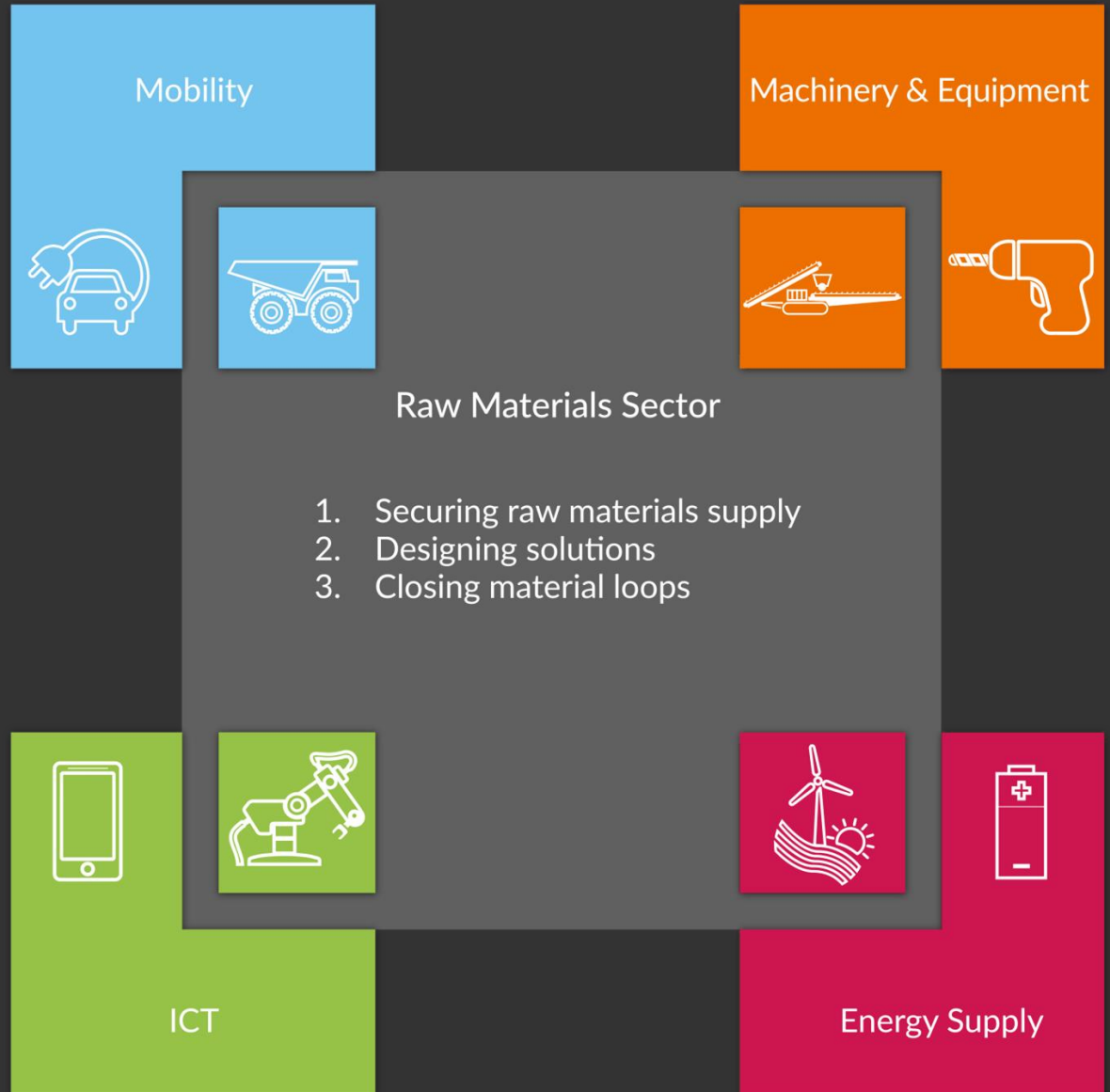
Business partners represent  
>700,000 jobs  
>200 billion € turnover

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





# Focus Markets



# Coverage of the resource industry





# Knowledge and Innovation themes

1. Exploration and RM resource assessment;
2. Mining in challenging environments;
3. Increased resource efficiency in mineral and metallurgical processes;
4. Recycling and material chain optimisation for End-of-Life products;
5. Substitution of critical and toxic materials in products and for optimised performance;
6. Design of products and services for the circular economy.

# 15 KAVA Types

## ***Matchmaking&Networking***

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

## ***Education&Learning***

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

## ***Validation & Acceleration***

5. Upscaling projects
6. Network of Infrastructure

## ***Business Creation & Support***

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

# Initial plans

## Overall expected budget cuts

in MEUR	2014	2015	2016	2017	2018	2019	2020	2014-2020
<b>EIT Indicative Budget - original</b>	235	279	336	408	430	483	539	2,711
<b>proposed cuts 15/01/2015</b>	0	25	136	107	22	30	30	350
<b>% of original budget</b>	NA	9%	40%	26%	5%	6%	6%	NA
<b>EIT indicative budget after the cut</b>	235	254	200	301	408	453	509	2,361

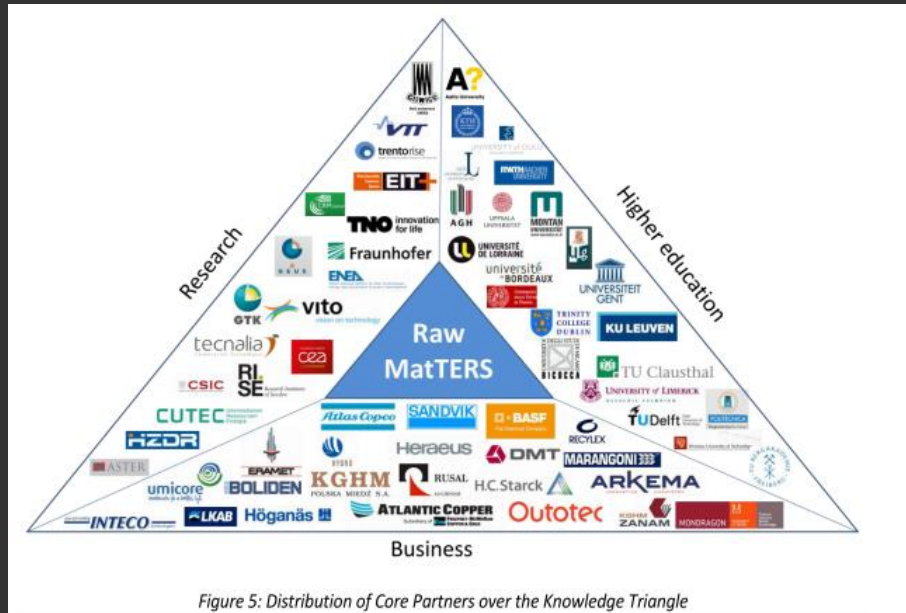
## Break down to EIT Raw Materials

in MEUR	2016	2017	2018	2019	2020	2021	2022	Total
<b>EIT funding (proposal)</b>	25	48	58	66	74	73	66	410
<b>Expected cuts</b>	ca. 50%	26%	5%	6%	6%	NA	NA	ca. 10%
<b>EIT funding (after cuts)</b>	12	35	55	62	69	73	66	372



# Baltic Sea CLC Otaniemi

- Action focus on cross-KIC level in projects either in one or several CLC's between several partners and countries
- EIT funding through KAVA (KIC Added Value Activities) projects on new innovations, entrepreneurship and education
- Overall impact of the whole consortium for 2016-2022 about 2 billion €



## Baltic Sea CLC Region

Materials, tools, machinery, equipment and services for innovative industrial solutions; optimized minerals and metallurgical processing; modelling, simulation and virtual RM design; systemic materials data management and databases

**CORE PARTNERS** Industry: [Höganäs](#) (SE), [Outotec](#) (FI), [Sandvik](#) (SE); **Research Institutes:** Geological Survey of Finland [GTK](#) (FI), Technical Research Centre of Finland [VTT](#) (FI); **Universities** [Aalto](#) University (FI), Royal Institute of Technology [KTH](#) (SE), University of Oulu [OU](#) (FI)

**ASSOCIATE PARTNERS** Industry: [Metso](#) (FI), [Spinverse](#) Consulting, (FI); **Universities** Lappeenranta University of Technology [LUT](#) (FI), [Lund University](#) (S), Tallinn University of Technology [TUT](#) (EE); **Clusters:** [FIMECC](#) (FI), [Jernkontoret](#) (SE)



## Industrial benefits at Baltic Sea CLC

- Connections to new talented experts, possibility to influence their education
- Continuous learning for own personnell accross the whole raw material value chain
- Network access to excellent research partners, innovative start-ups and SMEs
- Close co-op on idea development with researchers, SMEs and industrial partners
- A natural partner network for future EU calls





# Management committee of Baltic Sea CLC

- Olli Salmi CLC manager ([olli.salmi@eitrawmaterials.eu](mailto:olli.salmi@eitrawmaterials.eu))
- Denise McCluskey Education officer ([denise.mccluskey@eitrawmaterials.eu](mailto:denise.mccluskey@eitrawmaterials.eu))
- Harry Sandström Business developer ([harry.sandstrom@spinverse.com](mailto:harry.sandstrom@spinverse.com))

John Ågren KTH representative ([john@kth.se](mailto:john@kth.se))



# The KIC education mission...

**is to raise a new generation of entrepreneurs and innovators in Europe** by delivering a unique brand of excellent and relevant education responsive to both business and societal demands, focused on creativity, innovation and entrepreneurship.

Integration of the three parts of the knowledge triangle;  
**education – research – business/innovation**



# The EIT RAW Materials Academy

- An umbrella under which the education given by KIC partners in the area of raw materials is offered
- Focuses on fostering innovation and entrepreneurship along the full raw materials value chain and brings added value to RM sector by delivering increased knowledge and skills
- KAVA education activities
- EIT labeled programmes (Master and PhD)
- Ongoing on-line survey on industrial needs of education in EIT Raw Materials



# KAVA calls for education and learning

- Excellent opportunities for funding to develop new courses/education activities relevant to the KIC issues or to modify existing programs
- 2 calls in 2015, the projects proposed for funding are included in the 2016 Business plan, next call 2016

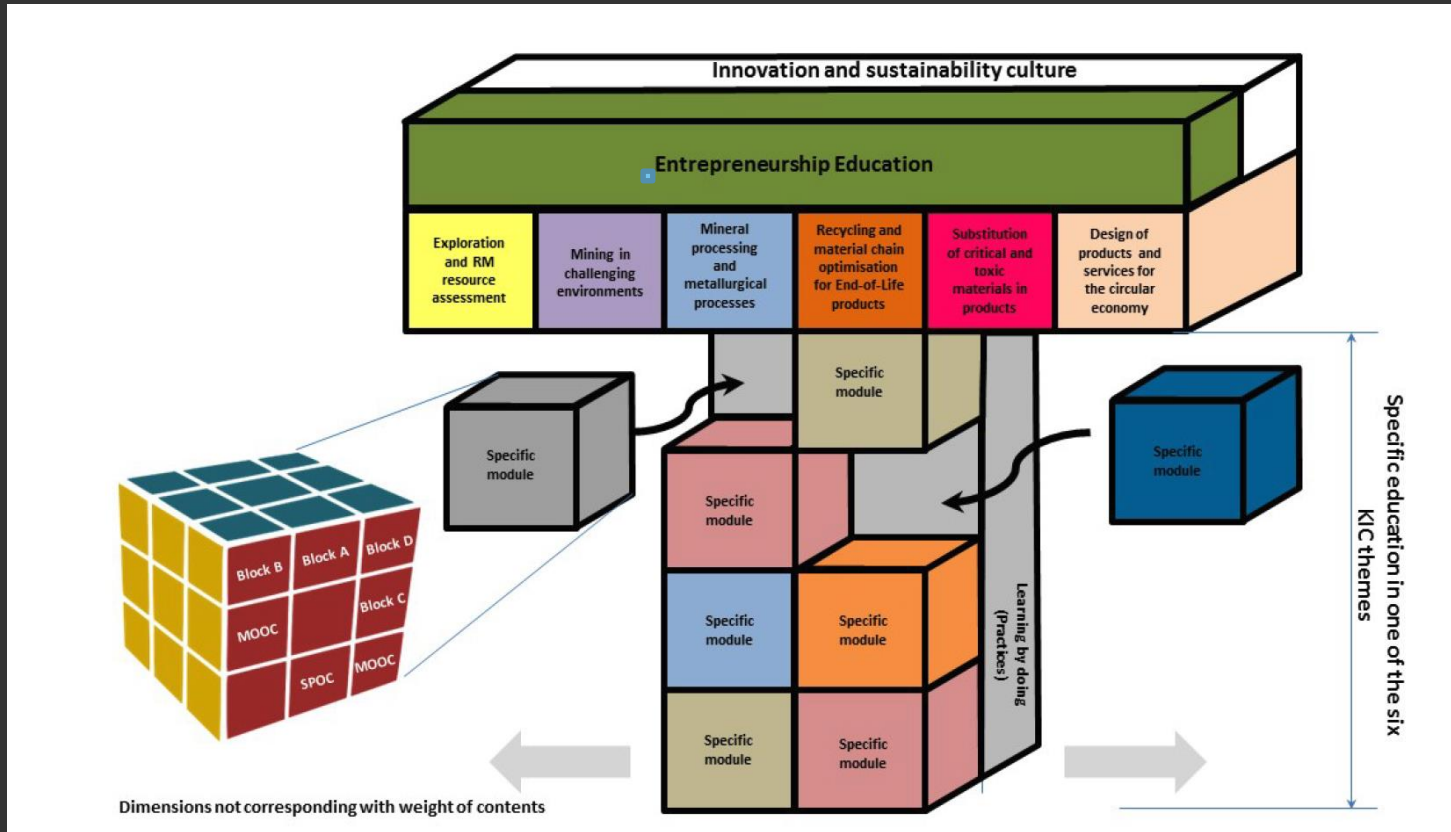


# KAVA education activity requirements

- Minimum of 3 KIC core or associate partners from minimum 2 different CLCs or minimum 2 countries
- Partners from at least two sides of the knowledge triangle (**education – research – business /innovation**)
- Project duration max 3 years
- Non-EIT/EIT funding ratio: education activities are required to reach non-EIT/EIT funding ratio 50/50



# The T-shaped professional





# KAVA (KIC Added Value Activities) education activities

## **KAVA 7: PhD Education**

- covers any new activity aimed at educating PhD students in the Raw Materials field with a perspective of entrepreneurship and fitting industry needs
- physical and online courses, seminars, workshops, exchange programs, summer schools, doctoral schools etc.





# KAVA (KIC Added Value Activities) education activities

## **KAVA 8: Master Education**

- new activity aimed at educating Master students in the Raw Materials field with a perspective of entrepreneurship and fitting industry needs
- physical and online courses, seminars and workshops, exchange programmes, summer schools, and relating tools etc.



# KAVA (KIC Added Value Activities) education activities

## **KAVA 9: Lifelong Education**

- New activity aimed at lifelong education in the Raw Materials field with a perspective of entrepreneurship and fitting industry needs
- Physical and online courses, training, seminars and workshops, programmes targeted for professionals and experts, adult education activities



# KAVA (KIC Added Value Activities) education activities

## **KAVA 10: Wider Society Learning**

- Covers new targeted communication and awareness raising activities to increase society's knowledge of RM issues, with an aim to raise people's interest in the RM sector
- To attract future students, to increase goodwill towards RM industry activities and secure social license to operate for RM industries.
- Activities aiming at guiding individuals towards the perfect job can also be included
- Target audience: primary and secondary schools (students + professors), higher education, working professionals, citizens and general public, local authorities, policy makers



# KAVA education project evaluation criteria

- Strategic importance for the KIC
- Economic importance
- Geographical scope
- Quality of the consortium
- Quality of the project definition (objectives, target audience, work programme)
- Expected impact
- KCA and other contributions from partners
- Financial sustainability



# Present project portfolio



KAVA Activity	Projects approved		2016 KAVA	Project budget 2017
Education 28 projects	Master education	6 projects	1.412 M	
	PhD education	6 projects	0.790 M	
	Lifelong learning	8 projects	1.396 M	
	Wider society learning	7 projects	0.730 M	
	RM Academy	1 project (+)	0.050 M	
Total			4.376 M	2.967 M
Validation & Acceleration 48 projects	Network of infrastructure	27 projects	2.458 M	1.975 M
	Up-scaling	21 projects	7.595 M	10.126 M
Total			10.053 M	12.100 M
Business creation & support. 7 projects	Entrepreneurship services	7 projects	1.428 M	
Other	Internationalisation	3 projects	0.155	
All		86 projects	16 M*	15 M

\*KAVA includes cofunding (partner/regional/national) and Membership fee financing. Total EIT funding for 2016 for projects is ~ 10.3 M



# Present call (deadline 31 May)

Open on the following KAVA instruments:

- Upscaling, Networks of Infrastructure
- Master's and PhD Education
- Lifelong Education
- Wider Society Learning
- Entrepreneurship Support Services
- Internationalization projects (new)
- EIT Regional Innovation Scheme (new).



# Important action points

- KIC-wide brokerage event 25-26 February in Berlin (2 representatives from each partner)
- Uppsala workshop on entrepreneurship and innovation in education 9-10 March
- BCLC partner meeting in Tallin 22-23 March – matchmaking between BCLC partners, main focus on SME's and start-ups (register Feb 26 at latest)
- The CLC management team will assist in coaching your KAVA proposals as soon as you have a draft (before 15 April)



# OUR VISION

To develop raw materials into a major strength for Europe.

