

Annex 2 – KIC EIT RawMaterials RIS Strategy 2018-2020

I. Lessons learnt from the implementation of the EIT RIS 2015-2017

EIT RawMaterials has always had a clear focus on EIT RIS eligible countries. The main reason for this is that many primary and secondary deposits of various raw materials are located in those countries. So naturally this creates the necessity for our KIC to be involved with our activities there. From the very beginning of the work of our consortium there has been a real interest in reaching out to EIT RIS eligible countries and executing EIT RawMaterials actions there.

From DECISION No 1312/2013/EU (EP) and EIT RIS Guidance Note 2018-2020 we regard the following point to be critically important:

- The RIS will [.....] provide a specific mechanism for the dissemination of best practice and widening participation
- The EIT RIS serves the purpose of opening up the KICs to entities that cannot (yet) become KIC partners
- EIT RIS provides a framework for transferring KIC good practice and know-how of the KTI
- The ultimate goal is to develop capacity of entities of EIT RIS regions to become KIC partners and participate in e.g. innovation and research projects on an equal footing

Our strategy for delivering these goals is to:

- Engage strong key partners to enable outreach to the local stakeholders
- Carry out core KIC activities in innovation/upscaling and education with partners in RIS regions
- Grow KIC participation from non-partners (and potential partners) from RIS regions by securing a strong presence in the RIS countries (HUBS) and by targeted outreach

The main focus area in the early days of the KIC was the region of East and South-East Europe. During the preparation phase Montanuniversitaet Leoben took on an active role in integrating ESEE Region Partners into the KIC RawMaterials consortium. As a result, many entities from this area became regular Partners, and this was clearly a positive outcome for the KIC. In this early stage, the activity level of these was limited. Apart from 1-2 KAVA Projects selected in the 2015-2016 call, the ESEE Region Partners were rather shy to take the lead in coordinating and submitting KAVA proposals. To address this issue, the EIT RawMaterials team took proactive steps at the end of 2016 and in 2017 to ensure an active participation of Partners and a larger number of activities dedicated to the EIT RIS / ESEE Region.

These included:

- conducting “mapping of competencies” of the Partners to better understand their skills, needs and expectations of the KIC;
- challenging the Partners from EIT RIS-eligible countries to lead KAVA proposals (including those perceived as being very demanding) and working closely with them on preparing good quality proposals;
- focusing Partners from EIT RIS-eligible countries on the EIT RIS KAVA category to ensure that they get involved into activities which are directly related to them;
- organizing ESEE Dialogue Conferences and other thematic events directly in the EIT RIS-eligible countries to come closer to the local stakeholders and networks;
- organizing dedicated KAVA EIT RIS Projects to work on challenges / issues directly related to EIT RIS-eligible countries (e.g., ESEE Ideation, ESEE Scholarships); and
- working with the Partners towards establishing EIT RawMaterials Regional Centres in EIT RIS-eligible regions/countries to disseminate more EIT RIS activities locally and get closer to raw materials stakeholders in different areas.

II. Country strategy and gap analysis

According to its Strategic Agenda 2016-22, EIT RawMaterials aims at extending the geographical reach to those countries where it is not yet present by establishing fruitful partnerships and sharing of knowledge, best practice and innovative technologies with the respective ecosystems. In terms of EIT RIS outreach the KIC sets priorities according to its own strategic objectives along with either existing or – according to specific local circumstances – new smart specializations strategies that need to be established to support the raw materials agenda.

Based on this strategy and the implications given in the initial (mainly desktop research based) country gap analysis (see: Annex A to Annex 2), EIT RawMaterials has clustered the EIT RIS-eligible countries into five (slightly overlapping) groups. According to the general and raw materials value chain-related particular specifics of the different groups and the covered EIT RIS-eligible countries, particularly appropriate outreach activities will be executed.

Nevertheless, even though this preliminary detailed analysis shall make transparent why and based on what the KIC has set its priority decisions on outreaching and planned activities within the EIT RIS-eligible regions and shall give indications for the reasons and the planned activities, it needs to be emphasised, that this indicative clustering is made upon already existing KIC and its partners knowledge and strategy, on desktop research, on individual information and particular first experiences gathered, and on assumptions – but is not sufficient to deliver final valid information for a long term planning.

In fact, reliable country gaps and knowledge about respective deficits (as well as about programs, options and chances) and respectively to be undertaken activities within the upcoming years will be further analysed, defined and forth written based on the corresponding activities and experiences that will be gathered along with outreaching attempts! EIT RawMaterials considers such (self optimizing) outreach activities, in any case combined with respective Knowledge Triangle Integration, within the upcoming years themselves already as the solution process to response to the challenges in EIT RIS eligible countries.

Creating and operating EIT RawMaterials Hubs in EIT RIS-eligible countries, involving the Partners from EIT RIS-eligible countries and regions, will deliver deeper information about each country's situation – and will address the identified gaps in a conscious way. Same for possible synergies with other national and/or regional programmes and instruments – first experiences show that to properly identify them and the options to get involved needs on-going interaction on the spot and mutual evaluations. Based on these operations, in the next version(s) of this strategy paper EIT RawMaterials shall be able to deliver much more reliable considerations on how its (respectively which specific) EIT RIS activities in particular countries and regions will help to achieve (i) the overall KIC strategic objectives (in mid- and long-terms), (ii) the best impact for those countries and regions, and (iii) which (and how) EIT RIS activities may be taken up in the KICs' regular activities.

The clustered groups are:

1. ESEE – Eastern and South-Eastern Europe

Covering Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Greece, Hungary, Kosovo, Macedonia, Montenegro, Romania, Serbia, Slovakia and Slovenia. Six of these 14 countries are currently (2017) represented by 8 members of the KIC (CLC East, CLC South), and several additional local players in these countries already participate in on-going and upcoming projects (as task partners).

The Eastern and South-Eastern European region has been identified as an EIT RawMaterials priority outreach region from the very beginning. The region has unique raw materials potential: the availability of various resources (both primary and secondary), its specific industrial history with state-owned enterprises, and its geopolitical situation and importance. Furthermore, it shows a strong existing partner network – gaps will be closed step by step according to the geographical strategic outreach steps. Due to its existing partner network, already established cooperation with local stakeholders, and the high strategic priority of this region, EIT RawMaterials is confident to make a difference in that region within the frame of this strategy planning in the next three years.

Local ecosystems are partly identified and/or under exploration or development. In 2018 three EIT RawMaterials Hubs (Regional Centers) will be established in this region (for details see Section IV.

Approach and solutions to address the gaps):

- EIT RawMaterials Hub – Regional Center Greece in Athens/Greece (overlapping with The Mediterranean; see below)
- EIT RawMaterials Hub – Regional Center Adria in Ljubljana/Slovenia
- EIT RawMaterials Hub – Regional Center Košice in Košice/Slovakia (overlapping with the Visegrád countries).

2. “Visegrád 4” countries – Central Europe

Covering Czech Republic, Hungary, Poland and Slovakia. Three of these four countries are currently (2017) covered by 9 members of the KIC (CLC East), supported by several additional local players participating in on-going and upcoming projects (as task partners).

These are traditionally strong mining and exploration countries with significant secondary raw materials resources, even though respective activities currently are on a quiet low level due to different reasons. Nevertheless, the resources are still there, significant knowledge and expertise related to raw materials value chain on the upstream side is available, and the potential to contribute to the KIC’s objective is high. Furthermore, these countries contribute significantly to the innovativeness to neighbouring western countries by the brain drain, which means that any respective activity fighting the brain drain in these countries will ultimately contribute to the innovativeness of them.

A rather strong partner network exists at least in Poland and Slovakia, the one in Hungary is growing, however, in Czech Republic there is no partner yet at all. Thus gaps shall and will be closed step by step in order to achieve respective impact within the given timeframe. First project proposals are already considered by partners that intend to reach out to Czech Republic and to include local entities.

Local ecosystems are partly identified and/or under exploration or development. In 2018 one EIT RawMaterials Hub will be established in this region:

- EIT RawMaterials Hub – Regional Center Košice in Košice/Slovakia (overlapping with ESEE; see above).

3. The Mediterranean

Covering Cyprus, Greece, Italy, Malta, Spain and Portugal. 4 of these 6 countries are currently covered by 17 members of the KIC (CLC South, CLC Central, CLC East), as well by numerous local actors participating in on-going and upcoming projects.

Greece, (Southern) Portugal and (Southern) Spain have a very strong mining focus, whereas Italy (overall) has a strong focus on secondary resources (e.g., urban mining, WEEE recycling) and substitution. A rather strong partner network exists – gaps will be closed step by step.

Local ecosystems are mostly identified and under exploration or development. In 2018 one EIT RawMaterials Hub will be established in this region:

- EIT RawMaterials Hub – Regional Center Greece in Athens/Greece (overlapping with ESEE).

Another EIT RawMaterials Hub is under consideration/investigation by CLC South, to cover the structurally weak region of the western Ionian Sea (Apulia/Italy, Campania/Italy, Sicilia/Italy, and Malta).

Beside the activities to be executed and finalized within this strategic framework by CLC East in Greece and CLC South in the Western Ionian Sea (see Section IV. Approach and solutions to address the gaps, point 1), no particular activities in terms of specific EIT RIS activities are planned currently. EIT RawMaterials considers The Mediterranean in general as central to its normal strategy executed according to yearly business plans. This is underlined by the number of partners of the KIC in this region, and by the number and quality of the projects executed by them. However, EIT RawMaterials is already on the track to create impact within the next three years on the level of the other ESEE countries, whereas it intends to also make differences in the mentioned Western Ionian Sea by the considered outreach activity.

4. The Baltics

Covering Estonia, Latvia and Lithuania. One of these three countries is currently (2017) covered by one member of the KIC (CLC Baltic Sea). Activities on identifying and activating more partners are on-going.

In terms of raw materials in the narrow sense Estonia is of interest due to its oil shale and phosphorite resources, in addition to being the only REE producer in Europe. Furthermore, the KIC member Tallinn Technical University is one of the top Start-Up Hubs in Europe. Although there are no other significant raw materials resources to be found, nor significant related industry, the potential impact through academics is significant.

Local ecosystems are mostly identified and under exploration or development. In 2018 CLC Baltic Sea will initiate respective activities to activate local players and to identify a reliable partner to continue this engagement either as an EIT RawMaterials Hub – Regional Center, due to overlapping objectives probably even as a joined Hub with other interested KICs, thus creating significant impact on a rather heuristic level than directly related to the raw materials value chain.

5. Other countries

Covering Armenia, Faroe Islands, Georgia, Turkey and the Ukraine, none of which have current members of the KIC, although a few Turkish players have reached out to the KIC for information about collaboration and membership. The Ukraine potentially may be included in the future by a CLC (East) and Regional Center Košice.

These “other” countries are currently on a lower KIC priority due to either limited raw materials value chain related impact and/or possibly political restriction. However, upcoming activities in the EIT RawMaterials Hub – Regional Center Kosice/Slovakia promise potential outreach to Ukraine based on historical and current connections to Ukrainian stakeholders. Furthermore, several individuals (students, idea holders) coming from Ukraine are already considerably involved on individual basis in several respective KIC activities, such as Business Idea/Plan Competition and Entrepreneurship & Business Creation Support. Furthermore, there are several Polish KIC partners with very good ties to Ukraine, who will try to reach out on individual and/or project basis.

ESEE Eastern and South-Eastern Europe	Albania, Bosnia, Bulgaria, Croatia, Cyprus, Greece, Hungary, Kosovo, Macedonia, Montenegro, Romania, Serbia, Slovakia, Slovenia	CLC East	6 of 14 countries covered by 10 partners 3 Hubs upcoming	<ul style="list-style-type: none"> • KIC strategic priority due to outstanding primary and secondary raw materials resources • Strong existing partner network / Gaps to be closed asap • Hubs and local ecosystems currently under development
“Visegrád 4” Central Europe	Czechia, Hungary, Poland, Slovakia	CLC East	3 of 4 countries covered by 10 partners 1 Hubs upcoming	<ul style="list-style-type: none"> • Traditionally strong mining and exploration countries / significant secondary raw materials resources • Strong existing partner network / Gaps to be closed asap • Hubs and local ecosystems currently under development
The Mediterranean	Cyprus, Greece, Italy, Malta, Spain, Portugal	CLCs South East Central	4 of 6 countries covered by 18 partners 1 Hub upcoming	<ul style="list-style-type: none"> • Greece, (Southern) Portugal and Spain with a very strong mining focus Italy with a strong focus on secondary resources (urban mining, WEEE recycling) & substitution • Southern Italy under investigation for a Hub creation
The Baltics	Estonia, Latvia, Lithuania	CLC Baltic See	1 of 3 countries covered by 1 partner Hub considered	<ul style="list-style-type: none"> • Estonia especially due to its resources on oil shale + phosphorite (+ the only REE factory in Europe) Tallinn TU (partner) one of the top Start-Up Hubs in Europe • No other significant raw materials resources, no significant industry impact just through academics
Others	Armenia, Faroe Islands, Georgia, Turkey, Ukraine	. / .	Not covered Hub Kosice will try to outreach towards Ukraine	<ul style="list-style-type: none"> • Currently low priority due to either no impact (Faroes) or political restrictions ... or both (e.g. Ukraine interesting mainly with a focus on Donbass) • Greenland (no RIS country) is of high strategic interest! Will be accessed by an own outreach program.

Figure 1: EIT RawMaterials RIS Strategy Cluster; status: 11/2017

III. Objectives of the KIC EIT RIS activities 2018-2020

EIT RawMaterials is committed to supporting the overarching objective of the EIT Regional Innovation Scheme (EIT RIS) to contribute to enhancing the innovation capacity of the countries and regions that are modest and moderate innovators. This shall be done accordingly by promoting Knowledge Triangle Integration in terms of engaging local players in KIC activities (action line I), and by mobilizing, interlinking and internationalizing national/regional networks (= “ecosystem approach”) (action line II).

This will be achieved by transferring KIC good practice of the Knowledge Triangle Integration by all means, including through the existing partner network and opening up to entities that are currently not KIC partners. Further targeted support to individuals and entities from EIT RIS-eligible countries shall be provided in order for them to take part in KICs activities and benefit from KIC services and programmes. By transferring KIC good practice and know-how of the KTI, by engaging with raw materials value chain related local innovation eco-system players and building sustained relationships and partnerships, EIT RawMaterials aims to ultimately increase its impact on the innovativeness and competitiveness of the respective countries.

All planned EIT RIS activities of the KIC follow the objective to contribute to enhancing of the innovation capacity of the respective countries and regions where activities (will) take place. Some of these activities intend to educate, motivate and support (potential) innovators either in these countries or from these countries or others with the intention to go to these countries with the clear aim to encourage them to make their innovation happen in the respective EIT RIS-eligible countries. Other activities are comparable to “usual” KAVA education and upscaling projects, but with the dedicated focus to “contribute ...” by, first of all and again, engaging players and entities from these countries/regions itself as far as possible (or as it makes sense in terms of contributing to the project’s objectives), and second, by requesting that the output of those projects clearly creates impact on the innovativeness of the local ecosystem(s).

Thus, one of EIT RawMaterials’ main tasks is bringing the EIT RIS-eligible regions and countries to the EIT RawMaterials and the EIT RawMaterials to the EIT RIS-eligible regions and countries. This will allow a larger group of relevant stakeholders from EIT RIS-eligible countries to participate in European projects and funding schemes. EIT RawMaterials is uniquely positioned to tackle this challenging task. On the one hand many RIS-eligible countries in Europe are endowed with primary and secondary deposits of metallic and mineral ores and residues. On the other hand, EIT RawMaterials already has a reasonably significant number of active partners coming from those countries and getting involved into EIT RIS projects and other KAVA activities. EIT RawMaterials always viewed less developed European regions as the areas of our natural involvement and representing a real opportunity to make an impact in line with EIT objectives. EIT RawMaterials views the EIT RIS-eligible regions as the areas of its natural involvement and as a real opportunity to make a significant impact by fostering innovation and entrepreneurship in line with EIT objectives.

In line with the Strategic Agenda 2016-22, EIT RawMaterials aims at further extending the geographical reach to those countries where it is not yet present. This will be achieved by establishing fruitful partnerships and sharing of knowledge, best practices and innovative technologies with the respective ecosystems. In terms of EIT RIS outreach the KIC is prioritizing aligning strategic objectives with existing or soon-to-be implemented Smart Specialization Strategies that support the raw materials agenda.

EIT RawMaterials will try to act in particular countries and regions jointly with other KICs as far as possible and reasonable by overlapping strategies, objectives or even local players.

Strategies include:

- Outreach to regional and local stakeholders in the raw materials sector in the EIT RIS-eligible countries and regions where the KIC is already present.
- Expand to new countries where the KIC does not have any presence yet.
- Involve existing partners and other stakeholders into KAVA activities (with a specific focus on EIT RIS KAVA) to maximise the impact on EIT RIS-eligible countries.
- Contribute to the improvement and excellence of the education programmes in the ESEE Region by executing an ESEE education strategy.
- Contribute to the improvement of the innovativeness of EIT RIS-eligible countries by identifying and supporting idea holders and start-ups in these countries and thus making innovation happen.

CLC East will take the lead within EIT RawMaterials on RIS related activities due to the fact that it covers mainly EIT RIS-eligible countries and regions and that by far the most of its partners are from those countries. In terms of implementation, EIT RawMaterials will focus on the EIT RIS strategy and on the initiation and implementation of the EIT RawMaterials specific activities and projects.

IV. Approach and solutions to address the gaps

In order to address gaps in strategically prioritised EIT RIS-eligible regions and countries with appropriate outreach activities according to the EIT RIS objectives of the KIC, EIT RawMaterials will focus on the following actions and solution in the upcoming years:

1. EIT Hubs

EIT RawMaterials is aware that all KICs do have different approaches in terms of where and how to create EIT Hubs and in terms of what they expect the Hubs to do. EIT RawMaterials has a strategic schedule in line with the EIT RIS guidance note, in particular related to the request to manage the risks and select a committed and capable organisation to perform the role of a Hub and to be a part of the EIT Community. This means according to the particular objectives, firstly to concentrate on involvement of ecosystems relevant to the raw materials value chain and the KIC's strategic scope, and secondly, to focus on engaging existing (experienced and committed) KIC partners to set up "focussed" Hubs and to execute respective Hub activities on behalf of the KIC in the local RIS ecosystems. Engaging those KIC members in the execution of Hubs, KAVAs and other activities and operations by signing respective project partner agreements with them (instead of sub-contracting third parties), the KIC is confident to mitigate any risks of non sufficient or non purposeful operation; the respective CLCs will lead constantly check and follow-up the processes.

This means, that in regions, where the KIC does not have respective partners yet, there may be a strategic wish and need to create a Hub. Commitments to such future hubs will follow identification of possible committed partners who can create a focussed EIT RawMaterials Hub. The current commitment EIT RawMaterials can give, is to identify in which countries it intends to create focussed Hubs within the framework of the EIT RawMaterials RIS strategy, and undertake action to engage and identify respective new KIC partners there. This process is on-going and will build on experiences for the initial hubs to be opened in 2018.

EIT Hubs shall engage in and contribute to "local ecosystems". In general, the ecosystems related to the raw materials value chain (and perhaps related to other industries as well) are not limited geography. Thus there may be two or more ecosystems existing beside each other, or ecosystems may reach across regional and national borders. This is for example the case in Central, Eastern and South-Eastern Europe. EIT RawMaterials will take this into consideration and, in each case, will set up "focussed" Hubs with appropriate geographical reach and tasks.

The KIC's objectives of how, why and with which focus to create a Hub will differ with local opportunities and challenges related to the raw materials sector. For example, the objectives of creating a hub in the Baltics, will be engaging with the productive start-up environment and capacity, and to engage them in the raw materials value chain related ecosystem), EIT RawMaterials intends to test a model of having an open call for organizations interested in acting as such a Hub. In this particular case the objectives do overlap with those of some other KICs, and it is considered to jointly create a cross-KIC Hub and possibly have a third party responsible. Respective processes and controlling mechanisms will be defined prior to any subcontracting in order to mitigate any potential risks.

2. Establishment of EIT RawMaterials Hubs (Regional Centers)

The EIT RawMaterials RIS activities are initiated and coordinated by the CLCs involved, which act as facilitators between the players in the EIT RIS-eligible regions and other players in the KIC. These activities will locally be supported and conducted via “focussed” ‘EIT Hubs’ (EIT RawMaterials Hubs – Regional Center), which are linked to the respective CLCs by project agreements. The Regional Centers act on behalf of the KIC and the respective CLC as a local platform and hubs for interaction and brokerage, as well as a channel of the knowledge sharing and good practice acquired by the KIC, with a clear focus on raw materials value chain related ecosystems. All local stakeholders in the Knowledge Triangle (Individuals, Start-ups, SMEs, Academia, Research, Industry, Local Authorities and other organisations) taking part in KIC activities will share their experience with the local ecosystems, and will be supported through the Regional Centers.

Within the framework of the overarching EIT RawMaterials objectives and the objectives of the KIC EIT RIS activities 2018-2020, the objectives of the EIT RawMaterials Hubs – Regional Centers are to promote Knowledge Triangle Integration (KTI), to act as a platform for interactions and brokerage with the KIC, to work with local higher education institutions, research institutions and businesses, and to provide mentoring and help that will allow the players of EIT RIS-eligible countries to effectively adopt the KIC KTI practice to the local realities.

EIT RawMaterials Hubs – Regional Centers are extensions/interfaces of the KICs and the respective CLC, and are managed through project agreements. The Regional Centers execute KIC activities, policies and operations on location based on the project agreements. They are thus not parallel organisations, and they will not execute calls or receive KIC funding to cover administration cost. The latter shall be co-funded by local funds, according to the best-practice developed by EIT RawMaterials Hubs – Regional Center Freiberg and Regional Center Leoben.

2.1. EIT RawMaterials Hubs in the ESEE Region

EIT RawMaterials Hubs – Regional Centers in EIT RIS-eligible countries will be established according to the prioritisation of regions/countries as detailed above. In 2018 at least three (“focussed”) EIT RawMaterials Hubs – Regional Centers will be established by CLC East in the ESEE region (overlapping with the Visegrád 4 region and The Mediterranean):

- EIT RawMaterials Hub – Regional Center Greece (RCG) in Athens/Greece (overlapping with The Mediterranean) – addressing the local ecosystem of Greece – operated by KIC partner National Technical University of Athens – NTUA. This will in the first instance engage local stakeholders with each other, create and support a local network in which the local entities will interact with each other and try to develop an innovative dynamic on local level, furthermore will apply jointly in national/local calls for projects. In second instance it will serve as a strong local facilitator to connect the raw materials value chain related entities to the KIC. Knowledge Triangle integration will be achieved following the efforts of the Greek Raw Materials Community Dialogue initiated in 2016 and 2017. This Hub will focus on both parts of the raw materials value chain, upstream and downstream.
- EIT RawMaterials Hub – Regional Center Adria (RCA) in Ljubljana/Slovenia – addressing the local (or rather regional integrated) ecosystem of the Western Balkans (former Republic of Yugoslavia plus Albania) – cross-border operated by cooperating KIC partners Geological

Survey of Slovenia – GeoZS, Slovenian National Building and Civil Engineering Institute – ZAG, and University of Zagreb/Croatia – UNIZG. This Hub will follow up on Matchmaking & Networking events initiated in 2017 in Slovenia as well as a number of KAVA Projects like “Mine Service” or “rEServe”. The priorities in 2018 will be on integrating the Knowledge Triangle in Slovenia and Croatia, aligning with already existing related networks and clusters, that – case of Slovenia – are set up along the defined Smart Specialization Strategies –, and reaching out further to related and connected ecosystems and entities in neighbouring countries in 2019 and onwards; its focus will be on upstream (GeoZS), downstream (ZAG), education (UNIZG) as well as (jointly) on entrepreneurial activities. Connections and interactions of local entities with regular KIC activities are established already in Croatia, Slovenia and beyond, but will be fostered further.

- EIT RawMaterials Hub – Regional Center Košice (RCK) in Košice/Slovakia (overlapping with the Visegrád 4 countries) – addressing in first instance the local ecosystem of (primarily Eastern) Slovakia and in second instance connected or even integrated ecosystems in neighbouring (mainly Carpathian) regions of Hungary, Romania, Ukraine – operated by KIC partner Technical University of Košice – TUKE. RCK will address the complete value chain (upstream, downstream) plus educational and entrepreneurial activities. First successful activities in order to establish local networks and to enable Knowledge Triangle Integration have been initiated already with promising indications for both, upcoming local cooperation and project proposals as well as engagements with regular KIC activities. Further options to foster the local/regional ecosystems and its innovativeness are considered and will be conducted step by step according to raising local/regional interest and demand.

2.2. EIT RawMaterials Hubs in the Visegrád 4 countries

For the upcoming EIT RawMaterials HUB – Regional Center Kosice see above. In terms of further coverage and outreach on mid term CLC East will evaluate on ecosystems covering Western Slovakia and Czech Republic, and – if appropriate – consider respective Hub creation. The first project reaching out to Czech Republic and respective local entities is already planned. Future activities will be based on experiences from this.

2.3. EIT RawMaterials Hubs in the Baltics

In 2018 CLC Baltic Sea will conduct further activities (initiated in 2017 already) to identify a partner to continue the engagement in the Baltic countries either as an EIT RawMaterials Hub – Regional Center, or – more probably – as a joint Hub with other KICs. This Hub will address the regional ecosystem(s) of the three Baltic countries. From EIT RawMaterials perspective Its objective will be to support the CLC Baltic Sea on the planned activities in The Baltics based on the Baltic+ experience in 2017. This includes scouting for new business ideas and start-ups through reverse-pitching events in Latvia and Lithuania. In these events, industry partners will have an opportunity to present their industrial challenges to start-ups and SMEs, who in turn, have a chance to meet Business Angels, especially from Latvian Business Angels Network (LATBAN) and Estonian Business Angels Network (ESTBAN). These Business Angels will also act as mentors and members of the pitching evaluation panels.

2.4. EIT RawMaterials Hubs in The Mediterranean

CLC South will investigate and evaluate on the needs and possibilities to set up an EIT RawMaterials Hub to cover the structurally weak region of the Western Ionian Sea (Apulia/Italy, Campania/Italy, Sicilia/Italy, and Malta).

The CLC South is presently covering Italy, Spain, and one partner in Hungary with the CLC office being located in Italy. Italy and Spain are both listed among the group of countries referred to as “modest innovators”, although it should be noted that there are very intense regional differences within each of these countries. Italy features a very strong gradient from north (high industrial concentration, very innovative industries) to south (less developed regions that are prioritised by Structural Funds). The presence of the EIT RawMaterials partnership in Italy mirrors very well this situation, with most of the partners located in the north of Italy and with only one partner (ENEA) having outposts in Campania, Apulia and Sicily. The presence of the KIC in these regions in Italy is at present very weak and needs to be reinforced. Another Mediterranean country that is currently not covered by the KIC is Malta, where different organisations have shown interest in the KIC RM activities.

Previous funding streams in the framework of the Structural Funds 2007-2013 may have achieved today technologies featuring a maturity level of interest for the KIC model. On top of that Transition Regions and Low Development regions are presently being targeted by research and innovation funding programmes in the framework of the 2014-2020 programming. The impact of the KIC model and the adoption of KTI approach would enable organisations in these regions to further contribute to improve the innovation capacity in the regional ecosystems.

EIT RawMaterials main objective for this Hub is to build upon the opportunities arising from already initiated pilot projects in this region, deploying an integrated effort to create a Mediterranean Hub with main seat in Apulia (profiting from the presence of ENEA in that Region), allowing the KIC to express its full potential in that region. Thus this Hub shall address primarily the downstream part of the value chain plus educational and entrepreneurial activities.

2.5. Further EIT RawMaterials Hubs

Further EIT RawMaterials will be established wherever strategically warranted (possibly in countries like Bulgaria, Hungary, Romania), in 2019-2020, in response to outreach needs, experience and success potential. This may – based on eventual evidence – also include the options, to either create additional Hubs in one or the other country in the Balkans (beyond the outreach activities of EIT RawMaterials Hub – Regional Center Adria), or even to create a particularly raw materials value chain related one (“focussed”) beside a cross-KIC joined one (based on more “heuristic” common objectives) in the one or the other country; this will depend on upcoming experience and development.

Concrete initial discussion about possible joined Hubs with other KICs have already been started in 2017 on Cyprus and Bulgaria, utilizing both, the already presence their of Climate-KIC as well as the opportunities given by engaged local actors showing dedicated interest to contribute to respective KIC’s objectives.

3. EIT RawMaterials Hubs – Regional Center activities

The EIT RawMaterials Hubs – Regional Centers will carry out stakeholder events, identify and initiate joint projects and demonstrators where the three sides of the local Knowledge Triangle are on board, will draft policy papers, position papers and related publications. They will help broker collaboration agreements among and provide mentoring services to local players. Further more the Hubs will broker project ideas in between local stakeholders solely in order to create respective proposals and projects applying for national/regional programs and funding, and between local stakeholders and the KIC network in order to – on the one hand – engage local stakeholders as far as possible in KIC regular activities and projects, and – on the other hand – to enable knowledge transfer (projects) from KIC partners towards EIT RIS-eligible countries, regions and stakeholders.

A broader EIT RIS impact on the national/regional level can be achieved by interacting with the Smart Specializations Strategies (S3) responsible National/Regional Authorities, Managing Authorities, Regional institutions and implementing actors. The KIC, through its CLCs and its EIT RawMaterials Hubs – Regional Centers, will provide expertise and will interact with local stakeholders to assist with S3 implementation mechanisms as well as to initiate and support project proposals within respective national S3-related calls; if applicable the Hubs shall also try to engage KIC members to get engaged in such calls in order to initiate knowledge transfer. This will be achieved through existing, accessible joint approaches and will provide meaningful cooperation possibilities related to raw materials and the expertise of the KIC and its partners.

The role of an EIT RawMaterials Hub – Regional Center is:

- To serve as an interface for KIC interaction with local players and the other way round (entry point towards the KIC), mobilising and internationalising the local networks and facilitating the KICs' efforts in fostering the Knowledge Triangle Integration as innovation brokers.
- To liaise and provide expertise to the relevant national, regional and local authorities.
- To help identify KTI funding and project opportunities, as well as to provide advice to KTI project / initiative / programme development and implementation.
- To contribute to enhancing the visibility of the EIT community among the national policy makers.
- To liaise with other existing information channels, offices, platforms and key experts to ensure efficient exchange of information and best practise, as well as appropriate visibility.

Concrete activities of the upcoming EIT RawMaterials Hubs – Regional Centers are planned for 2018 in detail already, with further development to be implemented in the following years.

3.1. EIT RawMaterials Hub – Regional Center Adria – in line with the EIT RIS activities framework and its two main actions lines for the promotion of the knowledge triangle integration model – will initially focus on:

- Matchmaking workshops, targeting on professionals (industry partners), national-policy makers, academics and students (PhD; Master).
- Thematic industrial symbiosis workshops, targeting professionals from relevant sectors, associations' representatives, consultants and other interested parties.

- Participating in and co-organizing of regional/local expert conferences, targeting research institutions, universities and other educational institutions, business, administration from whole Western Balkans ...
- Outreaching and disseminating to further Western Balkans countries not yet sufficiently approached or integrated, targeting initiating dialogues and cooperation with national/regional/local policy makers in the field of raw materials, industry, research and academia.
- Student education days to present ESEE mobility and scholarships, targeting students and young researchers from the Western Balkans.
- Regional Business Idea Competitions in the Western Balkans, followed by Entrepreneurial & Business Creation Support like boot camps. These might be executed as Cross-KIC EIT RIS activities with other interested KICs based on the positive experiences of such cooperation in 2017.

3.2 EIT RawMaterials Hub – Regional Center Greece will initially focus on:

- Network and community building, aiming at engaging the relevant stakeholders with the actions of the Regional Center in order to form a relevant critical mass.
- Regular workshops within the framework of the Regional Center activities, on knowledge exchange with the non-Greek participants and on feedback from the Knowledge Triangle in Greece (and preliminarily Cyprus).
- Continuation of the successfully initiated yearly Greek Raw Materials Community Dialogue. The scope of these events is to bring together the Greek Raw Material Community and the EIT RM Community from the Knowledge Triangle and authorities to discuss the challenges faced by the Greek Raw Materials Sector, to form an action list and to update the Business plan for the Regional Center Greece.
- Outreaching of the Greek Knowledge Triangle Integration in order to disseminate the activities, results and local ecosystem in targeted EU events, aiming at establishing synergies with European, Non-European and international initiatives and associations to maximize the impact and expand the outreach of the Greek Knowledge Triangle Integration.

3.3. EIT RawMaterials Hub – Regional Center Košice will initially focus on:

- Networking activities, such as individual consultations with potential local players (education, entrepreneurship, research) to make them familiar with the possibilities and offerings and to activate them for local and international cooperation.
- Matchmaking and Networking events, to address the concerns of all the important players of the regional Knowledge Triangle related to raw materials and to consolidate partnerships in the region.
- Increasing the awareness of young people in the field of Raw Materials by Wider Society Learning, aiming at building awareness about raw materials and environmental impacts, facilitating an educated and positive social licence concerning raw material.
- Introducing new and necessary education in Slovakia based on a respective survey of the region's needs to be executed in 2018.

4. Alignment with Smart Specialization Strategies

According to the EIT RawMaterials RIS objectives, the KIC, CLCs and the involved EIT RawMaterials Hubs – Regional Centers will prioritise and align the strategy and also the operations with existing or ready to be implemented Smart Specializations Strategies in EIT RIS-eligible regions and countries that support the raw materials agenda.

The aim is to find and utilize synergies and efficiency in respective raw materials-related and KTI building activities, but already to better integrate with the Knowledge Triangle to boost their innovation capacity. By aligning activities, it will be possible to activate funding from the European Regional Development Fund (ERDF) for projects executed by local players, and thus contribute to the KIC overall objectives and goals.

In order to do this the CLCs and their Regional Centers will focus on (existing, missing and even “wrong”) Smart Specialization Strategies (these need to be identified, an activity which is on-going and shall be continued in 2018) and to be matched with the KIC strategy. Especially in the Non-EU countries in the Western Balkans, Smart Specialization Strategies are mainly missing, but the topic will be addressed by EIT RawMaterials with local authorities and stakeholders step by step according to the raw materials-related strategic findings of the KIC and its partners in these countries.

5. ESEE Dialogue Conferences

Local ecosystems in EIT RIS-eligible countries need to be identified, built, approached, activated and brought into interaction with the KIC in order to engage local players in KIC activities, and to mobilise, interlink and internationalise these national/regional networks.

As EIT RawMaterials CLC East covers significant parts of the EIT RIS-eligible countries and regions, it will conduct (through the upcoming EIT RawMaterials Hubs – Regional Centers) regional events in order to achieve the objectives of both, the overall KIC’s and the EIT RIS. Thus, in order to start establishing local ecosystems and integrating new local partners in the East and South-East European Region (ESEE) in KAVA proposals, ESEE Dialogue Conferences will continue to take place. These have already been successfully implemented and intend to approach strategically interesting countries in the ESEE region that are not yet covered by existing partners. Thus these Dialogue Conferences will:

- provide first access to activities and services of the KIC to those in these countries who might not otherwise have this access;
- will raise the awareness in these countries towards EIT RawMaterials;
- open options for the CLC East and the KIC to close strategic gaps;
- will initiate impact on these countries by offering joint options on innovation and entrepreneurship.

Since the beginning of the KIC those conferences have been successfully conducted (organized and executed by EIT RawMaterials Hub – Regional Center Leoben; see below) in places like Belgrade/Serbia, Budapest/Hungary, Leoben/Austria, Skopje/Macedonia and Zagreb/Croatia. They have successfully laid the foundations for the proactive outreach of EIT RawMaterials in these regions and countries as well as in the engagement of the numerous projects partners in KAVAs coming from there.

In order to continue this successful outreach activity in 2018 two ESEE Dialogue Conferences (currently planned in Montenegro and Bosnia-Herzegovina, but may be subject to changes due to upcoming obstacles or opportunities) will be organised, followed by further ones in the upcoming years.

6. Education Programs

In Education, apart from the existing and new KAVA Projects, the CLC East team together with its partners are working on developing and implementing an EIT RIS-related particular ESEE Educational Strategy that will contribute to the overall EIT RIS and EIT RawMaterials RIS objectives. A working group formed in late 2017 will develop a roadmap for educational activities and actions within the broader education strategy of EIT RawMaterials in the first half of 2018. The overall objective is to close the gaps in terms of educational excellence and thus to contribute to the competitiveness of the education system in the EIT RIS-eligible countries in ESEE Region. This will lead to attractive educational programs that will make graduates themselves competitive, will also attract students from other and non-EIT RIS-eligible countries to contemplate these offers, and finally is intended to lay the foundations for future innovation initiated by entrepreneurs in these countries, thus also counteracting the brain-drain.

Respective activities and actions will be executed once this strategy is finalized and respective offerings are set up. However, the first steps in this direction will be already done in 2018 by training university teachers from Western Balkans in a pilot project on new teaching methods.

7. Support from Non-RIS EIT RawMaterials Hubs – Regional Centers

In addition to the upcoming EIT RawMaterials Hubs – Regional Centers in EIT RIS-eligible countries there are two already existing Regional Centers within EIT RawMaterials. Each of them acts as the local interface towards the raw materials community in a specific region: EIT RawMaterials Hub – Regional Center Freiberg in Saxony/Germany and EIT RawMaterials Hub – Regional Center Leoben in Leoben/Austria.

Being part of the CLC East, these two Regional Centers are not only active in their respective ecosystems, but are also committed to contributing to the EIT RawMaterials RIS objectives and the CLC East activities. From 2018 on, both will pilot, organize and execute Entrepreneurship Training Courses for the numerous students from Eastern and South-Eastern Europe, both in Saxony and Austria, to motivate them to start their own business in their EIT RIS-eligible home countries. Nevertheless, this is intended not only for students from the EIT RIS-eligible countries, but also for all other students considering to create Start-ups in EIT RIS-eligible countries – or to motivate them to do so. The focus is to make innovations happen in EIT RIS-eligible countries. Both Regional Centers will also significantly (i) contribute to the execution of new educational programs and knowledge transfer (see above), and (ii) support the upcoming EIT RawMaterials Hubs – Regional Center in EIT RIS-eligible countries and regions on connecting and interlinking local stakeholders with KIC members and projects from and in non-EIT RIS eligible countries (and vice versa).

EIT RawMaterials Hub – Regional Center Freiberg is jointly operated by Technical University Bergakademie Freiberg (TU BAF) and the Helmholtz Institute Freiberg for Resource Technology (HIF as part of the HZDR). Both have not only been the main partners of the KIC EIT RawMaterials from

the beginning, but have also established the EIT RawMaterials Hub – Regional Center Freiberg (RCF) at the very beginning of the KIC operations. As the first local office of the CLC East, the RCF plays an important role in the regional promotion of science and research, education and training, as well as environmental protection in Saxony and also allows external organizations such as Saxon SMEs access to the international activities of EIT RawMaterials. The result is a unique opportunity for the regional raw materials industry to expand and finance regional structures and to promote start-up companies. Thus RCF gives and lives best practices for all upcoming EIT RawMaterials Hubs – Regional Center, but also is one of the most active facilitator of projects with a focus on and engaging partners from ESEE region.

EIT RawMaterials Hub – Regional Center Leoben is operated by Montanuniversitaet Leoben (MUL), which has been active as a core partner in the preparation and early operational phase of EIT RawMaterials between 2012 and 2017. The contribution of MUL to EIT RawMaterials was inter alia focused on a special responsibility for the East and South East region in Europe (ESEE Region), granted for this from the Austrian Ministry of Science, Research and Economy (BMWFW) for the period 2015-2021. These activities included integrating the partners of the ESEE region into the EIT RawMaterials, organizing ESEE Dialogue Conferences (see above) to start establishing local ecosystems and integrating the ESEE partners in KAVA proposals. This will be continued within the frame of this EIT RawMaterials RIS strategy for 2018-2020.

8. New Partners

In order to ensure a high level engagement of key actors in the raw materials sector in the future, EIT RawMaterials will need to manage the partnership in a manner that at the same time secures the interests of the existing partners. To initiate such management, EIT RawMaterials has developed a strategy regarding new partners in the light of the current partnership development.

In accordance with this strategy the primary objective of the CLC East in terms of expanding the Partnership is to bring in more industry into CLC's and KIC RawMaterials' activities. Regardless of whether these industry groups participate as Project Partners or as regular Members of the KIC, it is important to have them participate by addressing the real challenges they face in their operations.

Given the geographical outreach into the EIT RIS-eligible countries, there is an interest to expand the partnership in that region. During the 2017-2019 growth phase considerable efforts will go into activating stakeholders on the Balkan Peninsula. This will be done in co-operation with existing partners and the upcoming EIT RawMaterials Hubs – Regional Centers as well as through other activities in the area. The overarching principle is to attract partners are either come directly from the industry or will collaborate strongly with local industry players including SMEs.

Regarding the Baltic States, it is the main aim of CLC Baltic Sea to maintain a solid partner base and excellence in innovation activities with all existing and new partners. Also geographic strengthening is still needed: partners from the Baltic Countries will be targeted during the growth phase 2017-2019. This is done in co-operation with existing partners. SMEs will be approached through platform organisations such as Triple Steelix and DIMECC.

9. KAVA

The CLC East partners are in 2017 involved in a wide range of already running KAVAs, and – as we see a tendency for this involvement to rise sharply – in 2018 we will see even more new KAVA projects with partners from RIS-eligible countries (both as coordinators or participating partners). In almost all of these projects external stakeholders from EIT-RIS eligible countries are involved as project partners. These projects are distributed over the upscaling and education categories, but going into 2018, the KIC will put an even stronger emphasis on EIT RIS, including more education and innovation projects into this Segment. The majority of EIT RawMaterials RIS KAVA projects from 2018 onwards will be coordinated by CLC East partners, including partners coming from the ESEE Region. These include very fundamental projects for developing further possibilities and impacts in the ESEE Region, e.g., rEServe (Inventory of primary and secondary mineral deposits in Western Balkans countries), REEBAUX (REE recovery from bauxite residue) or MineService (Mineral Services Management Platform in Macedonia).

Accordingly, in the upcoming KAVA calls, the KIC and its partners, especially those from the EIT RIS-eligible regions/countries, will focus even more on EIT RIS projects with impact on their own countries and ecosystems they are part of. The upcoming EIT RawMaterials Hubs – Regional Centers will support this intensively by acting along Action Line II – “Engage local players in KIC activities” (see above), initiating and brokering respective ideas, and – as far as possible – initiating also projects that might overcome the gap between EIT funded and ERDF funded projects.

10. Cross-KIC EIT RIS activities

Based on the first positive experiences gained in 2017 by the first cross-KIC EIT RIS activities, such as joined cross-KIC EIT RIS awareness events in EIT RIS-eligible countries and joined accelerator programs and services, EIT RawMaterials intends to cooperate and align with other KICs on furthering and strengthening such activities. Focus will be on where it provides more efficient and effective outreach to EIT RIS-eligible regions/countries and their Knowledge Triangles. Such joint activities will be initiated on a case-by-case basis on shared objectives and with those KICs that are interested in exploring EIT RIS synergies jointly. The first initiative in this direction is the attempt to establish a joined Baltic Hub together with the one of the other KICs, as well as projects for joined business idea competitions with following accelerator programs in the Western Balkans. EIT RawMaterials has also had good experiences with this type of cross-KIC collaboration in the Mediterranean regions, and will continue to further explore opportunities here.

In 2017 EIT RawMaterials within the cross-KIC EIT RIS activities had taken the task to organize respective Cross-KIC EIT RIS Dialogue Conferences in Slovenia, Slovakia and Latvia – all of them successfully conducted with potential for all KICs to follow up on. In 2018 EIT RawMaterials will further contribute to such activities, proposing to take the tasks for Serbia and Bulgaria.

V. Expected main outputs and results of the KIC EIT RIS activities 2018-2020

As emphasized in the objectives of the KIC EIT RIS activities 2018-2020 above, EIT RawMaterials is committed to supporting the overarching objective of the EIT Regional Innovation Scheme to contribute to enhancing the innovation capacity of the countries and regions that are modest and moderate innovators. This shall be done accordingly by promoting Knowledge Triangle Integration in terms of engaging local players in KIC activities (action line I), and mobilizing, interlinking and internationalizing national/regional networks (= “ecosystem approach”) (action line II). Summarized, all planned EIT RIS activities of the KIC follow the objective to contribute to enhancing of the innovation capacity of the respective countries and regions where activities (will) take place.

In terms of increased engagement of entities from EIT RIS-eligible countries by opening up KIC’s activities to them, it needs to be emphasized, that EIT RawMaterials **has already opened up KIC’s activities to EIT RIS-eligible countries** and furthermore that EIT RawMaterials **does not** distinguish between partners and involved stakeholders from EIT RIS-eligible or non-eligible countries. This, we firmly believe, is the only way to secure that we contribute to “enhancing the innovation capacity of the countries and regions that are modest and moderate innovators” in a sustainable way. Also, EIT RawMaterials does not measure participation, output and result differently for partners from EIT RIS-eligible countries.

Accordingly EIT RawMaterials intends to achieve the following outputs, results and appropriate KPIs within the next three years:

1. Outputs

Action Line I (“engaging local players in KIC activities”)

- Establishing three EIT RawMaterials Hubs – Regional Centers in the ESEE Region in 2018; another two Hubs are expected to follow 2018/2019 in the Baltics and in the Western Ionian Sea (overlapping output with Action Line II)
- Intensified outreach to regional and local stakeholders in the raw materials sector in the EIT RIS-eligible countries and regions where the KIC is already present by members
- Expansion to countries where the KIC does not have any presence yet
- Increased opening up to entities that are currently not KIC partners (though hubs and existing partners)
- Allocation of targeted support to individuals and entities from EIT RIS-eligible countries in order for them to take part in KICs activities and benefit from KIC services and programmes
- Fostered innovation in EIT RIS-eligible countries and regions along the raw materials value chain

Action Line II (“mobilizing, interlinking and internationalizing national/regional networks”)

- Establishing three EIT RawMaterials Hubs – Regional Centers in the ESEE Region in 2018; another two Hub will/may follow 2018/2019 in the Baltics and in the Western Ionian Sea (overlapping output with Action Line I)
- Organisation of a total of six ESEE Dialogue Conferences between 2018 and 2020
- Transfer of KIC good practice of the Knowledge Triangle Integration by all means, including through the existing partner network

- Creation, fertilization, initiation and support of local and regional networks and raw materials value chain related ecosystems
- Dissemination and communication of EIT and EIT RawMaterials strategies, objectives, activities and results in general as EIT RIS specifically in EIT RIS-eligible countries and regions
- Education, motivation and support of (potential) innovators either in EIT RIS-eligible countries or from these countries or others with the intention to go to these countries with the clear aim to encourage them to make their innovation happen in the respective countries
- Local/regional activity alignment and mutual engagement with existing Smart Specialization Strategies and the respective ecosystems, their activities, calls and projects, that support the raw materials agenda
- Contribution to the development of Smart Specialization Strategies in countries do not have developed them and which should consider raw materials related specialization in them due to the KIC's opinion
- Joined outreach and KTI promotional activities in particular countries and regions with other KICs as far as possible and reasonable by overlapping strategies, objectives or even local players
- Improvement of the education programmes in the ESEE Region by executing an ESEE education strategy and transferring respective excellence
- Contribution to the improvement of the innovativeness of EIT RIS-eligible countries by identifying and supporting idea holders and start-ups in these countries

2. Results

Action Line I (“engaging local players in KIC activities”)

- Stronger participation of entities from EIT RIS-eligible countries in KIC core activities; in KAVA projects as far as possible (or as it makes sense in terms of contributing to the project's objectives)
- Enhanced capacity of entities of EIT RIS-eligible countries and regions to potentially apply to become KIC members
- Increased number of KIC activities and KAVAs in which KIC members from EIT RIS-eligible countries participate or even take the proposing and coordinating initiative
- Increased number of KAVAs in the RIS category proposed and coordinated by KIC members from EIT RIS-eligible countries, thus taking the initiative themselves to contribute to their home-countries/regions innovativeness and competitiveness, and engaging further stakeholders from their countries/regions
- Extended geographical outreach to and coverage in countries where the KIC has still none or limited members being present
- Increased number of innovations in EIT RIS-eligible countries and regions along the raw materials value chain

Action Line II (“mobilizing, interlinking and internationalizing national/regional networks”)

- Measurable impact on local ecosystems related to the raw materials value chain in terms of increased level of local and regional innovation and entrepreneurship activities, supported and/or fostered by promoted networks and ecosystems
- Increased visibility of and awareness about the EIT, EIT RawMaterials and the EIT RIS strategy, objectives, activities and results in EIT RIS-eligible countries and regions

- Participation of KIC members from EIT RIS-eligible countries in local activities and along relevant Smart Specialization Strategies (and the respective calls) initiated projects – or even take the proposing and coordinating initiative – and/or initiate knowledge transfer from out KIC members from non-EIT RIS-eligible countries towards those
- Increased potential for contribution to the overarching objectives by focussing/requesting in the upcoming KAVA calls in the RIS category that the output of those projects clearly creates impact on the innovativeness of the local ecosystem(s) of EIT RIS-eligible countries and regions
- Closed gaps in terms of educational excellence in EIT RIS-eligible countries and regions

3. KPIs

Related to the creation of EIT RawMaterials Hubs – Regional Center:

- EITN07: success stories submitted to and accepted by EIT / 3
- KPI01.06: Kick-start funding ideas / 25
- Target groups: regional/local KT, all related stakeholders

Related to the ESEE Dialogue Conferences:

- EITN07: success stories submitted to and accepted by EIT / 6
- KPI01.05: Participants awareness events / 300
- Target groups: regional/local KT, all related stakeholders

Related to the regional/local events organized by the EIT RawMaterials Hubs – Regional Center in order to integrate KT:

- EITN07: success stories submitted to and accepted by EIT / 3 p.a.
- KPI01.05: Participants awareness events / 1000
- KPI02.02: Successful matches generated / 80
- KPI04.02: Matches / 500
- Target groups: regional/local KT, all related stakeholders

Related to the upcoming ESEE Education Strategy and Program:

- 50 lecturers will be trained in the "train the trainer" program
- KPI06.03: Lifelong Education / 50
- Target groups: Academics, (researchers)

VI. Communication and dissemination plan

Along with its RIS strategy and with all respective activities in EIT RIS-eligible countries and regions EIT RawMaterials is committed to increasing the EIT, the EIT RawMaterials and the EIT RIS visibility, in general by accentuating the respective messages within the overall communication, and in special by adding particular communication and dissemination actions and efforts within those countries and regions.

The related KIC's objectives on this on the one hand take into account the utmost importance of disseminating the EIT RIS-commitment of the EIT and its KICs, on the other hand the fact that any intentions of the KIC to implement and execute its RIS strategy in these countries and regions will depend to a large extent on its accompanying communications and dissemination and the contributing impact created by them.

By communication EIT RawMaterials intends to promoting its RIS related actions and their respective results, emphasising the EIT RIS background on which the actions base, and showing how the activities have achieved the intended outcomes and impacts. This shall be done mainly by press releases, communication materials like brochures and others, as well as by (mainly on social media) published news and success stories.

By according dissemination EIT RawMaterials will spread – as far and intensive as possible – activities accompanying information. This shall transfer all related results to the ones that can/shall best make use of it, especially – but not exclusively – by newsletters, newsflashes on social media, presentations on events, conferences and meetings, as well as publishing respective stories in relevant publications.

Both, communication and dissemination, shall be undertaken by all involved parties within and related to the KIC and the respective KIC RIS objectives and activities, shared according to the specified messages intended to spread and especially according to the particular objectives and audience which is intended to appeal to. Thus, the KIC's HQ based communication department will focus on the overarching key messages, on KIC wide audience, on audience, both, beyond the particular EIT RIS countries and regions, and beyond the EIT and KIC related public, whereas the CLCs particularly involved will reach out with the overarching key messages and the RIS specific core messages to their regions, partners and networks, to ecosystems involved already and to those that shall be attracted to engage, as well as to local and regional authorities and all other relevant regional and local stakeholders. All KIC partners in the EIT RIS eligible countries and regions, but especially the (upcoming) EIT RawMaterials Hubs – Regional Centers will rather focus on local and regional public and shareholders of all provenience and on ecosystem(s) and activities specific messages. The coordination in between the different communication and dissemination actors and levels will be undertaken by the involved CLCs.

The overarching key messages of EIT RawMaterials are:

- “Developing RawMaterials into a major strength for Europe”
- “Driving and fostering innovation along the raw materials value chain”
- “Empowering students and entrepreneurs, connecting business research and education”.

These will also overarch the communication in EIT RIS-eligible countries and regions, and the messages along respective activities out there will evolve from them, but will be complemented and respectively focussed by the following specific RIS-related deviated core messages:

- “Unlocking Europe’s potential for Innovation”
- “Enhancing the Innovation capacity of Europe”
- “Transferring Best Practices and innovative technologies through partnership and cooperation”.

All communication and dissemination activities will address the following (but not exclusively; extensions will depend and relate to upcoming demands and experiences) target audiences, in terms of message objectives and focus respectively to their specific roles within and along to the KIC’s EIT RIS objectives and activities (regarding the responsible communicators see above):

- General European public, with a special focus on EIT and EC related stakeholders
- KIC partners (members as well as engaged stakeholders), both, on European level as well as particularly in the EIT RIS-eligible regions
- National and regional Governments, Governmental organisations, influencers, NGOs and public media in EIT RIS-eligible regions and countries
- All local and regional stakeholders and relevant networks, national, regional and local governments, that are part of respective ecosystems and (once established) the integrated Knowledge Triangles, including internationals, SMEs, associations, clusters, research institutions, academia and individuals (e.g. students, idea holders ...).

Every RIS activity will be communicated in disseminated through the main EIT RM digital communications channels: News section of the website + External Newsletter, (1042 subscribers Newsletter, Events calendar, average visitors per month website – 6000 visitors) (InfoCenter, News and Events feed, Newsletter 472 subscribers and growing – Partner community) Social media Channels – Twitter 2223 followers, Linked 1688 followers, Facebook 6544 followers.)

Furthermore, EIT RawMaterials Communications will extend its support with the following:

- The establishing of each RIS HUB by supporting branding and printed materials production. Event announcements and coverage – through the main digital channels. Additionally, depending on the particular target group – digital campaigns will be designed to support education events and activities.
- Support and act as a catalyst for Partners and Projects to run their project communications activities and outreach activities in the region

In order to support the KIC partners and the EIT RawMaterials Hubs – Regional Center in EIT RIS-eligible countries and regions to effectively contribute to the overall communication and dissemination objectives (and by this to the overarching KIC RIS strategy) the KIC will provide them with all necessary communications tools and branding guidelines in line with the overall EIT communications strategy and EIT community branding guidelines. For any operations they will further be provided with respective marketing materials.

VII. Main milestones

- Q1/2018
- Inauguration of EIT RawMaterials Hub – Regional Center Greece in Athens/Greece officially announced
 - Inauguration of EIT RawMaterials Hub – Regional Center Adria in Ljubljana/Slovenia officially announced
 - Inauguration of EIT RawMaterials Hub – Regional Center Košice in Košice/Slovakia officially announced
 - Links to existing country's and/or regions' Smart Specialisation Strategy in ESEE Region are identified or already approached
 - 6th and 7th ESEE Dialogue Conferences in Belgrade/Serbia and Skopje/Macedonia successfully conducted; follow-up through EIT RawMaterials Hub – Regional Center Adria initiated
- Q2/2018
- EIT RIS related ESEE Educational Strategy finalized; first execution activities initiated
- Q3/2018
- EIT RawMaterials Hub – Regional Center Greece in Athens/Greece becomes operative
 - EIT RawMaterials Hub – Regional Center Adria in Ljubljana/Slovenia becomes operative
 - EIT RawMaterials Hub – Regional Center Košice in Košice/Slovakia becomes operative
 - Local ecosystems in The Baltics and ESEE Region are mostly identified and under exploration or development
 - Activities to activate local players in The Baltics initiated
 - Either: A reliable partner to continue as an EIT RawMaterials Hub – Regional Center for the Baltics – or possibly as a joined Hub with other interested KICs is identified – Or: A respective open call launched
 - Links to existing country's and/or regions' Smart Specialisation Strategy in the Baltics are identified; those in ESEE Region are widely approached
 - Local ecosystems in Western Ionian Sea are mostly identified and under exploration or development
 - Preparations to open an EIT RawMaterials Hub – Regional Center for the Western Ionian Sea are done
- Q1/2019
- Work plans for EIT RawMaterials Hubs – Regional Centers for 2018 successfully completed; based on the experiences work plans for 2019 developed, submitted and approved
 - KTI achieved in Croatia, Greece, Slovakia and Greece
 - KTI initiated in the Baltics, the Western Ionian Sea, Hungary, Macedonia and Serbia
 - Scouting for new business ideas and start-ups through reverse-pitching events in Latvia and Lithuania organised
 - Inauguration of further 1-2 EIT RawMaterials Hubs – Regional Centers in ESEE and/or Visegrád 4 Region officially announced (subject to evaluation in 2018)

- 8th and 9th ESEE Dialogue Conferences (planned in Montenegro and Bosnia & Herzegovina) successfully conducted; follow-up through EIT RawMaterials Hub – Regional Center Adria initiated
 - ESEE Educational Strategy completely implemented and on-going
 - Strategic partner gaps being closed in the Baltics and the already initially approached countries in Western Balkans
- Q3/2019
- Further EIT RawMaterials Hubs – Regional Centers in ESEE and/or Visegrád 4 Region becomes operative (subject to evaluation in 2018)
- Q1/2020
- Work plans of EIT RawMaterials Hubs – Regional Centers for 2019 successfully completed; based on the experiences work plans for 2019 developed, submitted and approved
 - Inauguration of further 1-2 EIT RawMaterials Hubs – Regional Centers in ESEE and/or Visegrád 4 Region officially announced (subject to evaluation in 2018)
 - Strategic partner gaps in still open countries in the ESEE and the Visegrád 4 Regions closed
 - 10th and 11th ESEE Dialogue Conferences successfully conducted; follow-up through related EIT RawMaterials Hubs – Regional Centers initiated
- Q3/2020
- Further EIT RawMaterials Hubs – Regional Centers in ESEE and/or Visegrád 4 Region becomes operative (subject to evaluation in 2018)

VIII. Financial forecast

EIT RawMaterials will aim to maximise the utilisation of funding available for EIT RIS activities.

For 2018 the KIC is budgeting is 4,2 m € in EIT RIS budget.

In the years 2019 and 2020 the KIC will aim at increasing that budget provided that there will be more funding available the KIC which will allow us to include more activities in the respective business plans.

EIT RawMaterials Hub – Regional Center Leoben is being granted from the Austrian Ministry of Science, Research and Economy (BMWFW) for the period 2015-2021 with 1 m € per year for activities, inter alia focusing on a special responsibility for the East and South-East Region in Europe (ESEE Region). EIT RawMaterials Hub – Regional Center Freiberg is being financially supported by the local authorities from the State of Saxony (Regional Government) since 2014, latest out of EU structural funds (ERFE) for 2017-20.

The newly proposed EIT RawMaterials Hubs – Regional Centers in Slovakia, Slovenia/Croatia and Greece (plus the Baltics and the Western Ionian Sea) will also attempt to secure long-term co-funding from local authorities in order to conduct their activities outreaching to and engaging of local actors and stakeholders.

In terms of potential revenues all of EIT RawMaterials RIS activities and/or including EIT RawMaterials Hubs – Regional Center activities will be aligned with the financial sustainability strategy, and, where possible, generate income.

Annex A to Annex 2 – Country Gap Analysis

Albania

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): none (2017)
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Albania is a country with rich raw materials resources, being mainly chromium, copper, iron and steel, but also gold and nickel. Mineral exploration and exploitation is an important part of the economy. Relevant players are AlbChrome Ltd. and Columbus Copper Corp. (as of 2014, Columbus Copper held licences for further chromium exploration), Beralb (only copper extraction and processing company in Albania) and Arian Resources Corp. (which held licences to explore the Kacinar gold and the Perlat copper-gold-silver properties in 2014).
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Smart Specialisation Strategies of interest: Materials – especially C.24: basic metals, M: Professional, scientific and technical activities, M.72: Scientific research and development and M.74 other professional, scientific and technical activities; Water & energy – 01: exploration and exploitation of the earth, 02.14: protection of soil and groundwater. 05: energy
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: tbd.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement? tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs? tbd.
- KIC) Relevant players to be approached and involved: AlbChrome Ltd.; Columbus Copper Corp.; Beralb; University of Tirana: faculty of natural sciences, faculty of geology and mining; Albanian geological survey; Ministry of Energy and Industry (MEI); National Agency of Natural Resources (AKBN).
- (KIC related) Outlook: Albania is expected to increase its production of metals, since foreign countries increase their investments in the mineral sector and local mineral exploration projects look promising.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Albania belongs to the Western Balkans and is essential part of the KIC's strategic objectives to the ESEE region
- Priority level (1-3): 2
- Focus activities: Upstream
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: Albania will be covered and approached by the upcoming EIT RawMaterials Hub – Regional Center Adria.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures)?: tbd.

Armenia

- Cluster region(s): others
- Existing partner network (which part of the KT?): none
- CLC: none
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Armenia ranked seventh in the world in mine output of molybdenum in 2014. Besides molybdenum, Armenia produced other metals, such as copper, gold, silver, and zinc, and industrial minerals and products, including cement, diatomite, gypsum, limestone, and perlite. The country also produced aluminium foil from aluminium imported from Russia, and ferromolybdenum, molybdenum metal, and rhenium salts (ammonium perrhenate and potassium perrhenate) from local ores. It also had developed a diamond-cutting industry based on imported diamond. Armenia possesses resources of copper, gold, iron ore, lead, molybdenum, and zinc. It also has resources of construction materials, such as basalt, granite, limestone, marble, and tuff; semiprecious stones, such as agate, jasper, and obsidian; and other non-metallic minerals, such as bentonite, diatomite, perlite, and zeolites.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: American University of Armenia Center for responsible Mining <http://crm.aua.am/>; Armenian Environmental Network (AEN), a project of Earth Island Institute (EII), is a non-profit organization headquartered in Washington, D.C. United States, with an office in Yerevan, Armenia. AEN was founded in 2007 as a response to a lack of environmental information available to Armenians.
- (KIC related) Outlook: tbd.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Armenia is geographically beyond the KIC's strategic outreach objectives as yet.
- Priority level (1-3): 3
- Focus activities: tbd.
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures)?: tbd.

Bosnia & Herzegovina

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): none (2017), but engagement already of University of Tuzla and ArcelorMittal Zenica
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): B&H has a high mining potential. Its resources are bauxite, alumina and aluminium, ferrosilicon, lead, zinc, iron and steel. Most of the leading mining companies are privately owned and the majority of the metal processing sector are small-sized companies (80%). Bosnia & Herzegovina's most important export partners are member states of the EU and the CEFTA. Relevant players are Alumina Zvornik (only alumina producer, but with financial problems in the past and resulting legal problems now), Boksit AD Milici (bauxite ore miners), Aluminij d.d. Mostar (countries' sole aluminium producer, with similar financial problems, but a lot of influence in the region), Gross d.o.o. Gradiska (extracting and processing lead and zinc, invest in long-term mine rehabilitation and modernisation) and ArcelorMittal Zenica (largest foreign investor and largest iron ore and crude steel producer).
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)? None
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: BEAR (Business Excellence area) metal processing and automobile industry; Automotive Cluster Bosnia and Herzegovina (AC-BiH); International Society of Soil Mechanics and Geotechnical Engineering; Faculty of Mining, Geology and Civil Engineering, Tuzla; Federal Institute for Geology; Faculty of technology Banja Luka; United Nations Environment Programme UNEP Strategy Development Framework for Bosnia and Herzegovina (2015)
- Related (public) instruments and/or programs: tbd.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: Each of the three constituent entities of Bosnia and Herzegovina – the Federation of Bosnia and Herzegovina, the Republic of Srpska, and the District of Brcko – formulates and implements its own mineral legislation and relevant regulations. Each of the two main political entities has its own government regulatory agency for mineral- and energy-related activities, including environmental protection – the Federal Ministry of Energy, Mining, and Industry in the Federation of Bosnia and Herzegovina and the Ministry of Industry, Energy, and Mining in the Republic of Srpska.
- (KIC) Relevant players to be approached and involved: Alumina Zvornik, Aluminij Mostar, Gross Gradiska and ArcelorMittal Zenica
- (KIC related) Outlook: In the near term, B&H will remain a relatively minor producer of mineral commodities globally, but the country's mineral industry will continue to contribute substantially to its national output and employment. Metals are expected to remain valuable export commodities. Alumina and aluminium production may recover if Alumina Zvornik is successfully restructured during bankruptcy and if Aluminij Mostar resolves its outstanding debts, but output may continue to decline in the short term until their problems are resolved; Government subsidies may be necessary for the sustained operation of both companies. Gross Gradiska's mine modernisations program should result in an increasing lead-zinc ore production.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Bosnia and Herzegovina belongs to the Western Balkans and is essential part of the KIC's strategic objectives to the ESEE region (see above).
- Priority level (1-3): 2
- Focus activities: Upstream
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: B&H will be covered and approached by the upcoming EIT RawMaterials Hub – Regional Center Adria.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures)?: tbd.

Bulgaria

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): none
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): The major raw materials extracted in Bulgaria included clays, copper, gypsum, lead, lignite, limestone, salt, sand and gravel, and zinc. The metallurgical sector smelted and refined copper, lead, silver, and zinc; produced crude steel; and processed products. Production quantities of crude oil and natural gas were insignificant. The mining and quarrying industry is a small, but important sector, that accounted for about 4.2% of total production value of industrial enterprises and had about 26'000 employed people in 2013 (most recent data available). It's metallic resources are Copper, Gold, Silver, Lead and Zinc. Existing relevant players are Aurubis AG of Germany, owning Bulgarias' only copper smelting and refining facility through its subsidiary Aurubis Bulgaria AD; Dundee Precious Metals Inc., whose 100%-subsidiary Chelopech Mining EAD is mining Copper, Gold and Silver; The Bulgaria Association of the Metallurgical Industry, which is a labour union for employees in the metallurgical industry.
- Existing country and/or region Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related): A smart specialisation strategy of interest is mechatronic and clean technologies. National strategy for regional development of Republic of Bulgaria for the period 2012 – 2022 (2012). Municipal waste management in Bulgaria (2013). 2. Innovation Strategy for Smart Specialization the Republic of Bulgaria 2014-2020 (2014)
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Automotive Cluster Bulgaria, Geotechnical services, Bulgarian Chamber of Mining and Geology, University of mining and geology "St. Ivan Rilski", Geological Institute "Strashimir Dimitrov", Faculty of Chemistry and Pharmacy.
- Related (public) instruments and/or programs: European Regional development Fund (ERDF) European Social Fund (ESF) Cohesion Fund (CF) European Agricultural Fund for RURAL Development (EAFRD) European Maritime and Fisheries Fund (EMFF)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Aurubis AG, Dundee Precious Metals Inc., Bulgaria Association of the Metallurgical Industry; University of mining and geology "St. Ivan Rilski"; Geological Institute "Strashimir Dimitrov"; Faculty of Chemistry and Pharmacy
- (KIC related) Outlook: Production of Bulgaria's mineral commodities depends mainly on the domestic and European economic outlook. Construction at the Burgas complex may increase the production of refined petroleum products significantly in the short run. Mining of copper, gold, and silver is likely to increase modestly. Nonferrous production is expected to remain at a modest rate of growth.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Bulgaria is on high priority level due to it's resources and innovation potential (will be followed up right after next outreach steps into former Yugoslavian republics); other KIC's presence offers opportunities to go for a joint "heuristic" Hub shortly – respective discussions about joined objectives are already on-going.
- Priority level (1-3): 2
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): full coverage

- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage? Joined Hub with other KIC's is considered on an "heuristic" approach level; in terms of raw materials value chain related focussed activities upcoming EIT RawMaterials Hubs – Regional Center Adria and Regional Center Kosice may support as far as they can reach out to connected ecosystems and stakeholders. On mid/long term own "focussed" Hub may be considered, once EIT RawMaterials will have an experienced and KIC member there.
- Cross-KIC Hub option? With whom?: Joined option with Climate-KIC, KIC InnoEnergy, KIC Food and KIC Health.
- Opportunities and risks (including risk mitigation measures): tbd.

Croatia

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): University Zagreb; academy; task partner, going to act as a co-operator for the upcoming EIT RawMaterials Hub – Regional Center Adria from 2018 on
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Croatia is an important raw material in- and exporter. In 2013, about €2.173 billion worth of mining and quarrying products were imported and roughly €166 million exported. It's main trading partners are countries in the EU. When Croatia joined the EU in 2013, the former Mining Act of 2009 was replaced by the Concession Act, the Mining Act and the Hydrocarbons Exploration and Exploitation Act to align Croatia's laws with the EU guidelines. The Mining Department of the Energy and Mining Directorate administers exploration and extraction of nonfuel materials.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Smart Specialisation Strategy of the Republic of Croatia for the period from 2016 to 2020
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: 13 Clusters, of which three are partly involved in these sectors of interest: cluster of automotive sector, chemical industry cluster and cluster of food-processing sector; Croatian Geology Society, Croatian Geotechnical Society, Croatian Chemical Society, Croatian Society of Biotechnology, Croatian Metallurgical Society; Faculty of Mining, Geology and Petroleum Engineering, Croatian Geological survey, Faculty of Chemical Engineering and Technology, Faculty of Metallurgy, Faculty of Food, Technology and Biotechnology, Faculty of science-Department of Geology, Faculty of Geotechnical Engineering
- Related (public) instruments and/or programs: Regional Development Strategy of the Republic of Croatia for the period until the end of 2020 (2016); Cluster Development Strategy in Croatia 2011 to 2020; Related (public) instruments and/or programs; Energy and Sustainable Environment (sewerage, waste management, materials recovery, environment, energy); Mineral Resources Management Strategy of the Republic Croatia (2008); Waste Management Strategy of the Republic of Croatia (2005); The National Strategy for Chemical Safety (2008)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Maris Ekologija I Poljoprivreda d.o.o. (waste treatment and recycling, secondary raw materials trader), TLM-TVP d.o.o. and TLM-TPP d.o.o. (both owned by Fintrust Holding GmbH, mining and manufacturing aluminium), ABS Sisak d.o.o. (owned by Danieli Group, crude steel producers); Croatian Geology Society (CGS) Croatian Geotechnical Society (CGS) Croatian Chemical Society (CCS) Croatian Society of Biotechnology (CSB) Croatian Metallurgical Society (CMS).
- (KIC related) Outlook: Croatia is expected to remain a modest producer of a limited number of mineral commodities in the near future. Increases in metal and industrial mineral output could materialize as the country's aluminium, cement, nitrogen, and steel production facilities are modernized, but this is also contingent on increased demand for such commodities in both Croatia and its main export markets in Europe.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Croatia is on highest outreach priority in the ESEE region due to its potential all along the raw materials related value chain, the strong (existing and potential) partner and stakeholders
- Priority level (1-3): 1
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): full coverage
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage? EIT RawMaterials Hub – Regional Center Adria upcoming, starting operations on 2018
- Cross-KIC Hub option? With whom?: none
- Opportunities and risks (including risk mitigation measures): tbd.

Czech Republic

- Cluster region(s): Visegrád 4
- Existing partner network (which part of the KT?): none
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): The Czech Republic still has a small iron, steel, tin and gold mining sector, but it is one of the few countries in Europe extracting uranium, but the mining activities regarding uranium are expected to decrease in the near term, due to the focus on environment friendly energy. In October 2017, the mining company European Metals signed a mining agreement for lithium with the Czech Republic. The lithium deposit is said to be the largest in Europe and the 4th largest in the world. The Czech Republic was also the 4th-ranked producer of Kaolin in 2013.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Natural resources, agriculture and food; Mechanical engineering; Electricity production and distribution; Mechanical engineering and metal; Chemical industry; Smart grids and smart cities; Treatment and utilisation of secondary raw materials and wastes in environment of Ostrava agglomeration; Advanced materials and materials with low energy demand.
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: (The Ministry of Environment; Ministry of Industry and Trade (energy policies))
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: none yet
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs? tbd.
- (KIC) Relevant players to be approached and involved: European Metals (Lithium), DIAMO s.p. (Uranium)
- (KIC related) Outlook: The Uranium mining activities are expected to decrease further in the next years, due to the focus on renewable and environment friendly energy, which is also a reason that Lithium mining activities could increase enormously, given how important Lithium is for modern computer and car batteries.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: To be actively included in existing KIC activities in the other Visegrád 4 countries
- Priority level (1-3): 2
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): full coverage
- New partners outreach? (someone in concrete? why?): University of Ostriche
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures): tbd.

Cyprus

- Cluster region(s): ESEE / The Mediterranean
- Existing partner network (which part of the KT?): none
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Resources include copper, iron pyrite, gold, chromite and asbestos fibres, the main mining sector is copper. Possibly relevant players are BMG Resources Limited (the only mineral exploration company), EMED Mining (at the Troodos Ophiolite complex) and Hellenic copper Mines Ltd. (operating only active copper mine – Skouriotissa Mine). Almost 13% of the manufacturing sectors were metals in 2012. The production of other minerals, such as asbestos fibers, chromite, copper, gold, and iron pyrites, largely ceased after the political division of the island in 1974. The mineral resources of Cyprus include asbestos, bentonite, copper, crushed limestone (known locally as havara), gypsum, lime, marble, sand and gravel, and umber, which is a pigment that contains iron oxide. The island accounted for almost 1% of world bentonite production in 2014. The mining and quarrying sector as a whole accounted for less than 1% of national economic output.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related): Tourism, Energy (with focus on renewable and sustainable energies, electricity supply, power and storage technologies), Agriculture-Food Industry, Construction Industry, Transportation and Health. "Energy" and "Construction Industry" seem to offer interlinks with raw materials (due to their particular definitions). The Cypriot Government has released a "Strengthening Entrepreneurial Innovation" Programme as the latest initiative of the Ministry of Energy, Trade, Industry and Tourism aiming to boost entrepreneurial innovation, aiming to support and strengthen SMEs in order to develop competitive innovative products and services and a "Competitiveness and sustainable development" programme, in order to reinforce the competitiveness of the economy et al.
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: (The Mines Service of the Ministry of Agriculture, Natural Resources, and Environment (authority and administration for mines) and the Ministry of Energy, Industry, Commerce, and Tourism grants mineral rights for the development of natural gas and petroleum reserves through three separate authorizations for upstream activities)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement? tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Hellenic Copper Mines Ltd., in charge of the only active mine and EMED Mining and BMG Resources Limited, since they are actively exploring
- (KIC related) Outlook: Cyprus's economy is forecasted to return to a low rate of positive growth in 2015. Mining and quarrying output is expected to continue to decrease, though at a lower rate, as the contraction of the construction sector and the concomitant decrease in demand for industrial minerals on the island slows down. Copper cathode production is expected to increase with the beginning of mining of deposits at a second site by Hellenic Copper Mines. The exploration of copper and gold deposits by BMG Resources, which was the only active mineral exploration company in Cyprus after Northern Lion suspended its program in late 2014, is at an early stage of development and is not expected to increase metal production in the near future. General innovation and start-up supporting activities of the Government promise significant opportunities.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Shall be of interest due to still existing (even though small) mining and processing activities, but definitely due to governmental start-up support strategy.
- Priority level (1-3): 2
- Focus activities: Start-Up/SME support
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage? Related to raw materials shall be covered by EIT RawMaterials Hub – Regional Center Greece
- Cross-KIC Hub option? With whom?: Joined "heuristic" Hub currently under investigation with Climate-KIC, KIC Food and KIC Health
- Opportunities and risks (including risk mitigation measures): tbd.

Estonia

- Cluster region(s): The Baltics
- Existing partner network (which part of the KT?): University of Tallinn; academy
- CLC Baltic Sea
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...):
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related):
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Green Economy Cluster Real estate and Energy Cluster Road Cluster Wind Technology Cluster
- Related (public) instruments and/or programs: European Regional development Fund (ERDF); European Social Fund (ESF); Cohesion Fund (CF); European Agricultural Fund for RURAL Development (EAFRD); European Maritime and Fisheries Fund (EMFF)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: tbd.
- (KIC related) Outlook: Estonia's mineral industry is expected to continue to focus on reducing CO2 emissions by improving technology to achieve greater efficiency throughout the oil shale cycle (from mining to consumption). The efficiencies were planned to be achieved by implementing the National Development Plan for the Utilization of Oil Shale 2016–2030, which limits oil shale production to 20 Mt/yr., and by shifting to renewable energy sources. Production of rare earths is likely to continue to increase to meet global demand.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Estonia is geographically beyond the KIC's strategic outreach objectives as yet.
- Priority level (1-3): 2
- Focus activities: tbd.
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures?): tbd.

Faroe Islands

Research tbd.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Faroe Islands are geographically beyond the KIC's strategic outreach objectives as yet.
- Priority level (1-3): 3
- Focus activities: tbd.
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures)?: tbd.

Georgia

Research tbd.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Georgia is geographically beyond the KIC's strategic outreach objectives as yet.
- Priority level (1-3): 3
- Focus activities: tbd.
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures)?: tbd.

Greece

- Cluster region(s): ESEE / The Mediterranean
- Existing partner network (which part of the KT?): National Technical University of Athens (NTUA); academy; associate partner; going to operate EIT RawMaterials Hub – Regional Center Greece from 2018 on / MONOLITHOS Catalysts & Recycling Ltd.; associate partner; industry
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): As one of the countries in the Eastern and South-Eastern Europe (ESEE) region has significant mineral resources in terms of quality, quantity and variety of ores and minerals. The Greek Raw Materials Industry is an important sector for the country's economic activity and accounts together with the corresponding manufacturing sector for 3-5% of the GDP. The Greek Raw Materials Sector is comprised of more than 25 large mining companies that are active in Greece and abroad and employ roughly 20,000 (direct) and 80,000 (indirect) individuals.
- Relevant players are: S&B Industrial Minerals, S.A. (biggest miner for bauxite in 2013), Eldorado Gold Corp. (owner of the straton mine) and Larco G.M.M. S.A. (only nickel producer)
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)? Smart Specialization Strategies in Greece include: Manufacturing technologies; Electronics, electrical appliances; Manufacturing of chemicals and energy; Metallurgy, metal products, machinery and equipment; Energy production; Metals and metal products; Waste management; Metals and construction materials; Blue growth; Aquaculture; Green energy; Microelectronics; Metals and materials; Solid and liquid waste management; Renewables, sustainable energy.
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: (Hellenic Technology Cluster Initiative - target groups: Microelectronics/Semiconductors and Embedded Systems)
- Related (public) instruments and/or programs: tbd.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement? Mines and exploration in Greece are mainly privatized, the government does primarily only own companies in the mineral fuel sector.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: tbd.
- (KIC related) Outlook: The raw materials sector is expected to stay a small, but important sector with raising exports

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Greece on to priority within the ESEE region
- Priority level (1-3): 1
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): full coverage
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: EIT RawMaterials Hub – Regional Center Greece, to be conducted by NTUA, covering whole Greece and outreaching to Cyprus
- Cross-KIC Hub option? With whom?: none
- Opportunities and risks (including risk mitigation measures): tbd.

Hungary

- Cluster region(s): ESEE, Visegrád 4
- Existing partner network (which part of the KT?): Bay Zoltán Institute; research; associate partner (due to its thematic focus belonging to CLC South) / University of Miskolc; associate partner; academy
- CLC East / (CLC South – particular partner related)
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Before the global economic crisis in 2008, Hungary used to be an important iron and steel producer, after the crisis, its production declined. Its main trading partners are European countries, like Russia and Turkey, but also other EU states.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Clean and renewable energies (Energy production and distribution efficiency, other power and storage technologies, sustainable energy and renewables), Sustainable environment (waste management, waste treatment, monitoring facilities for measurement of pollution, solid waste, industrial production and technology)
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: CAPES-cluster of applied earth sciences, South west Hungarian engineering cluster, Kexport cluster; Hungarian Chemical Society, Hungarian Mining Association, Hungarian Geological Society; Eötvös Loránd University-Faculty of science, BME Faculty of Chemical Technology, Geological and Geophysical Institute of Hungary
- Related (public) instruments and/or programs: Act no. 48, defines legal basis for mining, exploration and processing, Office for mining and geology
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Megapolisresource (secondary raw material producer), Office for mining and geology, Magyar Aluminium Ltd. (Alumina and Bauxite producer, in process of liquidation), ISD Dunafer Co. Ltd. (iron, pig iron and crude steel producer)
- (KIC related) Outlook: Hungary has energy-rich minerals, ores and raw materials and has historically been proven to be an important trading partner. Its current financial situation after the economical crisis in 2008 and the closure of the Halimba bauxite mine in 2013 is hindering its production efficiency now and in the near future.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Shall be integrated in on-going und further planned activities with the other Visegrád 4 countries
- Priority level (1-3): 2
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): full coverage
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: not planned yet; Eastern Hungary will be covered by EIT RawMaterials Hub – Regional Center Kosice
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures): tbd.

Italy

- Cluster region(s): The Mediterranean
- Existing partner network (which part of the KT?): Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile – ENEA; research; core partner; going to operate EIT RawMaterials Mediterranean RIS Hub from 2019 / ASTER S. Cons. P.A.; research; core partner / Hub Innovazione Trentino S.c.a.r.l.; research; core partner / Centro Ricerche FIAT S.c.p.a; industry; associate partner / Brembo S.p.A; industry; associate partner / Relight srl; industry; associate partner / Politecnico di Milano; academic; core partner / Università degli Studi di Milano – Bicocca; academic; core partner / Università degli Studi di Padova; academic; core partner
- CLC South
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Italy is one of most relevant countries in Europe for metal processing and recycling: second after Germany for production of steel, basic metals and fabricated metal products; third in the world for recycling of Aluminium after US and Japan. Italy has a relevant positioning in the target sectors for the use of RawMaterials identified by the KIC: transport, mechanical equipment.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: in the strategic priority "Intelligent manufacturing", some of the strategic priorities identified are in line with the targets of the KIC, such as: advanced production processes, which include additive manufacturing , laser systems, surface treatments, advanced manufacturing and processing of new materials; mechatronic, including machining and monitoring systems; modelling and simulations, including advanced modelling for innovative materials; sustainable manufacturing, including recycling of End-of-Life products (such as WEEE); innovative materials for extreme conditions, for energy production and storage, displays, multifunctional.
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Vanguard Initiative and regional cluster on Efficient and Sustainable Manufacturing led by Lombardia Region
- Related (public) instruments and/or programs: Regional support schemes targeting previously mentioned Smart Specialization Strategies. Specifically, Transition Regions and Low Development regions are presently being targeted by research and innovation funding programmes in the framework of the 2014-2020 programming.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: there is a large difference among Regions in Italy, with some being at forefront of Innovation and production and others lagging behind (South and Islands).
- (KIC) Relevant players to be approached and involved: ENEA as KIC partner that is present in Southern Regions and has an institutional role in the promotion of innovation, should be involved in promoting the creation of innovation ecosystem in Southern Italy.
- (KIC related) Outlook: a x-KIC feasibility study to create a centre for recycling of WEEEs in the South of Italy (Campania) was carried out in 2016 and followed up throughout 2017 and aims at seeking support though cross-KIC funds.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: the presence of the KIC partnership in Italy mirrors the local regional differences, with most of the partners located in the north of Italy and with only one partner (ENEA) having outposts in Campania, Apulia and Sicily. The presence of the KIC RM in these regions in Italy is at present very weak and needs to be reinforced
- KIC objectives towards the country: reinforce the presence in Southern Italy and support the creation of the KIC model and the adoption of KTI approach to enable organisations in these regions to further contribute to improve the innovation capacity in the regional ecosystems
- Priority level (1-3): 1
- Focus activities: support to the Southern Italy Regions in the creation of innovation ecosystems. In particular dialogue with the Sulcis Region of Sardinia (around the Province of Iglesias), a once-very important mining region where activities have been decreasing during the last decades, to support the creation of vaporization of closed mines (tailings and untapped deposits);
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: The main objective is to deploy a Mediterranean EIT RIS Hub with main seat in Apulia (profiting from the presence of ENEA in that Region) to allow the KIC RM to express its full potential in regions that are currently poorly covered by the partnership, where there is a great potential to innovate and nurture the local ecosystems related to raw materials. This EIT RIS Hub will be located in Apulia and will leverage on regional funds for its operation, fostering the participation of the most innovative industries and SMEs and prestigious universities and research centres following the EIT's KTI model.
- Cross-KIC Hub option? With whom?: x-KIC activities in collaboration with KIC Digital and Climate-KIC in South of Italy were already carried out; the option to involve these KICs in the EIT RIS Hub will be supported, to address the recycling of WEEEs in the South of Italy.
- Opportunities and risks (including risk mitigation measures)?: tbd.

Kosovo

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): none
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Despite its small size, the country has substantial mineral resources of cobalt, nickel, lead, lignite, silver, and zinc. Kosovo's territory is geologically composed of various sedimentary, magmatic, and metamorphic formations that contain deposits of aggregates and construction materials, bauxite, chromium, lead, magnesite, nickel, silver, and zinc. The country also has substantial hydropower and wind energy potential. The eastern Vardari Zone in the north forms the most important mineral zone and hosts the Trepca lead, silver, and zinc mines, which provided the majority of mineral production in former Yugoslavia until its disintegration in 1990.
Metals and mineral commodities are essential for Kosovo's export. In 2014, base metals and articles thereof made up about 46% of the total export value, mineral products (industrial minerals and metal ores) made up additional 14%. It's main trading partners are EU countries and members of the Central European Free Trade Agreement. Kosovo's mineral Resources are Chromium, Ferronickel and Nickel, Gold and Silver, Iron and Steel. The most valuable mine, the Trepca Complex, is still a widely disputed point between Kosovo and Serbia. Most important mining companies are Newco Ferronikeli (nickel) and Llamkos GalvaSteel (steel).
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: none
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Newco Feronikeli-Drenas, Trepca-Mitrovica, Vinex-Viti, Elsam-Ferizaj, Balkan Newco-Theranda, Independent Commission for Mines and Minerals (ICMM), Ministry of Economic Development, Ministry of Environment and Spatial Planning, Privatization Agency of Kosovo (sells state-owned enterprises to private investors), Faculty of Geoscience and Technology Mitrovica
- Related (public) instruments and/or programs: (Privatization programme by the Privatization Agency of Kosovo)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: The government changes a lot and therefore government programmes regarding the raw materials sector are sometimes short-lived.
- (KIC) Relevant players to be approached and involved: Arsi Sh.p.k. Ltd (chromite), Llamkos GalvaSteel (Iron and steel) and Newco Ferronikeli (Nickel, Ferronickel), Faculty of Geoscience and Technology Mitrovica.
- (KIC related) Outlook: Kosovo is expected to remain a modest producer of mineral commodities, but it is likely to continue increasing its cement, dimension stone (marble), ferronickel, nickel, and steel output owing to new business investments and improvements in operational efficiency. Exploration for gold and silver is at an early stage and is not expected to lead to precious-metal extraction in the country soon. The Trepca Complex has the potential to become a regionally significant producer of lead and zinc, but this would require major investment in the mines and the resolution of multiple ownership and creditor claims, neither of which seems likely to happen in the near future. Similarly, Kosovo's significant reserves of lignite could make it a leading producer of coal in the world, but this would depend on global demand as well as the opening of new mines for extraction. The country is expected to increase its renewable energy production in the coming years, but it is likely to continue to rely on lignite coal to meet most of its energy needs for the foreseeable future.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Kosovo belongs to the Western Balkans and is essential part of the KIC's strategic objectives to the ESEE region
- Priority level (1-3): 2
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): Upstream
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: Kosovo will be covered and approached by the upcoming EIT RawMaterials Hub – Regional Center Adria
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures): tbd.

Latvia

- Cluster region(s): The Baltics
- Existing partner network (which part of the KT?): none
- CLC Baltic Sea
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): tbd.
- Existing country and/or region Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: tbd.
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: European Regional development Fund (ERDF); European Social Fund (ESF); Cohesion Fund (CF); European Agricultural Fund for RURAL Development (EAFRD); European Maritime and Fisheries Fund (EMFF)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Liepājas Metalurģs, which was leading metallurgical company operating in Latvia, had its own port facility at the Liepāja Port; the company produced steel products for domestic use and export. CEMEX SIA, which was wholly owned by CEMEX S.A.B. de C.V. of Mexico, was the only cement producer and supplier of ready-mix cement in the country.
- (KIC related) Outlook: With the expansion of peat production, Latvia is likely to maintain its position as one of the world's leading peat-producing countries. The recommissioning of the Liepājas Metalurģs steel plant could increase manufacturing output. Continuing growth in the construction sector could lead to an increase in industrial mineral mining and cement production. The future of Latvia's economy and the minerals sector highly depends on political relations with Russia. It also depends on the country's ability to develop and maintain a reliable worldwide business network.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Shall be outreached and integrated as part of the whole Baltics
- Priority level (1-3): 2
- Focus activities: Downstream, Education, Start-Up/SME support
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: see below
- Cross-KIC Hub option? With whom?: Joined "heuristic" Hub currently considered together with KIC Food and KIC Health
- Opportunities and risks (including risk mitigation measures): tbd.

Lithuania

- Cluster region(s): The Baltics
- Existing partner network (which part of the KT?): none
- CLC Baltic Sea
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): tbd.
- Existing country and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: tbd.
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: European Regional development Fund (ERDF); European Social Fund (ESF); Cohesion Fund (CF); European Agricultural Fund for RURAL Development (EAFRD); European Maritime and Fisheries Fund (EMFF)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: AB Akmenes Cementas was the only cement producer in Lithuania. The company was privatized in 1997, and since then had been majority owned by domestic investors. Akmenes had the capacity to produce about 1.5 million metric tons per year (Mt/yr.) of cement at its Naujoji Akmene plant. Orlen Lietuva, which was a subsidiary of PKN Orlen S.A. Group of Poland, owned and operated the Mazeikiai oil refinery and oil processing plant in Lithuania. The Mazeikiai refinery had a design capacity of 15 Mt/yr. of crude oil and was the only refinery in the Baltic States.
- (KIC related) Outlook: tbd.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Shall be outreached and integrated as part of the whole Baltics
- Priority level (1-3): 2
- Focus activities: Downstream, Education, Start-Up/SME support
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: see below
- Cross-KIC Hub option? With whom?: Joined "heuristic" Hub currently considered together with KIC Food and KIC Health
- Opportunities and risks (including risk mitigation measures): tbd.

Macedonia (Former Yugoslav Republic of Macedonia)

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): none
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Macedonia has a variety of metallic resources like antimony, arsenic, chromium, copper ore, gold, iron ore, lead, manganese, nickel, silver and zinc, with copper ore and lead ore being the bulk of mineral exports. In 2014, most of the copper and gold deposits were in exploration stage and only the Buchim copper mine was actively operating at that time. In 2015, Kadiica Mine started operating, but there is no specific data available yet.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: none; first discussions with Governmental representatives have been held, encouraging them to define S3 strategies
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Macedonian Association of Food Processors, Automotive Cluster of Macedonia, Geological survey of Macedonia, the Engineering Institution of Macedonia, Faculty of natural and technical sciences, Faculty of technology and metallurgy-Skopje, Faculty of Technology and Technical Sciences (FTTS)-Veles, Faculty of Biotechnical Sciences, Geological Institute Skopje
- Related (public) instruments and/or programs: RFQ 07/2006 – Technical Design for Fugitive Dust Control of Topolnica Tailings Dam – Bucim Mine (Sustainable mining clean up and pollution management in Bucim and Lojane Mines), an UNDP Project; Energy Community Agreement, United Nations Framework Convention on Climate Change and Kyoto Protocol
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Solway Investment Group Ltd. (leading copper and lead mining company) and Indo Minerals and Metals DOOEL (lead mining company)
- (KIC related) Outlook: There is a lot of potential in Macedonia, since a lot of deposits are not actively mined yet. The government tries to attract foreign mining companies and is improving the country's energy sector.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Macedonia belongs to the Western Balkans and is essential part of the KIC's strategic objectives to the ESEE region; first KAVA projects are already running with engagement of local Macedonian entities
- Priority level (1-3)
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other)
- New partners outreach? (someone in concrete? why?)
- Hub to be created / when / by whom? / geographical coverage?: Macedonia will be covered and approached by the upcoming EIT RawMaterials Hub – Regional Center Adria
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures): tbd.

Malta

- Cluster region(s): The Mediterranean
- Existing partner network (which part of the KT?): None
- CLC South
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): The country's industry base is strongly focused on sectors that are downstream the value chain of the raw materials industry.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: The strategies are complementary to those of interest to the RM sector, with focus on high value – added manufacturing, processes and design, including products and components, in particular for the transport sector, as automotive and aviation, for energy storage, ICT and resources – efficient buildings
- even taking into account waste vaporization. Many of these topics are included in the focus markets of the KIC.
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: letters of endorsement for obtained from different organisation: ALBERTAX Quality, Paragon, STMicroelectronics, Playmobil, Aluminium Powder Coatings, Altern Ltd, Drop Chemicals, Energy and Engineering, Jekran, MLC Components, RAESCH, Solid Base
- Related (public) instruments and/or programs: tbd.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: Malta is heavily involved in EU programmes. There is an active community involved in the Climate-KIC
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: tbd.; partners and CLC South staff are in contact on this
- (KIC related) Outlook: tbd.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: There is no specific objective yet, but the inclusion of the Country would be relevant for the partners
- Priority level (1-3): 2
- Focus activities: Circular Economy, industrial waste management, materials for the automotive sector
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: The highest chances of cross-KIC collaboration are with Climate-KIC
- Opportunities and risks (including risk mitigation measures)?: tbd.

Moldova

Research tbd.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Moldova is geographically beyond the KIC's strategic outreach objectives as yet.
- Priority level (1-3): 3
- Focus activities: tbd.
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures)?: tbd.

Montenegro

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): none
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): The country produced a limited number of mineral commodities, none of which was regionally or globally significant, but it has the potential to become a regionally important coal and hydrocarbon producer. Montenegro's mineral industry included the mining and processing of bauxite, industrial minerals, and lignite coal. Metal production included alumina refining, primary aluminium smelting, and steelmaking. Mining and quarrying is essential for Montenegro's export. Raw Aluminium made up 21% of the countries' exports and other steel bars, raw iron bars scrap copper and scrap aluminium accounted for additional 7%. The country is aligning its legal framework for mining and energy with EU legislation. An important local player is Uniprom metali, a mining company, which recently bought the large bauxite mine Rudnici Boksita and owns the largest aluminium producer Kombinat Aluminijuma Podgorika.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: New Materials (Basic metals, Industrial production and technology, Manufacture of basic metals)
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Bomex holding-steel products, Metal works cluster, Montenegro Chamber of Engineers, Geological Survey of Montenegro, Faculty of Metallurgy and Technology, University of Montenegro, Faculty of Biotechnology
- Related (public) instruments and/or programs: tbd.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.; the legal mining framework is in progress of aligning with EU legislation
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Uniprom metali (mining company and investor, obtained KAP, former biggest Aluminium producer and invested 13 million euro [other sources say 3 mil EUR] in the Rudnici Boksita mine)
- (KIC related) Outlook: Montenegro's mineral industry is likely to continue its modest recovery. Aluminium and steel production in the country is expected to increase, albeit from a low base, under the new ownership of KAP and Tosçelik Niksic. Bauxite production may cease altogether if no bidders materialize for the assets of Rudnici Boksita. Coal production is expected to reverse its recent decline with the resumption of underground mining operations in Berane. Exploration for base metals in the country is contingent on the future progress of the Monty Project. Petroleum and natural gas exploration in Montenegro's Adriatic waters has the potential to transform the country into a producer of mineral fuels.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Montenegro belongs to the Western Balkans and is essential part of the KIC's strategic objectives to the ESEE region
- Priority level (1-3): 2
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): Upstream
- New partners outreach? (someone in concrete? why?): tbd.

- Hub to be created / when / by whom? / geographical coverage?: Montenegro will be covered and approached by the upcoming EIT RawMaterials Hub – Regional Center Adria
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures): tbd.

Poland

- Cluster region(s): Visegrád 4
- Existing partner network (which part of the KT?): Mineral and Energy Economy Research Institute of the Polish Academy of Sciences – MEERI; research; associate partner / Wrocław University of Technology (Politechnika Wroclawska); academy; core partner / Silesian University of Technology; academy; associate partner / AGH University of Science and Technology; academy; core partner / Instytut Metali Niezależnych – Institute of Nonferrous Metals; research; core partner / KGHM Cuprum Ltd. Research & Development Centre; research; associate partner / Lodz University of Technology; academy; associate partner / Wrocławskie Centrum Badań EIT+; research; core partner
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Poland has large deposits of copper (ranked 9th in the world) and silver (ranked 3rd in the world). It is also the 2nd-ranked rhenium and the 11th-ranked cadmium producer; With iron imports, Poland also produces steel.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Natural resources and waste management; Sustainable energy (in Maloposkie); Energy; ICT – micro/Nanoelectronics; low-carbon emission energy; Sustainable energy Development; Metal and casting industry; Metal and machinery industry; Advanced metal products; Manufacture of machinery and equipment, materials processing; Raw materials and recyclable raw materials; Energy technologies and renewable energy; Metal and machine industry technologies; Eco-effective technologies in generation, transmission, distribution and consumption of energy and fuels
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: (inistry of Environment, National Energy Mineral Operator Fund (national funding program for environmental protection and water management)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- Relevant players to be approached and involved: KGHM Polska Miedz S.A. (Copper [Ore | Concentrate | Metal], Gold metal, refined Lead, Rhenium [content of ammonium perrhenate | metal], refined silver), IQ Recycling (secondary raw materials producer), ArcelorMittal S.A. (50% of the country's steel production)
- (KIC related) Outlook: Poland's Rhenium production is likely to stay relevant, it is not to be expected to be able to start iron mining again in the near future, so it is likely to stay dependent to its iron imports. Copper production is unlikely to decrease.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Poland is one of the KIC's strategic core countries
- Priority level (1-3): 1
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): full coverage
- New partners outreach? (someone in concrete? why?): KGHM Polska Miedz S.A. shall be won back
- Hub to be created / when / by whom? / geographical coverage?: Currently Poland is covered by the CLC East itself
- Cross-KIC Hub option? With whom?: none
- Opportunities and risks (including risk mitigation measures): tbd.

Portugal

- Cluster region(s): The Mediterranean
- Existing partner network (which part of the KT?): tbd.
- CLC Central
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): tbd.
- Existing country and/or region Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: tbd.
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: tbd.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: tbd.
- (KIC related) Outlook: tbd.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Faroe Islands are geographically beyond the KIC's strategic outreach objectives as yet.
- Priority level (1-3): 2
- Focus activities: tbd.
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures?): tbd.

Romania

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): Ovidius University Constanta; academy; associate partner
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Romania possesses commercial deposits of a wide range of metallic ores, including iron, manganese, chrome, nickel, molybdenum, aluminium, zinc, copper, tin, titanium, vanadium, lead, gold, and silver. It also is one of the two EU countries currently mining uranium (the other one being the Czech Republic). The development of these reserves was a key element of the country's industrialization after World War II. To exploit the ores, the government built numerous mining and enrichment centres, whose output in turn was delivered to the country's large and ever-expanding metallurgical and machine building industries. Its mineral production is adequate to supply its manufacturing output.
Since joining the European Union (EU) in 2007, Romania's mineral sector has been in transition from the Government owning most firms to the majority of firms being privately owned. At the end of 2013, state-owned enterprises constituted 44% of the energy and gas sector and 18% of the mining and quarrying sector. The state owns all mineral resources in the country as well as in the portion of the continental shelf of the Black Sea that adjoins Romania.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Energy & Environment
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Green energy Romanian Innovative biomass cluster; Biorene-biotechnology cluster; Faculty of Geology and Geophysics-Bukurešt; Faculty of geography and geology; Faculty of Chemistry; The Faculty of Material Science and Engineering; Geological institute of Romania; Faculty of Biotechnologies
- Related (public) instruments and/or programs: (National Agency for Mineral Resources)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Compania Nationala a Uraniului (CNU), in Bucuresti (uranium extraction); Euro Sun Mining (former Carpathian Gold Inc.) (second largest gold deposit in Europe)
- (KIC related) Outlook: In 2016, Romania's economy achieved a GDP growth of 4.8% (driven mainly by the recovery in domestic consumption and strong exports), which was the fastest pace since 2007, and the highest mark in the EU. Performance in the mineral and mining sectors is expected to remain mixed. Steel production, while significantly below the pre-2009 peak levels, was relatively stable during the past years at about 3 Mt. The Invest Nikarom steel plants were undergoing reorganization in 2014 and had limited production during the year. Despite potentially significant gold and silver production and the creation of associated jobs, the lack of public support and of Government progress on favourable mining legislation is likely to hinder growth in this sector in the long term.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Like the whole Western Balkans Romania is essential part of the KIC's strategic objectives to the ESEE region
- Priority level (1-3): 2
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): full coverage

- New partners outreach? (someone in concrete? why?): Geological Institute of Romania shall we won back (left the KIC due to financial problems); further tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures): tbd.

Serbia

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): none
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Serbia has untapped mining potential. Gold, copper, zinc, lead and others minerals and metals have been important, however, the diversity of mining diminished over the years, and was concentrated in the extraction of generally low-grade coal by state-owned enterprises for the purpose of producing thermal energy. At least six companies were engaged in gold and copper exploration in Serbia. These included Canadian companies Avala Resources Ltd., Dunav Resources Ltd., Euromax Resources Ltd., Mundoro Capital Inc., and Reservoir Minerals Inc., as well as Orogen Gold plc of the United Kingdom.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: tbd.; S3 currently only exist in Vojvodina region; first discussions with representatives have been made on establishing national Smart Specialisation Strategies
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Hesteel Serbia Iron & Steel d.o.o. Beograd; Automotive cluster of Serbia; Galenit – Cluster for the Organized Collection and recycling of Used Batteries and Accumulators; EKO KRUG – Cluster for Collection, Packaging, Processing and Permanent Disposal of Electronic, Industrial and Hazardous Waste; MEMOS Cluster – The Association for Competitiveness Promotion of Metal Producers; The First Cluster for Plastics and Packaging – JATO; Serbian Geological Society (SGS); Association of metallurgical engineers of Serbia; Association of Metalworking and Power Industry, Metal Mines and Metallurgy; BIPOM Cluster – Balkan and Black Sea Industry of Agricultural Machinery; The Union of Engineers and Technicians of Serbia; Serbian Chamber of Engineers; Faculty of Mining and Geology, University of Belgrade; Technical Faculty of Bor; Faculty of Technology and Metallurgy; Faculty of Chemistry; Geological Survey of Serbia; Engineering Academy of Serbia
- Related (public) instruments and/or programs: Waste Management Strategy (2010-2019)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: MINECO LIMITED – lead, zinc, copper; MG Serbien d.o.o. - dolomite (magnesium)
- (KIC related) Outlook: An increasing number of firms, including Rio Tinto (Jadar lithium-borate project) and Erin Ventures Inc. (Piskanja boron deposit) are exploring at sites across the country, principally in the Bor-Timok complex that runs down the east side of the country and in western Serbia. New mining investor friendly framework already attracted big miners like Dundee, Rio Tinto, Freeport & many junior mining companies developing gold, copper, gold, lithium, borates, and other mines. Additional legal improvement is expected to attract new investors in highly perspective greenfield metal and precious metals deposits, unexplored and biggest in Europe. In the longer run, new projects in the nonfuel mineral sector, such as possible development of boron, copper, gold, and lithium deposits, are likely to provide a significant source of revenue to the Government and a boost to the GDP.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Serbia belongs to the Western Balkans and is essential part of the KIC's strategic objectives to the ESEE region
- Priority level (1-3): 2
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): Full coverage
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: Serbia will be covered by EIT RawMaterials Hub – Regional Center Adria
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures): tbd.

Slovakia

- Cluster region(s): ESEE / Visegrád 4
- Existing partner network (which part of the KT?): Technical University of Kosice; academy; associate partner; going to operate EIT RawMaterials Hub Regional Center Kosice from 2018 on / Slovak Technical University of Bratislava; academy; associate partner
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): There is no significant mining and exploration or secondary resources sector nowadays, but the country has Aluminium, Antimony, Copper, Silver, Gold and Uranium resources. The government tries to attract foreign companies with low taxes and inexpensive and skilled labour. Relevant mining companies are Slovalco, a.s. (Aluminium), EMED Mining Public Ltd. (Gold), Slovenska Banska, spol. s.r.o. (Gold) and U.S. Steel Kosice, s.r.o. (crude steel and pig iron).
- Existing country and/or region Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Processing and increasing the value of light metals and their alloys. Production and processing of iron and steel; Increasing the value of domestic raw material base. Production and processing of iron and steel, support of the smart technologies in the field of raw materials processing in regions of their occurrence. Specially in Bratislava, there is: new materials in electronics, photovoltaic, sensors; new materials
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: tbd.
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: SME mining companies
- (KIC related) Outlook: Slovalco is said to increase its production of aluminium ingot and aluminium alloy, but the mining sector is expected to stay small in the near future.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Slovakia is of primary interest in the Visegrád 4 region
- Priority level: 1
- Focus activities: Upstream, Education, Start-Up/SME support
- New partners outreach? (someone in concrete? why?): SME (mining companies)
- Hub to be created / when / by whom? / geographical coverage?: EIT RawMaterials Hub – Regional Center Kosice will operate from 2018 on
- Cross-KIC Hub option? With whom?: none
- Opportunities and risks (including risk mitigation measures): tbd.

Slovenia

- Cluster region(s): ESEE
- Existing partner network (which part of the KT?): Geological Survey of Slovenia (GeoZS); research; associate partner – core partner from 2018 on; co-operator of EIT RawMaterials Hub – Regional Center Adria from 2018 on / Slovenian national building and civil engineering institute (ZAG) ; research; associate partner – core partner from 2019 on; co-operator of EIT RawMaterials Hub – Regional Center Adria from 2018 on
- CLC East
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Slovenia's raw materials are mostly mined or imported, but there is also mining activity and raw materials recycling. Slovenia has a rather small mining sector compared to other countries and it includes Aluminium extraction and aluminium products, mostly by the company Talum d.d. (with its subsidiaries Talum Aluminij d.o.o. – Aluminium production and Talum Izparilniki d.o.o. – solar thermal plant production in cooperation with Sophia Antipolis Energy Development) and Iron and Steel production by Slovenska Industrija Jekla d.d., Acroni Jesenice d.o.o. and Metal Ravne d.o.o, which all produce cast steel.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Development of Materials as Products; Industry 4.0, smart factories; Networks for the Transition to Circular Economy
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: Slovenian Environmental Cluster, Slovenian Geological Society, Slovenian Chemical Society, International Society for Soil Mechanics and Geotechnical Engineering, Slovenian Chamber of Engineers (Section of Mining and Geotechnology), Geological Survey of Slovenia, Faculty of Natural Science and Engineering, Biotechnical Faculty
- Related (public) instruments and/or programs: (Slovenian Ministry of Infrastructure (especially Energy Directorate)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: MPI Metalurgija, plastika inženiring d.o.o. (secondary raw materials producer)
- (KIC related) Outlook: The mining and extraction sector is expected to stay rather modest, but the few actively operating companies work stable. Governmental representatives confirmed interest in cooperation with the KIC.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Slovenia is of primary interest of the KIC in the ESEE region
- Priority level: 1
- Focus activities: Upstream, Downstream, Start-Up/SME support
- New partners outreach? None
- Hub to be created / when / by whom? / geographical coverage?: EIT RawMaterials Hub – Regional Center Adria, co-operated by GeoZS, ZAG and University of Zagreb/Croatia
- Cross-KIC Hub option? With whom?: none
- Opportunities and risks (including risk mitigation measures): tbd.

Spain

- Cluster region(s): The Mediterranean
- Existing partner network (which part of the KT?): Atlantic Copper, MAGNA, Mondragon, CAMBRESCAT, UPM, Fundacion Gomez Pardo, Tecnalía, CSIC
- CLC South
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): The country has a very strong mining potential especially in the southern part, with the Iberian Pyrite Belt being the large geographical area with most potential and on-going activities.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: Priority areas of relevance for the RM sector include Manufacturing, KET and Sustainable Innovation
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: The Country is already involved in the KIC and there are several networks that are relevant, in several areas (e.g., Andalucía, Leon, etc..)
- Related (public) instruments and/or programs: CDTI has an on-going very active innovation programme
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: The engagement is very high but the KIC should aim at involving more industries of the metal mining sector, that have many activities especially in the South of Spain.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Cobre Las Cruces, Mineralia, CELSA Group
- (KIC related) Outlook: The country is well involved in the KIC activities, with most of the partner from the northern part of the country. We are at involving large mining industries in the south of the country.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: The country is well involved in the KIC activities, with most of the partner from the northern part of the country. We are at involving large mining industries in the south of the country.
- KIC objectives towards the country: Spain is within the core focus of regular KIC activities
- Priority level (1-3): 1
- Focus activities: mining sector, recycling, automotive industry
- New partners outreach? (someone in concrete? why?): Cobre Las Cruces, Mineralia, CELSA Group. Cobre Las Cruces has one of the largest copper mines in Europe and related smelter – they are involved as task partners in some of the KIC project
- Hub to be created / when / by whom? / geographical coverage?: no hub foreseen
- Cross-KIC Hub option? With whom?: Potentials for collaboration with EIT Digital, InnoEnergy and Climate-KIC
- Opportunities and risks (including risk mitigation measures)?: tbd.

Turkey

Research tbd.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: Turkey is geographically beyond the KIC's strategic outreach objectives as yet.
- Priority level (1-3): 3
- Focus activities: tbd.
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures)?: tbd.

Ukraine

- Cluster region(s): others
- Existing partner network (which part of the KT?): none
- CLC: none
- Complementarity with KIC strategy (related to KIC objectives, e.g. potential and/or activities on primary and/or secondary resources, existing relevant players ...): Ukraine has a ton of natural resources, including aluminium, iron, manganese, titanium, gold, silver and uranium. In 2013 (last year with available data), Ukraine was one of the world's top four producers of gallium, 4th-ranked producer of iron ore (), 7th-ranked producer of pig iron, 9th-ranked producer of steel, 10th-ranked producer of manganese and one of the leading world producers of titanium ore and titanium sponge. The mining activity and energy is partly dependent on its export to Russia, which is the most important importer of Ukraine's minerals.
- Existing country's and/or regions' Smart Specialisation Strategies (S3) / are those in line with the assessment/knowledge of the KIC (as far as KIC's activities are related)?: S3 none; Energy and Energy Efficiency; New substances and materials; Rational environmental management; Energy and Power Engineering; Resource Materials
- Local networks, clusters and/or ecosystems related to either existing (relevant) Smart Specialisation Strategies or to KIC's activities: tbd.
- Related (public) instruments and/or programs: (Ministry of Energy and Coal Industry of Ukraine)
- What is the engagement level of local players in the KIC / in European programs? If applicable: Are there reasons for low(er) engagement?: tbd.
- What are the main weaknesses of innovation ecosystems / reasons for weak links to international economies and/or programs?: tbd.
- (KIC) Relevant players to be approached and involved: Vostochnyi GOK (state-owned uranium mining company), Lugansk Gold Ltd. (subsidiary of Korab Resources of Australia, planned on building a mine at the Bobrikovskoye gold sulphide deposit by 2018), Zaporozhye Titanium & Magnesium Complex (government-owned titanium sponge and titanium ingot production), ChAo Crimea Titan (DF Group, 100%, Titanium dioxide pigment production)
- (KIC related) Outlook: Uranium mining can generally be expected to decrease, because of the focus on renewable energy. That aside, Ukraine is most likely to remain one of the leading world producers of manganese ore, titanium ores and titanium sponge. With the Berehove mine, Ukraine has access to one of the world's largest gold mines and could potentially become a large gold exporter.

Strategic KIC conclusion:

- Country specific gaps related to KIC's activities and possibilities: tbd.
- KIC objectives towards the country: (Resources related) Potential of strategic interest for the KIC; systematic outreach yet not planned; Ukrainian entities and individuals are engaged with the KIC on project and/or individual basis
- Priority level (1-3): 3
- Focus activities (Upstream, Downstream, Education, Start-Up/SME support, other): potential full coverage
- New partners outreach? (someone in concrete? why?): tbd.
- Hub to be created / when / by whom? / geographical coverage?: tbd.; EIT RawMaterials Hub – Regional Center Kosice will outreach to near border ecosystem and entities
- Cross-KIC Hub option? With whom?: tbd.
- Opportunities and risks (including risk mitigation measures): tbd.