Introduction to a new Knowledge and Innovation Community

John Ågren, 2016-02-23

http://eitrawmaterials.eu/
Content

- What is a KIC?
- The activities in a KIC; KAVA, KCA
- KIC EIT RawMaterials
- KAVA types in EIT RawMaterials
- Tentative over-all budget
- Baltic Sea CLC (BCLC)
- Management Committee of BCLC
- Education
- Present project portfolio
- Present Call (deadline 31 May)
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 headquarters 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.
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

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

Raw Materials Sector

1. Securing raw materials supply
2. Designing solutions
3. Closing material loops
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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EIT Indicative Budget - original</td>
<td>235</td>
<td>279</td>
<td>336</td>
<td>408</td>
<td>430</td>
<td>483</td>
<td>539</td>
<td>2,711</td>
</tr>
<tr>
<td>proposed cuts 15/01/2015</td>
<td>0</td>
<td>25</td>
<td>136</td>
<td>107</td>
<td>22</td>
<td>30</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td>% of original budget</td>
<td>NA</td>
<td>9%</td>
<td>40%</td>
<td>26%</td>
<td>5%</td>
<td>6%</td>
<td>6%</td>
<td>NA</td>
</tr>
<tr>
<td>EIT indicative budget after the cut</td>
<td>235</td>
<td>254</td>
<td>200</td>
<td>301</td>
<td>408</td>
<td>453</td>
<td>509</td>
<td>2,361</td>
</tr>
</tbody>
</table>

#### Break down to EIT Raw Materials

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EIT funding (proposal)</td>
<td>25</td>
<td>48</td>
<td>58</td>
<td>66</td>
<td>74</td>
<td>73</td>
<td>66</td>
<td>410</td>
</tr>
<tr>
<td>Expected cuts</td>
<td>ca. 50%</td>
<td>26%</td>
<td>5%</td>
<td>6%</td>
<td>6%</td>
<td>NA</td>
<td>NA</td>
<td>ca. 10%</td>
</tr>
<tr>
<td>EIT funding (after cuts)</td>
<td>12</td>
<td>35</td>
<td>55</td>
<td>62</td>
<td>69</td>
<td>73</td>
<td>66</td>
<td>372</td>
</tr>
</tbody>
</table>
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)
- Denise McCluskey Education officer (denise.mccluskey@eitrawmaterials.eu)
- Harry Sandström Business developer (harry.sandstrom@spinverse.com)

John Ågren KTH representative (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 ration 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

<table>
<thead>
<tr>
<th>KAVA Activity</th>
<th>Projects approved</th>
<th>2016 KAVA</th>
<th>Project budget 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td>Master education</td>
<td>6 projects</td>
<td>1.412 M</td>
</tr>
<tr>
<td>28 projects</td>
<td>PhD education</td>
<td>6 projects</td>
<td>0.790 M</td>
</tr>
<tr>
<td></td>
<td>Lifelong learning</td>
<td>8 projects</td>
<td>1.396 M</td>
</tr>
<tr>
<td></td>
<td>Wider society learning</td>
<td>7 projects</td>
<td>0.730 M</td>
</tr>
<tr>
<td></td>
<td>RM Academy</td>
<td>1 project (+)</td>
<td>0.050 M</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Network of infrastructure</strong></td>
<td><strong>27 projects</strong></td>
<td><strong>2.458 M</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Up-scaling</strong></td>
<td><strong>21 projects</strong></td>
<td><strong>7.595 M</strong></td>
</tr>
<tr>
<td><strong>Validation &amp; Acceleration</strong></td>
<td><strong>Entrepreneurship services</strong></td>
<td><strong>7 projects</strong></td>
<td><strong>1.428 M</strong></td>
</tr>
<tr>
<td>48 projects</td>
<td><strong>Internationalisation</strong></td>
<td><strong>3 projects</strong></td>
<td><strong>0.155</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>All</strong></td>
<td><strong>86 projects</strong></td>
<td><strong>16 M</strong></td>
</tr>
</tbody>
</table>

*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 haft a draft (before 15 April)
OUR VISION
To develop raw materials into a major strength for Europe.