

EIT RawMaterials Academy Consolidation Action Plan

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RM Academy Consolidation Strategy

1. Background.....	3
2. Learning & Education Baseline.....	3
3. ACTION PLAN.....	4
3.1. General Consolidation Action	4
3.2. Specific Consolidation Actions	5
3.3. Master and PhD programmes with focus on the EIT Labelled programmes	6
3.4. Wider Society Learning.....	8
3.5. Lifelong Learning	8
3.6. Alumni organisation	9
3.7. ESEE region	9

1. Background

The Learning & Education pillar of the EIT RawMaterials aims to ensure that the different segments of European society are equipped with the vital knowledge, skills and competences necessary for innovation in the raw materials sector and to make the sector strong and stable in Europe. In order to do this, an equilibrium must be established where the capacity of the domains of learning – Lifelong Learning, Wider Society, Higher Education – contribute to the European raw materials base.

2. Learning & Education Baseline

2.1. 1st Fact: There is both a shortage of people and a skills gap in the raw materials sector.

The EIT RawMaterials Academy aims to attract people to the sector with an educational concept that accelerates skill development combined in a blended model comprising:

- Standard technical skills in relevant discipline
- Hands-on learning
- An overview of the entire raw materials value chain
- Innovation & entrepreneurship (I&E) training

This blended model ensures that learners benefit from systems-oriented programmes which take a holistic value chain approach whilst actively learning vital I&E skills necessary for guiding raw materials ideas to market solutions that will strengthen the sector. The Unique Selling Point (USP) for our education is the access to the partnership, especially its industry and Research partners that are not traditionally involved in education. This, combined with new teaching and learning tools, give our learners the benefit of a targeted and accelerated career path. Actions to further strengthen our KIC USP can be found below in the section on General and Specific Action Plans.

2.2 2nd Fact: Wider Society – civil society, school pupils and policymakers – are key stakeholders in an economy where raw materials is a strength.

Our KIC Learning & Education programmes will continue to reach out to the general public, pupils and policymakers to emphasize and showcase the significance of raw materials in society. We will underline how they as consumers and decision makers contribute to a society where raw materials is a strength. Actions to further build on existing Wider Society programmes, and also consolidate existing ones, can be found in the section on Specific Action Plans.

2.3 3rd Fact: Our portfolio analysis shows that there is no thematic gap in our portfolio

In response, there is no need to diversify our portfolio from a thematic point of view. Instead, we will consolidate the existing partners' initiatives (KAVA projects) in several aspects. Actions to do so can be found below in the General and Specific Action Plans.

3. Action Plan

The following Action Plan has been developed to further strengthen, refine and consolidate the EIT RawMaterials education programmes in different domains of learning. Three general actions will be implemented supported by specific actions per domain of learning.

3.1. General Consolidation Action

For all domains of learning, consolidation will consist of the following:

Strengthening industrial orientation. The Education Team will carry out an Education Roadshow. This means the Education Team will establish a working relationship with the top-level of 5 KIC industry partners in order to ascertain the skills and competencies requirements,

now and in the future. A robust consultation framework will be developed in advance which will guide the interaction and coherently extract the information. Information provided by industry will be inventoried, analysed and influence the thematic scope for flexible and long-term training offers, both in higher education and lifelong learning.

The Education Team, with support from the Education Committee, will set up a small Advisory Board to advise partners and the Education Team on the re-design of educational programmes (higher education and lifelong learning). The composition, terms of reference and governance structure of the Advisory Board will be developed with guidance from the Education Committee.

√ RESULTS: Closer cooperation with industry; inventory and analysis of industry needs; salient education programmes which build demand-driven capacity of future and existing human capital

Gender diversity. Develop a gender diversity strategy for the four domains of learning.

√ RESULTS: Increase the number of female participants in our programmes.

Communication and Marketing Strategy. In order to continue refining, harmonizing and increasing the visibility of all education programmes, a robust Communication and Marketing Strategy will be developed which will establish the guidelines and procedures for dissemination of education programme offerings. One FTE in the RM Academy will be hired to assist with developing and implementing a Communication and Marketing Strategy for education programmes. The RM Academy will coordinate and ensure the strategy for each programme is implemented centrally and by partners in order to maximize visibility to the relevant target groups.

√ RESULTS: Coherent branding and heightened visibility of EIT RM education programmes; increasing number of applications to and participation in programmes

3.2. Specific Consolidation Actions

Specifically, for the four domains of learning, consolidation will consist of the following actions:

3.3. Master and PhD programmes with focus on the EIT Labelled programmes

With the exception of circular economy, our 5 Labelled Master programmes cover the entire value chain.

For PhD, all themes are covered in our two Labelled programmes, including circular economy by both programmes.

Because all themes are covered and considering the limited budget in the Academy, a cap for new Labelled programmes will need to be decided on now by the Executive Board in principle to ensure that sufficient funds are available for the consolidation of the existing labelled programmes and a limited number of new ones. The concrete cap on labelled programmes will then depend on the KIC funds made available for education as a whole.

Therefore, the Consolidation Action Plan will consist of the following actions adapted to Master and PhD level, respectively:

Consolidate summer school programmes based on real industrial cases, using industry and academic input. The Education Team will map and consolidate existing EIT RM summer schools together with the Education Committee, resulting in a total of 3-4 different summer school themes. The summer schools will share a standardized format, but each will address a different theme. This will enable the Academy to build a branding around each summer school theme and recruit participants centrally. The summer schools should also be open to students from both partner and non-partner universities who are not enrolled in the Labelled programmes.

√ **RESULTS:** Win-win situation for industries and students thanks to mutual exchange of solutions to business challenges and scouting of talent, resulting in greater efficiency by removing duplication and clustering summer school themes; improved brand, coordinated communications and quality assurance through harmonization of curriculum

Digital transformation. Integrating a module on Industry 4.0 in all programmes, possibly as a blended learning component for Master programmes. This will be done in two-steps. In the short term, it will be offered as an optional course, possibly one of the topics of the summer school offerings in the previous action. In the long term, it is to be an integral part of all labelled Master programmes. For PhD programmes, this will be in the format of a short course.

√ RESULTS: students equipped with vital Industry 4.0 knowledge and skills for the raw materials sector after graduation

I&E harmonisation of pedagogy. In addition to knowledge of the subject area (technical skills), the Education Team, together with the support of the Education Committee, will develop an I&E ingredient list which shall include the main I&E concepts to be recommended to Master and PhD programmes to include in their courses. Such main I&E concepts could include inter alia business modeling, science communication, finance and accounting, etc. These I&E recommendations will be developed in consultation with the Education Committee and through a consultation with university business schools of KIC partners.

√ RESULTS: Students equipped with sector-relevant I&E skills; improved branding

Financial sustainability. Explore together with Label programmes how to secure Erasmus+ funding, and also other sources of non-KIC funding, in order to ensure programme longevity after KIC funding ends.

√ RESULTS: Longevity of programmes

EIT Label communication and recruitment strategy. Developing and implementing an EIT-Label Programme Communication and Recruitment Strategy together with our university partners, which will be implemented for all Labelled programmes in order to build the EIT-Label brand. It will be part of the wider Academy Communications and Marketing Strategy.

√ RESULTS: Increased visibility of Label programmes; more students recruited in Label programmes

3.4. Wider Society Learning

The WSL activities of EIT RawMaterials vitally contribute to improve the competitiveness of raw materials actors in the EU by creating a favourable environment for the following target groups:

- Young people (16-18 years): Ensure the availability of expertise in the future
- Policymakers: Ensure sound legislation through enhanced subject understanding
- Civil society: Improve general awareness

At this stage of our KIC, we shall focus on young people and their educators as well as civil society.

Consolidation of current Flagship programmes for young people. This will consist of focusing on two programmes – RM@Schools and Junior Achievement – by building on successes and replicating them in Europe. At the same time, we will always allow additionally for small, short-term, outside-the-box quick-delivery projects.

√ RESULTS: Branding & visibility; raising awareness of raw materials in a critical and measurable mass of potential new students.

3.5. Lifelong Learning

LLL programmes are currently well funded but many do not attract enough participants. We surmise this is a result of both mismatched demand and supply and deficient communication and marketing measures. In order to address these weaknesses, we plan to address and improve existing LLL programmes as well as introduce new programmes and initiatives:

Improvement of LLL programmes. Cataloging our LLL courses in order to design an LLL component of the aforementioned Academy Communications and Marketing Strategy. Create new courses and adjust existing courses based on the Education Roadshow results and consultations with the customer and customer organisations (e.g. professional associations) and the foreseen Advisory Board indicated above.

√ RESULTS: More participants; improved branding and visibility

Workforce qualification for new technologies. To keep pace with the introduction of new technologies in businesses, staff needs to be trained to effectively and efficiently use these technologies. These can be linked to certification schemes or European norms, such as the LLL initiative proposal developed by Fraunhofer.

√ RESULTS: Increased economies-of-scale and adaptable certification scheme for various industries.

Off-Campus Master School: Hybrid Master track for professionals to re-train and up-skill in a similar or different discipline (60 ECTS, combination of distance learning and face-to-face seminar blocks)

√ RESULTS: Increased pool of raw materials professionals

3.6. Alumni organisation

Impact through alumni. All KAVA projects keep records of student participants. Now we have to create an alumni organization for all education programmes. The alumni organization serves as a valuable pool for promotion of existing and new programmes and for measuring the impact of our work by tracing the contribution of our learners to the sector. The EIT RM Alumni organization needs a 0,5 FTE administrative coordinator, based in a CLC, to work closely with the university partners.

√ RESULTS: Ambassadors of EIT RawMaterials programmes; impact measurement instrument.

3.7. ESEE region

A separate ESEE region education strategy is being developed by ECLC, its partners and the Academy to start in 2018.

√ RESULTS: capacity building of vital skills and competences of students, professionals and faculty in RIS/ESEE regions; initiating transformative changes in ESEE region universities; activating dormant partners