

EIT Rawmaterials Innovaatioiden ja Kasvuyrittämisen vauhdittajana

Mikko Korhonen 4.12.2017

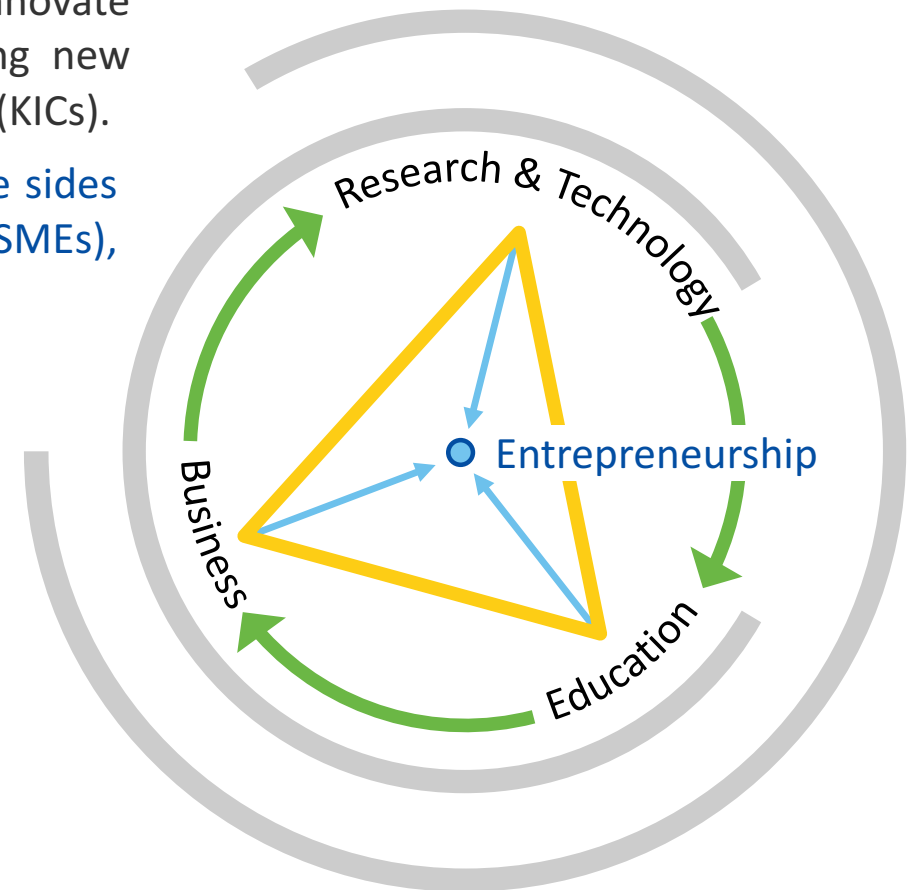
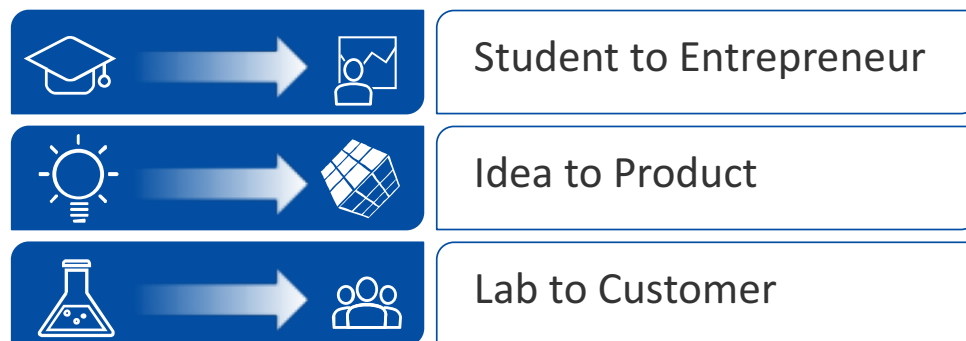


EIT (European Institute of Innovation and Technology)

The EIT is an EU body that enhances Europe's ability to innovate by nurturing young entrepreneurial talent and supporting new ideas through the Knowledge and Innovation Communities (KICs).

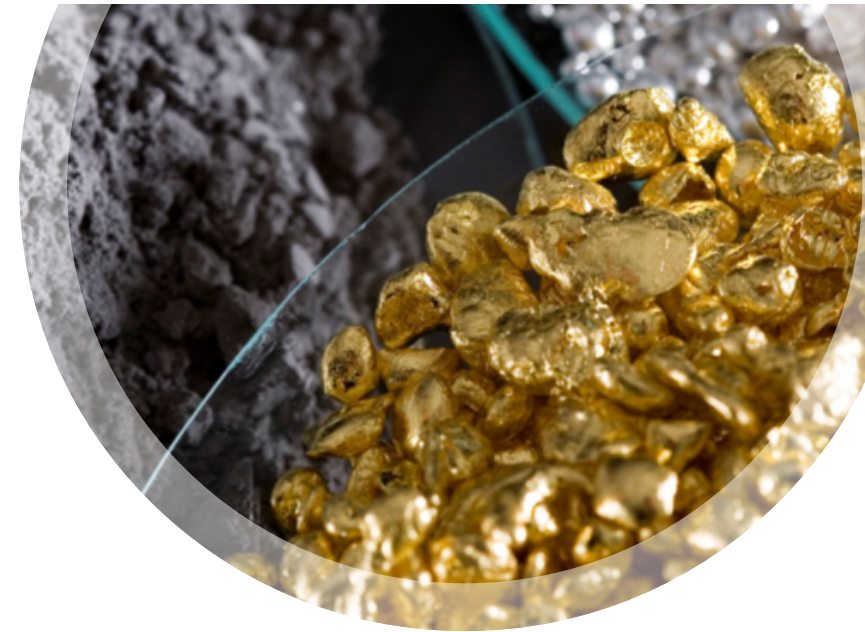
The EIT is the first EU initiative bringing together the three sides of the "knowledge triangle": Business (companies and SMEs), Higher Education Institutions and Research Centres.

The EIT aims to increase the cooperation and integration between education, business and research to facilitate the transition from:



What is EIT RawMaterials?

- A company formed by 120 European partners from metal and mineral sectors
- Aims to improve innovation in the raw materials value chain through financial support and network activities
- Focus is the whole raw material value chain: From exploration to mining, and from processing to recycling, substitution and eco-design
- Financially supported by the European Union (2017 ca EUR 42 M, 2018 ca EUR60M)
- Pre-commercial funding, TRL* 5-7



Technology Readiness Level

TRL 5:

Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6:

Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7:

System prototype demonstration in operational environment

A pan-European Network of Excellence

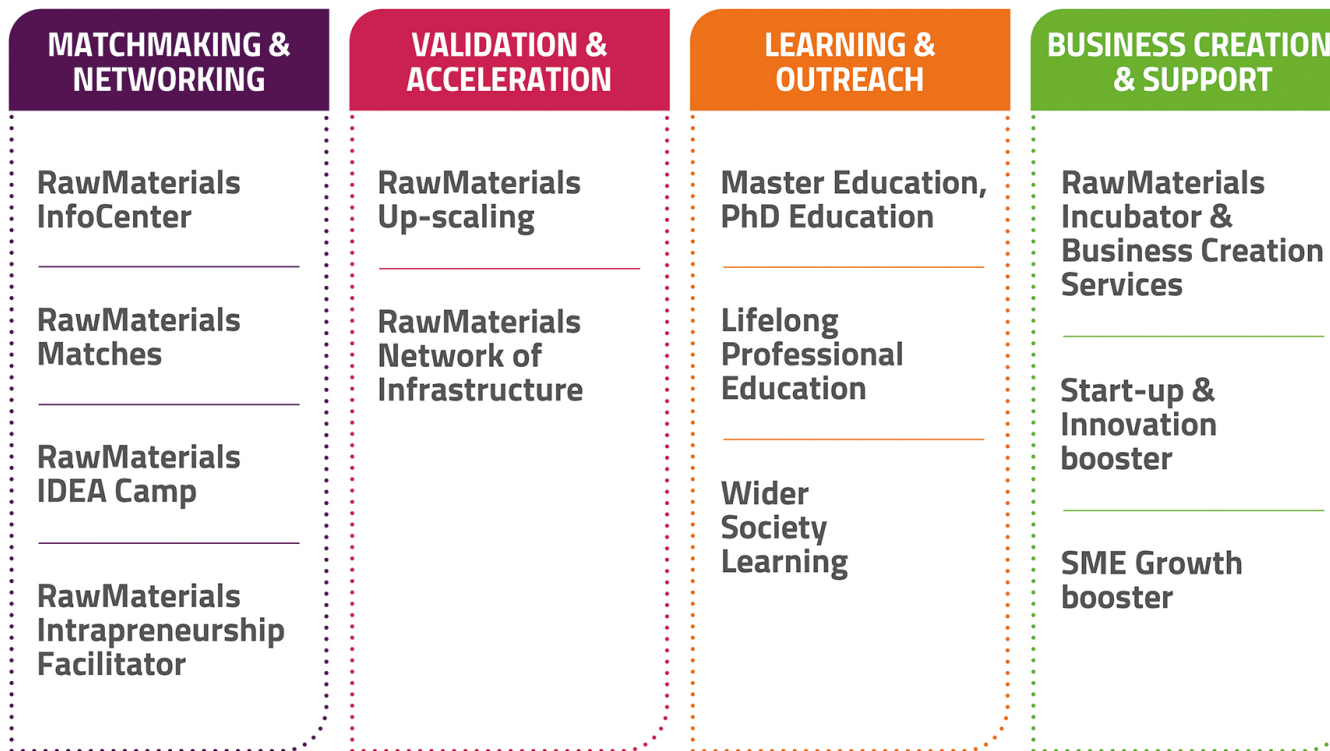
- 120 partners
- 22 countries
- Coverage of full value chain
- Six Co-Location-Centers across Europe
- Headquarter in Berlin, Germany



Our partners – our network – our knowledge triangle



EIT RawMaterials Activities

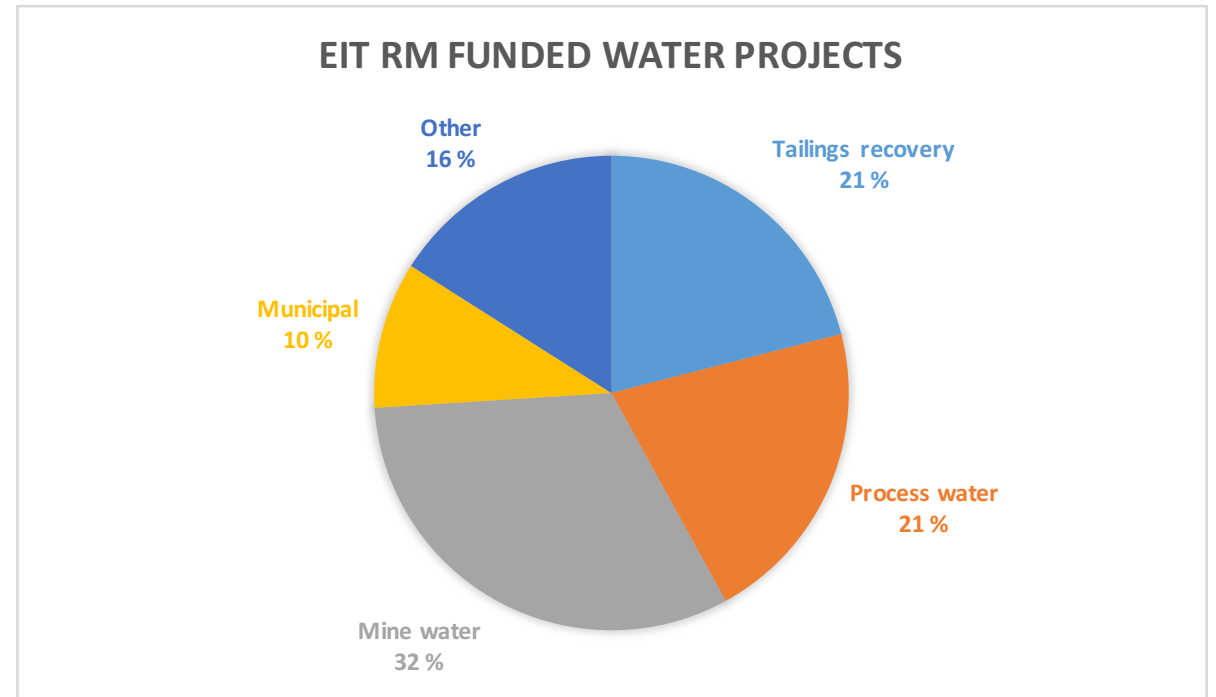


How does EIT Rawmaterials work?

- Effective networking: EIT RawMaterials runs up to 50 different matchmaking and networking events annually, with easy access to all our partners
- Annual calls for funding, minimum criteria 3 partners from 2 CLCs / countries
- Partners can apply: Matchmaking, Validation & Acceleration, Learning & Education projects, typically 100-300k€, up to 5M€
- Start-ups / growth companies / idea holders can apply: grant funding (up to 60k€ or equity)

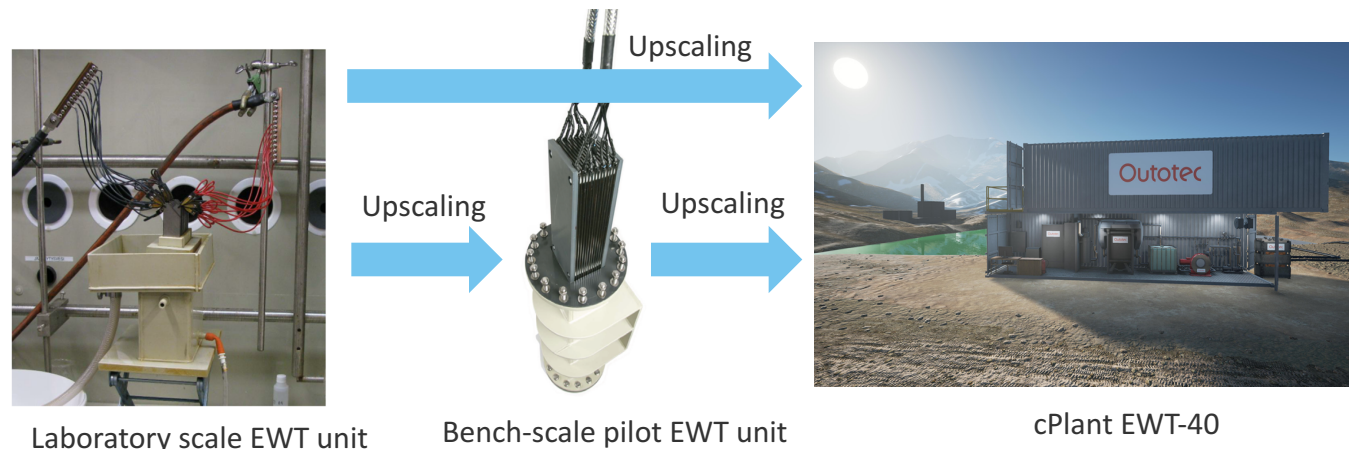
Water, mine water and tailings recovery related projects

- Mostly upscaling (TRL 5-9)
- 12 projects
- Total funding 19,7 Meur so far
- >50% on mine or process water



EWT-CYNCOR

- Develop and optimize electrochemical treatment methods for cyanide and nitrogen compounds removal from water
- Find suitable S/L separation solutions for produced EWT sludge
- Produce stable solid product (EWT "waste") that can be easily disposed
- Upscale developed treatment concept to be tested at prototype on-site (commercial scale)



Start-up examples



Patented technology for recovery of metals and rare earth elements in water management systems for hydrometallurgical industry, based on the use of magnetic nanoparticles with lipophilic and hydrophilic coating, which makes them stable in water and capable of adsorbing/emulsifying large amounts of hydrophobic/lipophilic compounds.

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Owazone proposes an innovation based on low-temperature evaporation via use of mechanical vapour recompression (MVR). After efficient concentration, any impurities can be recovered from the waste water with high efficiency and minimal chemical consumption. Metals are recovered as pure salt crystals while water is purified to potable quality, with low energy input.

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WEBSITE: owa.fi

FesiLeg

FesiLeg utilizes two waste streams, red mud and waste silicon (mainly of-cycle solar panels or dried saw slurry), to recover a new valuable and competitive resource, ferrosilicon... via a silicothermic reduction of ironoxid. This technology offers the possibility to add other metal-oxides as chromium, nickel, titanium, vanadium and others, which are also reduced by silicothermic reaction, in order to obtain ferrosilicon alloys with these metals.

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ROCKATHON
MINING
CHALLENGE

HACK theRock!

Application deadline 19 May 2017

EIT RawMaterials is supported by the EIT, a body of the European Union



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BUSINESS IDEA COMPETITION

Deadline: 31 May 2017
Prizes: 112.500 Euro

Apply here: eitrawmaterials.eu/business-idea-competition/2017/



EIT RawMaterials is supported by the EIT, a body of the European Union



Business Ideas Competition in Raw Materials

Deadline to participate:
17 October 2016
45,000 euros in prizes

For more information and submissions: www.eitrawmaterials.eu



RawMaterials

Connecting matters

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