The Raw Materials Strategy: the way forward

European Mining Business Forum
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EU “Raw Materials Initiative”

- **Aim:** securing sustainable supplies of raw materials
- **Launched in 2008, consolidated in 2011**
- **Non-energy, non-agricultural raw materials**
- **Connecting EU external and internal policies**
- **Integrated strategy (3 pillars)**
- **Introduced list of Critical Raw Materials (CRM) in 2010, updated 20 CRMs in 2014**
Critical raw materials

* Communication on the review of the list of critical raw materials for the EU and the implementation of the Raw Materials Initiative - COM(2014) 297, 26.5.2014

CRM ↔ Economic importance + Supply risk

1. Raw Materials Initiative

- China
  - Antimony (87%)
  - Coking Coal (51%)
  - Fluorspar (56%)
  - Gallium (69%)
  - Germanium (59%)
  - Indium (58%)
  - Magnesite (69%)
  - Magnesium (86%)
  - Natural Graphite (69%)
  - Phosphate Rock (38%)
  - REE (Heavy) (99%)
  - REE (Light) (87%)
  - Silicon Metal (56%)
  - Tungsten (85%)

- Russia
  - PGM (27%)

- USA
  - Beryllium (90%)
  - Borates (30%)

- Turkey
  - Borates (38%)

- Brazil
  - Niobium (92%)

- South Africa
  - Chromium (43%)
  - PGM (61%)

- DRC
  - Cobalt (56%)

* *
The EIP plays a central role in the EU's raw materials policy framework

- It reinforces the **Raw Materials Initiative** by:
  - translating the strategic policy framework into **concrete actions**
  - mobilising the **stakeholder community** to implement them

- It has been instrumental in helping **securing R&I funding**: EUR 600 million secured under Horizon 2020
The Strategic Implementation Plan is the EIP's action plan.

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<th>Objectives</th>
<th>Systemic change</th>
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<td>To reduce dependency on imports</td>
<td>To put Europe at the forefront in raw materials sectors</td>
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<td>To promote the production and exports</td>
<td>To make Europe a world leader in raw materials capabilities</td>
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<td>To diversify raw materials sourcing</td>
<td>To mitigate environmental, social and health impacts</td>
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<td>To improve resource efficiency including recycling</td>
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<td>To find alternative raw materials</td>
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<td>Up to 10 innovative pilot actions</td>
<td>Pro-active international co-operation strategy of the EU at bilateral and multilateral level</td>
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<td>Substitutes for 3 applications of CRMs</td>
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<td>Framework conditions for primary raw materials</td>
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<th>Actions</th>
<th>Stakeholder participation</th>
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<td>95 concrete actions, organised in 7 Priority Areas</td>
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The EIP has made significant progress towards the implementation of its actions

- **123 Raw Materials Commitments**: 980 partners, indicative budget ± EUR 2 billion

- **European Commission**:
  - **Horizon 2020 (2014-2016)**: Near 40 Projects on Raw Materials under SC5. EC Contribution > EUR 200 M
  - Circular Economy Package
  - Studies, reports, conferences, dialogues etc

- **Launch EIT Raw Materials**

![Indicative budget secured by the Commitments](image)
The EIP is well on track to achieving its targets

<table>
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<th>Target</th>
<th>Outlook</th>
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<td>1: Up to 10 innovative pilot actions</td>
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<td>2: Substitutes for at least 3 applications of critical and scarce raw materials</td>
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<td>3: Framework conditions for primary raw materials</td>
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<td>4: Framework conditions for material efficiency and waste management</td>
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<td>5: European raw materials knowledge base</td>
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<td>6: Launch of a Knowledge and Innovation Community</td>
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<td>7: Pro-active international co-operation strategy</td>
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Looking towards the future: strategic orientations for the EIP

To increase the EIP's impact until 2020, the EIP will:

• Create synergies with other stakeholders:
  → Member States and regions, downstream users, SMEs, other High-Level Groups, OECD, International Resource Panel etc
  → Improve communication and raise awareness about the EIP's work

• Change the set-up of the Operational Groups
Looking towards the future: strategic orientations for the EIP

The EIP should actively participate in shaping the EU's future raw materials policy framework

1. Outline actions that need to be taken to support raw materials policy + make proposals on how to take into account economic, political and geopolitical evolutions that affect the raw materials sector

2. Carry out a detailed mapping of the EIP's actions to identify useful future activities
Horizon 2020 Context and overview

Excellent science (€ 24 billion)

Industrial leadership (€ 17 billion)

Societal challenges (€ 31 billion)

SC5. Climate action, environment, resource efficiency and raw materials
Objective of the Societal Challenge 5: 'Climate action, environment, resource efficiency and raw materials': to achieve a resource – and water – efficient and climate change resilient economy and society, the protection and sustainable management of natural resources and ecosystems, and a sustainable supply and use of raw materials, in order to meet the needs of a growing global population within the limits of the planet's natural resources and eco-systems.

Call - Greening the Economy
1. Climate services
2. Towards a low-carbon Europe
3. Nature-based solutions for territorial resilience
4. Water
5. **Raw materials**
6. Earth Observation
7. Cultural heritage for sustainable growth
8. Support to policy and preparing for innovation procurement
9. Fast Track to Innovation Pilot
10. SME Instrument

* More topics relevant to raw materials under SC2, SC3, SPIRE, Circular Economy, LEIT-NMBP
Societal Challenge 5 Call 'Greening the economy'.

Budget
• 2017: €76 million

Topics in 2017 will open on 08 November 2016

Deadlines:
• 7 Mar 2017 (RIA, CSA, and First stage of IA)
• 5 Sep 2017 (Second stage of IA)
Societal Challenge 5 Call 'Greening the economy'.

- **New solutions for sustainable production of raw materials**
  - New sensitive exploration technologies (RIA)
- **Raw materials Innovation actions (2 IA)**
  - Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways
  - Sustainable metallurgical processes
- **Raw materials policy support actions (5 CSA)**
  - Good practice in waste collection systems
  - Optimising collection of raw materials data in Member States
  - Linking land use planning policies to national mineral policies
  - EU network of mining and metallurgy regions
  - EU network of regions on sustainable wood mobilisation (wood supply)
- **Raw materials international co-operation (1 CSA)**
  - International network of raw materials training centres
Prospection and exploration

Extraction - Environmental monitoring and risk prevention

Mine closure / Land reclamation

Fight illegal mining

Real time monitoring of exploration and exploitation activities

Environmental impact control

Risk mitigation

Early Warning Systems

Technological disaster management and control

Copernicus for the Extractive industries value chain

Copernicus: Europe's eyes on Earth

Copernicus services address six Key Service Areas:

- Land Monitoring
- Marine Monitoring
- Atmosphere Monitoring
- Emergency Management
- Security
- Climate Change

Copernicus users can also have access to data from a range of services.

Products and Services
GEO-related topics in H2020 WP 2016-2017

SC5-18-2017: Novel in-situ observation
SC5-20-2016: European data hub of the GEOSS information system (Data access) – CLOSED

EO-1-2017: Downstream applications

SMEinst-11-2016-2017: Boosting the potential of small businesses in the areas of climate action, environment, resource efficiency and raw materials (inc. Earth Observation). Continuously open call
Examples of Involvement of Bulgarian Stakeholders

Raw Materials Commitments:
- 1 RMC led by Bulgarian Partner: "Multiplication of the Bulgarian Sustainable Mining Standard"
- 4 RMCs with Bulgarian partners: REFLEX, RUBICON, ELTSTANDARD, PLATINUM

Horizon 2020. 1 Coordination and Support Action: "IMPACTPaperRec". 4 Partners: 2 SMEs, 2 Municipalities
Your Horizon 2020 National Contact Points
http://ec.europa.eu/research/participants/portal/desktop/en/support/national_contact_points.html

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EU raw materials:  

EIP on Raw materials:  

Horizon 2020 - Raw materials webpage:  

Participant portal → SC5 (call "Greening the economy")
- Raw materials topics open on 08 November 2016
- Deadline: 7 Mar 2017 (RIA, CSA, and First stage of IA).
- Don't wait until last minute!!!

Horizon 2020 – EXPERTS:  

EIT Raw materials:  www.eitrawmaterials.eu
- **29 November**  "6th EU-US-Japan Trilateral Conference on Critical Raw Materials" (on invitation only)

- **30 November (morning)**  "Education and training as a vehicle to improve competitiveness and business creation", a half day event co-organized with the **EIT Raw Materials**

- **30 November (afternoon)**  "Horizon 2020 Brokerage event"

- **1 December**  "4th annual High Level Conference of the EIP on Raw Materials"

Other stakeholders are invited to organise satellite events.
If you would like to add your event to the programme, please contact
**GROW-EIP-RAW-MATERIALS@ec.europa.eu**

The Raw Materials Strategy: the way forward

Thank you!

European Mining Business Forum
Sofia, 13 September 2016

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Deputy Head of Unit «Resource Efficiency and Raw Materials»
Directorate-General for Internal Market, Industry, Entrepreneurship and SME's
European Commission
RIA – €10 million in 2017

- Sustainable selective low impact mining (2016)
- New technologies for the enhanced recovery of by-products (2016)
- New sensitive exploration technologies (2017)

Specific Challenge:

- The EU is highly dependent on raw materials that are crucial for a strong European industrial base, an essential building block of the EU's growth and competitiveness. Securing the sustainable access to raw materials, including metals, industrial minerals and construction raw materials, and particularly Critical Raw Materials (CRM), for the EU economy is of high importance.

- However, the EU is confronted with a number of technological challenges along the entire raw materials production value chain of primary and secondary raw materials. There is also a need for clean and sustainable raw materials production solutions to avoid environmental damage.

- This specific challenge is identified in the Priority Area 'Technologies for primary and secondary raw materials’ production of the European Innovation Partnership (EIP) on Raw Materials.

Scope:

- develop sustainable systemic solutions through industrially- and user-driven multidisciplinary consortia covering the relevant value chain of non-energy non-agricultural raw materials.

- Assessment of the related environmental and safety risks and a plan to communicate the added value of the proposal to the local communities and society for improving public acceptance and trust should be addressed.

- Participation of civil society from the start of exploration until after-mining activities in a process of co-design, co-development and co-implementation is strongly encouraged.

- cluster with other projects financed under this topic and – if possible – with other relevant projects in the field funded by Horizon 2020, in support of the EIP on Raw Materials.

- international co-operation is encouraged.
SC5-13 c) New sensitive exploration technologies [2017]

Scope:

- develop **new and more sensitive environmentally sound exploration technologies and solutions** (such as remote sensing technologies, innovative multi-method approaches to reprocess existing or new geophysical data) **able to identify targets for detailed exploration** on the land with lower costs, leading to finding **new deposits** and to **re-assessing** the mineral potential for the EU.
- Any of the **metallic, industrial and/or construction minerals could be targeted**. The **importance of the targeted raw materials for the EU economy** has to be duly **demonstrated** in the proposal.
- **include the participation of technology oriented SMEs**, as far as possible.
- **Sea exploration is not targeted by this call.**

Indicative size of proposals: EUR 3 to 7 million
Expected TRL: 4-5
SC5-13 c) New sensitive exploration technologies [2017]

Expected Impact: Projects are expected to justify and provide evidence that they lead to:

- achieving the objectives of the EIP on Raw Materials, particularly in terms of ensuring the sustainable supply of raw materials to the EU and improving supply conditions within the EU;
- pushing the EU to the forefront in the area of sustainable exploration technologies and solutions through generated know how (planned patents, publications in high impact journals and joint public-private publications etc.);
- increasing the reserves of various primary raw materials within the EU;
- reducing the exploration costs for the industry through new cost-effective exploration technologies, while safe-guarding environmental stability;
- in longer term improving the competitiveness of and creating added value and new jobs in raw materials producing, equipment manufacturing, information and communication technologies and/or downstream industries;
- improving the awareness, acceptance and trust of society in a sustainable raw materials production in the EU.
SC5-14-2016-2017: Raw materials Innovation actions IA – €56 million in 2017

- Intelligent mining on land (2016)
- Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways (2017)
- Sustainable metallurgical processes (2017)
SC5-14-2016-2017: Raw materials Innovation actions

Specific Challenge:

- The **EU is highly dependent on raw materials** that are crucial for a strong European industrial base, an essential building block of the EU's growth and competitiveness. **Securing the sustainable access to raw materials**, including metals, industrial minerals and construction raw materials, and particularly **Critical Raw Materials (CRM)**, for the EU economy is of high importance.

- The **challenge for industry is to scale-up promising raw materials production technologies** and to demonstrate that raw materials can be produced in an innovative and sustainable way in order to make sure that **research and innovation end-up on the market**, to strengthen the competitiveness of the European raw materials industries, to meet ambitious energy and climate 2030 targets and to gain the trust of the EU citizens to raw materials sector.

- This specific challenge is addressing **development of the "innovative pilot actions"** which is one of the **major targets of the European Innovation Partnership (EIP) on Raw Materials**.
SC5-14-2016-2017: Raw materials Innovation actions

Scope:

- to develop innovative pilots demonstrating clean and sustainable production of non-energy non-agricultural raw materials in the EU from primary and/or secondary sources.

- justify relevance of selected pilot demonstrations, finishing at Technology Readiness Levels (TRL) 6-8, in different locations within the EU (if justified also outside);

- facilitate the market uptake of solutions developed through industrially- and user-driven multidisciplinary consortia covering the relevant value chain;

- outline the initial exploitation and business plans (with indicated CAPEX, OPEX, IRR and NPV) with clarified management of IPR, and commitment to the first exploitation;

- consider standardisation aspects when relevant;
**SC5-14-2016-2017: Raw materials Innovation actions**

- **assess health, safety and environmental risks and their management**

- **include a plan to communicate the added value of the proposal to the local communities and society** for improving public acceptance and trust should be addressed by all the proposals.

- **Participation of civil society** from the start of exploration until after-closure activities in a process of co-design, co-development and co-implementation is strongly encouraged.

- **seek synergies, including possibilities for funding, with relevant national/regional research and innovation programmes**...

- **cluster with other projects** financed under this topic and – if possible – with other relevant projects in the field funded by Horizon 2020, in support of the EIP on Raw Materials

- **international cooperation is encouraged.**
SC5-14 Innovation Actions

SC5-14 b) Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways [2017]

- demonstrate new systems integrating relevant processing and refining technologies for better recovery of minerals and metals from low grade and/or complex ores, industrial or mining wastes at increased efficiency in terms of better yield and process selectivity.

- The importance of the targeted raw materials and their sources for the EU has to be demonstrated in the proposal.

- The solution proposed should be flexible enough to adapt to different ore grades and should be supported by efficient and robust process control.

Indicative size of proposals: EUR 8-13 million
Expected TRL: 6-8
SC5-14 b) Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways [2017]

Expected Impact: Projects are expected to justify and provide evidence that they:

• contribute to achieving the targets of the EIP on Raw Materials, particularly in terms of innovative pilot actions on processing and/or recycling for innovative production of raw materials;
• improve economic viability and market potential that will be gained through the pilot, leading to expanding the business across the EU after the project is finished;
• create added value and new jobs in raw materials producing, equipment manufacturing and/or downstream industries;
• optimise raw materials recovery (increased yield and selectivity) from low grade and/or complex and variable primary and/or secondary resources;
SC5-14 b) Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways [2017]

Expected Impact: Projects are expected to justify and provide evidence that they:

- push the EU to the forefront in the area of raw materials processing technologies and solutions through generated know how (planned patents, publications in high impact journals and joint public-private publications etc.);
- lead to unlocking substantial reserves by giving economic viability to new or today unexploited resources within the EU;
- improve the environmental performance, including reduction in waste generation and a better recovery of resources from generated waste;
- improve the health and safety performance of the operations; improve the awareness, acceptance and trust of society in a sustainable raw materials production in the EU;
SC5-14 c) Sustainable metallurgical processes [2017]

- develop **innovative metallurgical systems** integrating pyro-, hydro-, bio-, and/or electro-metallurgical and/or electrochemical technologies, in order to **enhance the production efficiency, metal recovery and selectivity** from primary and/or secondary raw materials.

Indicative size of proposals: EUR 8-13 million
Expected TRL: 6-8
SC5-14 c) Sustainable metallurgical processes [2017]

Expected Impact: Projects are expected to justify and provide evidence that they:

• contribute to achieving the targets of the EIP on Raw Materials, particularly in terms of innovative pilot actions for innovative production of raw materials;

• improve economic viability and market potential that will be gained through the pilot, leading to expanding the business across the EU after the project is finished;

• optimise metal production (increased yield and selectivity) from primary and/or secondary resources, while keeping competitive process performance in terms of resource and energy efficiency;
SC5-14 c) Sustainable metallurgical processes [2017]

**Expected Impact:** Projects are expected to justify and provide evidence that they:

- push the EU to the forefront in the area of metals processing and refining technologies and solutions through generated knowledge (planned patents, publications in high impact journals and joint public-private publications etc.);
- create added value and new jobs in metallurgy, equipment manufacturing and/or downstream industries;
- improve the environmental (control of emissions, residues, effluents), health and safety performance of the operations;
- improve the awareness, acceptance and trust of society in a sustainable raw materials production in the EU.
SC5-15-2016-2017: Raw materials policy support actions - CSA

- Good practice in waste collection systems (2017)
- Optimising collection of raw materials data in Member States (2017)
- Linking land use planning policies to national mineral policies (2017)
- EU network of mining and metallurgy regions (2017)
- EU network of regions on sustainable wood mobilisation (wood supply) (2017)

*Projects should include a work-package to cluster with other projects financed under this topic and – if possible – with other relevant projects in the field funded by Horizon 2020, in support of the EIP on Raw Materials
SC5-15 b) Good practice in waste collection systems [2017]

Proposals should cover all the following points:

- map and assess existing waste collection systems in a representative set of EU Member States for a wide range of waste streams, including packaging and paper waste, and end-of-life products (e.g. electrical and electronic equipment, batteries, transport vehicles, tyres, construction products, furniture);
- where feasible assess advantages and disadvantages of different approaches – including environmental and socio-economic impacts – with quantified costs and benefits;
- identify good practices and key elements for effective and efficient waste collection systems, as well as the barriers for implementation and possible solutions to overcome bottlenecks taking into consideration the adaptability of solutions to different regions of the EU;
- validate the identified key elements, good practices, and the measures to overcome obstacles by consulting stakeholders through a participatory approach involving citizens and plan targeted dissemination actions.

- Indicative size of proposals: EUR 1.5 million
- Up to one project shall be funded
SC5-15 c) Optimising collection of raw materials data in Member States [2017]

Proposals should cover all the following points:

- map and analyse the current situation of collection of data and data sources in all Member States;
- provide recommendations for improvement of data sets and for EU level harmonization with justified benefits for the EU and the Member States and taking into account the INSPIRE Directive;
- demonstrate the applicability of recommendations on a number of improved data sets at Member States level. Improved data sets related to primary mineral raw materials should include for example: data on mineral occurrences and deposits; economic and technical data on mineral exploration and extraction; data on the environmental and social dimensions of extraction and, minerals intelligence data. Data sets related to secondary mineral raw materials should build on raw materials flows at Member state level (Materials Systems Analysis) and be presented in a form of Sankey diagrams. Other data sets on minerals secondary raw materials could also be considered.
- involve all mandated key players for primary and secondary mineral raw materials in Member States, including in particular data providers and relevant public authorities and bodies.
- ensure access to information on how data and best practices will be shared with the wider EU raw materials community, in particular via the Raw Materials Information System (RMIS).

Indicative size of proposals: EUR 1.5 million
Up to one project shall be funded
SC5-15 d) Linking land use planning policies to national mineral policies [2017]

Proposals should cover all the following points:

- review and analyse **how exploration and extraction of mineral raw materials in Member States are integrated in land use planning and practices** at all levels of implementation (national, regional, local) **seeking** the **harmonization and convergence** in national approaches towards minerals policies and land-use planning policies and practices;

- consider **how to best link land-use planning with the concept of safeguarding valuable mineral deposits** (such as mineral deposits of public importance) in order to ensure the current and future access to the deposits and to **avoid ‘land sterilization’**;

- take into account the following relevant issues: a) the integration of land use and subsurface planning, b) the assessment of different options for land use where there is no pre-exclusion, c) the INSPIRE Directive, d) information needed in the process, e) e-procedure, f) smart regulation, g) the infrastructure planning and approaches;
SC5-15 d) Linking land use planning policies to national mineral policies [2017]

Proposals should cover all the following points:

- involve civil society, practitioners, land-use planners and mining public authorities at local, regional and national levels and develop a dissemination strategy;
- provide recommendations and publish guidance documents to promote a harmonized approach and good practise sharing among Member States in order to ensure a more effective access to raw materials;

- Indicative size of proposals: EUR 1.5 million
- Up to one project shall be funded
SC5-15 e) EU network of mining and metallurgy regions [2017]

The purpose is to create a sustainable EU network of regions dedicated to mining (including exploration), processing and metallurgy aiming at improving related framework conditions, social aspects and industry competitiveness.

Specifically, this network should cover all the following points:

- establish coherent co-ordination and support mechanisms among a representative number of EU regions, and identify and engage the other relevant EU regions;
- establish the right raw materials framework conditions based on good practices in the addressed regions, including administration, land use planning, investment conditions, training and attracting skilled workforce;
- define Social Licence to Operate (SLO) guidelines and develop a toolbox improving communication and transparency during the permitting and licensing procedures and in the production cycle (from exploration, mine operation to rehabilitation and residues and tailings management) by mobilising all the concerned EU's stakeholders (relevant authorities municipalities, mining and other relevant companies, civil society organisations and local communities) which can be affected by a mining project.
- explore and promote in and across the regions potential synergies between raw materials, value chains, market and societal players in order to create new business opportunities and economic growth;
SC5-15 e) EU network of mining and metallurgy regions [2017]

- plan and establish operational synergies between R&I investments (public and private) and the European Structural and Investment Funds (ESIF) to strengthen competitiveness of the industry, through different improved R&I infrastructure and capacity and to foster market uptake and replication of innovative solutions in the relevant fields;
- perform communication activities across the EU to present, challenge and validate the outputs of the project;
- involve relevant competent authorities, private sector, research and academic organisations, civil society and experts in relevant social sciences and humanities. Participation of regional authorities from all the regions addressed in the proposal is compulsory;
- identify synergies and collaborate closely with the relevant established or new initiatives at the EU and national levels, such as EIP on Raw materials and KIC on Raw materials and link to circular economy and resource efficiency policies;
- use a multidisciplinary approach, involving in particular social sciences and humanities, in order to better understand the different aspects of Social Licence to Operate (SLO) in mining in a given cultural context. Proposals should also benchmark the EU SLO guidelines and initiatives with those developed internationally (Canada, Australia, USA, etc.).

- Indicative size of proposals: EUR 3 million
- Up to one project shall be funded
SC5-15 f) EU network of regions on sustainable wood mobilisation (wood supply) [2017]

The objective is to create a European network of regions for improved and sustainable supply of primary wood raw material that will contribute to improved industrial competitiveness and rural development, whilst preserving EU forest ecosystems and forests' capacity to deliver all their economic, social and ecological functions, and ensuring consistency with relevant EU policy goals (e.g. EU Bioeconomy Strategy, 7th Environmental Action Programme, EU Biodiversity Strategy, EU Forest Strategy, EU Nature legislation; EU climate policy). The network’s activities shall cover all the following points:

- establish coherent co-ordination and support mechanisms among a geographically and socio-economically representative number of regions, and identify and engage other relevant EU regions;
- plan and establish operational synergies between R&I investments (public and private) and the European Structural and Investment Funds (ESIF), notably European Agricultural Fund for Rural Development (EAFRD), to facilitate uptake and replication of innovative solutions;
- identify, exchange and widely disseminate good practices (replicable between the regions) in the area of sustainable wood mobilisation with an aim to establish the right framework conditions. This should build on the European Commission/Forest Europe/UNECE/FAO ‘Good practice guidance on sustainable mobilisation of wood in Europe’ and relevant projects (such as SIMWOOD), and contribute to the strategic orientations of the EU Forest Strategy;
SC5-15 f) EU network of regions on sustainable wood mobilisation (wood supply) [2017]

- explore and promote potential synergies between materials, value chains, markets and societal players in order to create new business opportunities and economic growth;
- identify synergies and collaborate closely with the relevant established or new initiatives at the EU and national levels, such as the EIPs on Raw Materials and for Agricultural Productivity and Sustainability.

The areas of focus for the regional network activities should at minimum cover: (a) forest ownership and land tenure, sustainable forest management, administration, co-ordination and planning, including silvicultural measures; (b) infrastructure and logistics; (c) organisation and transparency of the markets; (d) financing sourcing, legal and fiscal measures; and (e) education, training and skills.

Participation of competent regional authorities relevant to sustainable wood mobilisation is required, notably in the context of establishing operational synergies in the research and innovation area. Participation of relevant competent authorities and actors for sustainable wood mobilisation, e.g. chambers of agriculture and forestry, forest owners/managers associations, academia, research technology platforms/centres, and EU stakeholder organisations, is encouraged.

- Indicative size of proposals: EUR 1.5 million
- Up to one project shall be funded
SC5-16-2016-2017: Raw materials international cooperation - CSA

- Demand-supply forecast and raw materials flows at global level (2016)
- Advancing the idea of a World Forum on Raw Materials (2016)
- International network of raw materials training centres (2017)
SC5-16 c) International network of raw materials training centres [2017]

Proposals should:

- create a self-sustainable long-term lasting international network of training centres for professionals.
- involve educational and research institutions in the EU and the leading counterparts in third countries, based on specific country expertise in the primary and secondary raw materials sectors.
- map skills and knowledge in the EU and the third countries, identify key knowledge gaps and emerging needs, develop roadmap for improving skills and knowledge,
- establish common training programmes in the raw materials sectors.
- International collaboration is required.
- where appropriate, synergies with the relevant EU Member States initiatives are to be explored and fostered.

- Indicative size of proposals: EUR 1 million