



**EIT RAWMATERIALS**

**List of participants**

<b>Participant No.</b>	<b>Participant organisation name</b>	<b>Country</b>
1 (Coordinator)	EIT RawMaterials GmbH	DE
2	EIT Raw Materials CLC North AB	SE
3	EIT RawMaterials CLC Baltic Sea OY	FI
4	EIT RawMaterials Central EURL	FR
5	EIT RawMaterials CLC West	BE
6	EIT RawMaterials CLC East Sp. z o.o.	PL
7	EIT RawMaterials CLC South S.r.l.	IT

## Executive summary

Metals and minerals are **key enablers for the European Green Deal** and will substitute fossil fuels in the long run. At the same time, Europe is **highly dependent on importing** raw materials for its manufacturing industries and to accomplish the transition to a resource efficient, sustainable society. This is why the European Green Deal defines **access to resources** as a **strategic security question** for Europe's ambition to develop into a **green economy**.

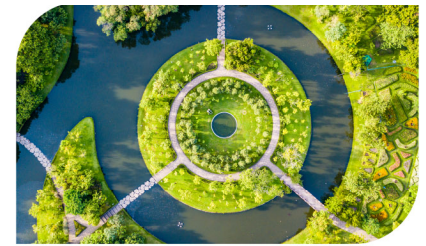
To meet this challenge, the vision of EIT RawMaterials is to **develop raw materials into a major strength for Europe**. EIT RawMaterials' mission is to advance Europe's transition to sustainability by **driving innovation along the entire raw materials value chain**. To fulfil the mission, **three strategic objectives** are addressed: securing raw materials supply; designing materials solutions; and closing materials loops.



**SECURING RAW MATERIALS SUPPLY**



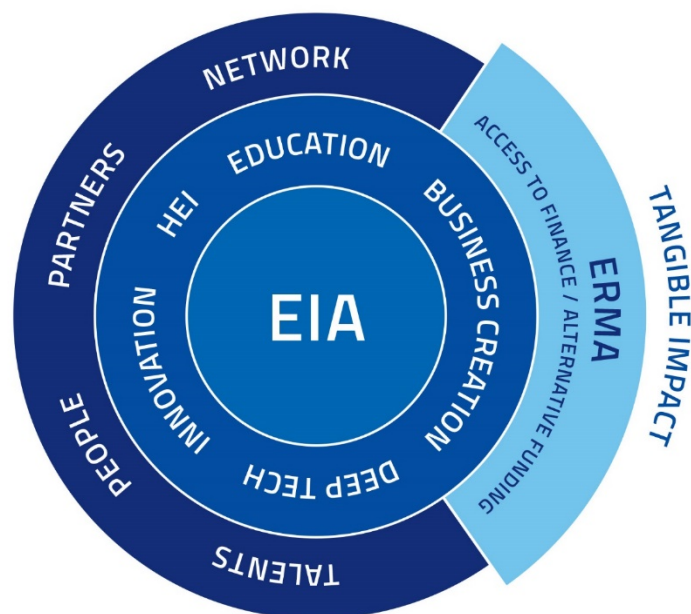
**DESIGNING MATERIALS SOLUTIONS**



**CLOSING MATERIAL LOOPS**

*Fig. 1: EIT RawMaterials Strategic Objectives*

EIT RawMaterials is the **world's largest and leading partnership** in raw materials and closely connected with the policy agenda of the European Commission. The Knowledge and Innovation Community (KIC) is **open to new partners** from Regional Innovation Scheme (RIS) countries and small business and is driven by a strategy that creates **industrial symbiosis** through innovation across value chains. The **European Raw Materials Alliance (ERMA)** managed by EIT RawMaterials on behalf of the Commission is an important mechanism for translating projects into **investments and infrastructures** that contribute to **creating added value and jobs for Europe** within key strategic industrial ecosystems. These initiatives are complemented by EIT RawMaterials' **leading role in education and innovation activities**, such as the EIT's initiative in capacity building for **Higher Education Institutions (HEI)** and the European Commission's **European Innovation Area (EIA)**. Through these **high-impact activities and the KIC's talent, people and partner network**, EIT RawMaterials has set the foundation to create impact and to achieve its strategic objectives. (see Fig. 2).



*Fig. 2: EIT RawMaterials Activities*

The Business Plan 2023-2025 is fully aligned with the mission and vision of EIT RawMaterials and will **strongly contribute** to the strategic priorities and objectives as defined in the Strategic Agenda 2021-2027. The **main activities of Business Plan 2023-2025<sup>1</sup>** are:

- **More than 40 new projects on upscaling, education and RIS activities** that will start in 2023 and create impact and a sustainable standard of living across Europe (close to 90 new projects in 100% EIT funding scenario).
- **Strong diversification of EIT RawMaterials' revenue generation** through RoI & Equity, SAFE approach (Simple Agreement for Future Equity), service fees, milestone fees and success fees fully

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<sup>1</sup> The Business Plan proposal 2023-2025 is based on the partial funding allocation modalities communicated by the EIT. This means that 100% of the budget are allocated upfront for 2023, while only 75% of the budget are allocated upfront for 2024 and 2025. It is expected that more funding will be allocated for 2024 and 2025 to meet the Strategic Agenda budget and KPI targets. This implies that the KPI planning in the original version of the Business Plan was not based on the full budget for 2023-2025 but on an 83% budget, which has been further reduced by another 12% due to the EIT's final grant allocation as communicated in December 2022 (also Financial Sustainability targets have been corrected). KPI targets might be subject to further adjustments and amendment to future amended funding allocations by the EIT. The Implementation of the EIT RawMaterials Business Plan 2023-2025 will fully comply with the EIT Financial Sustainability principles, KIC fund principles, Innovation Principles, EIT RIS Hub Minimum Standards and Good Governance principles.



supporting the Strategic Agenda 2021-2027 targets.

- **Three recently accepted EIT-labelled Master programmes** are planned to educate more than 400 labelled students along 2023-2025 (more than 540 labelled students and up to six new EIT-labelled Master programmes in 100% EIT funding scenario).
- **New ‘Lab2Market’ initiative** to boost the creation of new start-ups by EIT-labelled students and entrepreneurs, despite of the significant EIT funding cuts of more than 18m EUR.
- **Continuation of EIT RawMaterials’ successful leadership of the HEI Capacity Building Initiative**, with strong focus on the Deep Tech Talents Initiative (DTTI) and the KIC’s strong footprint in RIS regions.
- **Extension of the successful Girls Go Circular programme across all EU-27 countries under the leadership of EIT RawMaterials.**
- **New Non-EIT Funded Activity** fully financed by EIT RawMaterials: EIT RawMaterials e.V.
- **Tight monitoring and controlling of the KIC’s performance** on impact, KPIs and financial sustainability.

Selected contributions of Business Plan 2023-2025<sup>1</sup> to the Strategic Agenda 2021-2027 are:

- **More than 120 marketed innovations** (>40% of the 2021-2027 target)
- **210 start-ups supported** (>50% of the 2021-2027 target)
- **130m EUR investment attracted by start-ups supported** (200% of the 2021-2027 target)
- **More than 30 new start-ups created from education and innovation** (>20% of the 2021-2027 targets)
- **400 new labelled graduates** (30% of the 2021-2027 target)

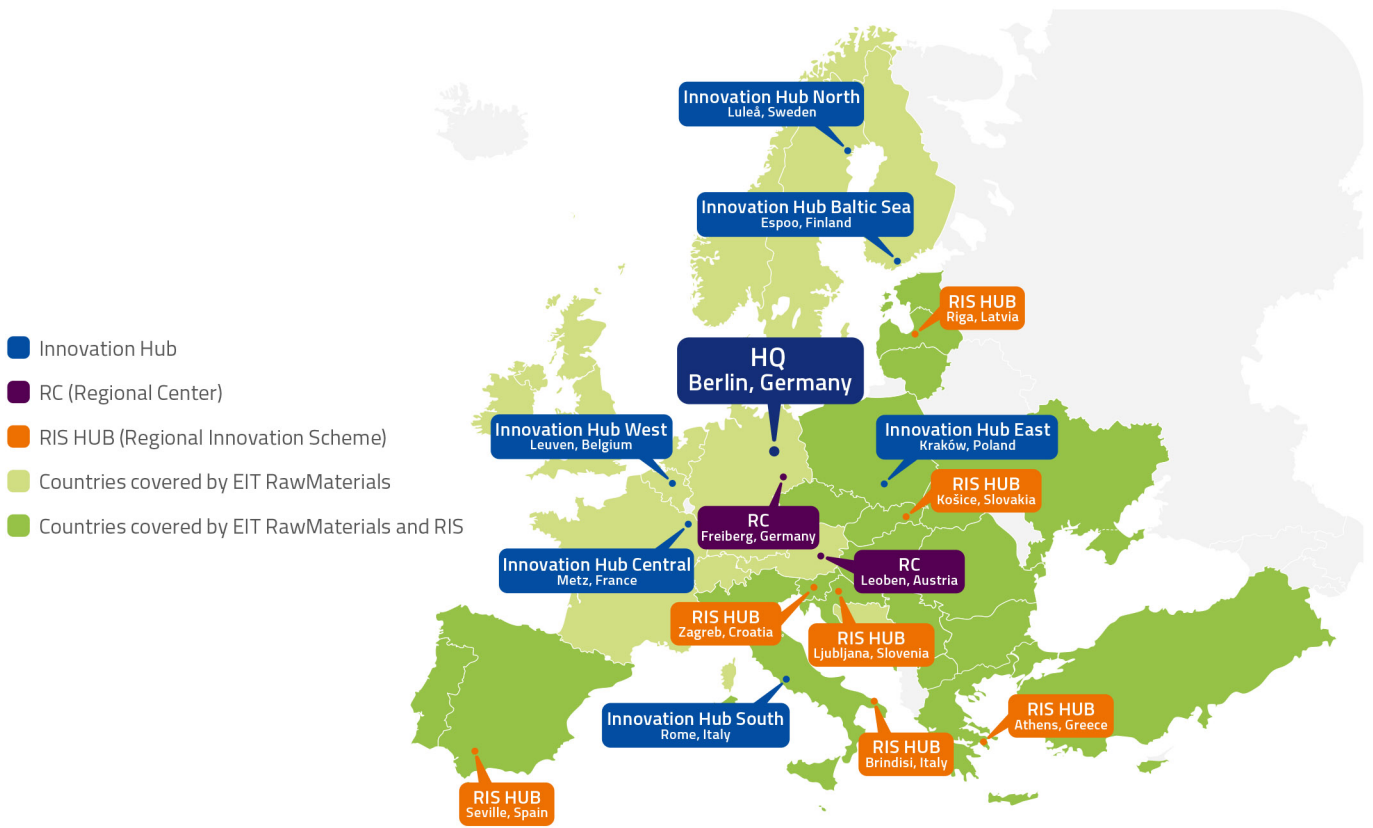
In the upcoming years, EIT RawMaterials will continue its **high level of engagement in outreach** to European and national policy-makers. The KIC will also intensify **its outreach activities towards international markets and organisations** in order to support diversification of the European supply with critical raw materials. Based on the investment potential of ERMA, EIT RawMaterials will be able to **support closing the significant supply-demand gaps for many critical raw materials** for Europe and thereby contribute to the European Commission’s targets.

EIT RawMaterials will continue to implement the **BEST (Be Excellent in Service Today) programme** as a highly performing **network- and service-focused organisation** with the ambition to become a stand-alone, profitable professional service organisation by 2027. The **new network partnership model** of EIT RawMaterials will serve as the basis to achieve these targets while offering an **attractive value proposition and services** to the KIC’s existing and new partners, also further expanding to RIS countries based on the existing coverage (see Fig. 3).

As part of the new partnership model, EIT RawMaterials continues to offer both existing and new partners a **highly attractive funding scheme** fully in line with the EIT’s expectations on financial sustainability. The KAVA Calls have been fully revised in terms of **openness, agility and transparency**, both from a financial sustainability and co-funding standpoint. They address **resource efficiency** at the partners’ and the KIC’s



organisation side whilst maintaining the **topical focus** in accordance with **the set targets of the Strategic Agenda 2021-2027**.



*Fig. 3: EIT RawMaterials coverage of Europe*



# 1. Excellence in regards to the KIC’s Multiannual Strategic Agenda 2021-2027

## 1.1 Objectives and ambition

### Choosing the most impactful and innovative activities to support the strategic objectives

EIT RawMaterials has defined three strategic objectives in its Strategic Agenda 2021-2027:

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

All KAVAs supported by EIT RawMaterials must directly contribute to one or more of these strategic objectives. Each strategic objective is linked to a dedicated EIT RawMaterials Lighthouse. Those are thematically clustered in Responsible Sourcing, Sustainable Materials, and Circular Societies. Guiding strategic frameworks are used to align on innovation and education targets for the community, to identify clusters of partner interests, to identify pressing industry challenges and innovation opportunities for the KIC's calls for proposals, to forge significant connections with the EIT RawMaterials partner network through matchmaking events and to accelerate EIT RawMaterials projects to investors, including ERMA. The three Lighthouses focus on six key value chains that strongly correlate with the EU’s present and future raw materials challenges and which are of highest strategic importance for the EU. Those include batteries, fuel cells, magnets and motors, photovoltaics, electronics and lightweight design. In addition, there are specific focus topics, which are called future exploration, mining and processing technologies.

	<b>Responsible Sourcing</b>	<b>Sustainable Materials</b>	<b>Circular Societies</b>
<b>Strategic technologies and value chains</b>	Batteries, fuel cells, magnets and motors, photovoltaics, electronics, lightweight design, future mining, exploration, and processing technologies		
<b>Thematic focus areas</b>	<ul style="list-style-type: none"> <li>• Smart, data-driven targeting of ore deposits</li> <li>• Mining and ore processing at the highest safety and environmental standards</li> <li>• Social Licence to Operate</li> </ul>	<ul style="list-style-type: none"> <li>• Substitution of critical, toxic, and low-performance materials</li> <li>• Resource-efficient materials design and processing</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial symbiosis</li> <li>• End-of-life product recycling</li> <li>• Design for recycling and lifetime extension</li> <li>• Traceability, sustainability, supply chain transparency</li> </ul>





<b>EIT RawMaterials Strategic Objectives</b>	Securing raw materials supply	Designing materials solutions	Closing materials loops
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Strategic Objective 1: Securing raw materials supply

Securing raw materials supply from primary and secondary sources is a pivotal challenge for Europe and the ‘twin transition’. Minerals and metals are the fundamental building blocks for a sustainable, greener and more circular future. Yet, raw materials must be sourced responsibly and sustainably at competitive prices. This strategic objective is therefore closely linked with the Lighthouse Responsible Sourcing and aims at achieving a more targeted and cost-effective exploration and quicker transition to mining operation, reducing the environmental footprint of mining and processing and improving the efficiency of mineral and metallurgical processing. Examples:

- With the start-up **Terranigma Solutions** that provides innovative software solutions to accelerate exploration and data acquisition processes, and with the upscaling **SOLSA-DEM’UP** project that aims to bring to market the first automated expert system for on-line drill cores and samples analysis, we will revolutionise exploration campaigns and accelerate the identification of new mineral resources.
- The **LiBre** project is aiming to contribute to the discovery of major ores in Europe and supporting key investment. This will decrease Europe’s dependency and vulnerability to external disruptions in supply chains of borates and lithium.
- With the mining industry that is highly dependent on the social license to operate (SLO), relying on best practices in environmental, social and governance (ESG) aspects, the start-up **Bind-X** we support will improve both the dust control and improve the environmental performances mines.
- And to support innovation and entrepreneurship in mining and exploration, we have initiated two new Masters programmes **TimRex** and **Raven**, that will provide talents to the industry in the fields of mineral resource exploration and mine engineering by attracting students from around the world.

Strategic Objective 2: Designing materials solutions

The choice and design of pre-cursor materials, intermediates, and advanced materials significantly impact the overall resource efficiency, footprint, performance, and cost of a product. Hence, designing materials solutions is a key approach in raw materials innovation and education. This strategic objective is linked to the Lighthouse Sustainable Materials and focuses on substituting critical, toxic and low-performance materials at the elemental, materials and processing levels. Key technological approaches include modelling materials and processes, alloy development, microstructure engineering and resource-efficient materials design and processing, including near-net-shape processing, e.g., 3D printing. Examples:

- the **HIPAM** project will through the additive Manufacturing and Powder Metallurgy route provide a



new way for the production of high added value Austenitic Ni-Free Stainless Steel (ANFSS) as an alternative to Titanium, Cobalt and other alloys typically used in consumer and healthcare applications. The **CastQC** project aims at producing a stronger and more sustainable aluminium alloy that directly contributes to a 30% weight reduction and a 20% reduction in CO<sub>2</sub> emissions compared to the standard alloy.

- The **EUMagnesium** project will reduce the full dependency on magnesium on China imports by new, innovative processing technologies that will be implemented in a new metal production facility in Tarnaveni, Romania.
- The start-up **Adianano** we support in the fields of deep-tech and nano-materials, aims to supply nano silicon composites to European lithium-ion manufacturers to improve the battery capacity by a factor of two.
- On education: to increase the skills for jobs in enterprises that are active along the Rare Earth Magnets and Motors value chain that Europe needs to develop to tackle the energy transition challenge, we initiated in 2022 the development of a lifelong learning course, **ExpSkills-REM**, that aims to develop training for professionals within that thematic orientation.

### Strategic Objective 3: Closing materials loops

The concept of a Circular Economy has recently gained traction in Europe as a positive, solutions-based perspective for achieving economic development within increasing environmental constraints. Raw, processed, and advanced materials from primary and secondary sources are the backbone of the economy. A radical shift is required from linear to circular thinking. End-of-life products, so-called ‘waste’, must be considered as a resource for new product cycles. At the same time, losses and stocks of unused materials must be minimised and valorised along the entire raw materials value chains. In addition, business opportunities in strategically linking the processing of different materials’ value chains must be considered to define the best circular solution from a systems point of view. This is defined as Industrial Symbiosis. Awareness of the benefits of closing material loops must be raised in society. The strategic objective of closing materials loops is linked to the Lighthouse Circular Societies, which focuses on innovation and education related to industrial symbiosis, design for recycling and lifetime extension, end-of-life product recycling as well as on the chain of custody (traceability, sustainability, transparency). Examples:

- The **Alcasim** project that aims to design, develop and pilot a professional course on tools for environmental and water footprint via Life Cycle Assessment (LCA) will support the design of a circularity economy.
- The **ReproSolar** project, which is composed of deep-tech start-ups we supported in their development, aims at realising a highly innovative industrial process for the recycling of end-of-life silicon-based photovoltaic modules containing precious raw materials to recover and reuse.
- The **ReLieVe** project which has delivered the up-scaling of an innovative closed-loop process to recycle Li-ion batteries from electric vehicles to supply Europe with critical raw materials required for batteries manufacturing will be supported by the Innovation Funds (EC) and industrialised in 2024.
- With the e-mobility that is strongly dependent on high performant magnets in e-motors, the deep-tech





**MagREESource** start-up will complete the picture, by scaling up a process to recycle end-of-life magnets into magnet powder, ready to be transformed into new magnets via innovative manufacturing technologies.

- Focusing on skills and expertise on circular economy and recycling processes that will be crucial for solving the circular economy challenges, we will launch in 2023 the new doctoral summer school **Clocks** that will have a strong focus on scientific and technical topics in that field.

Consistent with the overall KIC portfolio, all projects in the ERMA investment pipeline address one or more of the three strategic objectives of the KIC, with the following distribution:

- Securing raw materials supply: 55 projects (around 50% of the ERMA pipeline)
- Designing materials solutions: 22 projects (around 20% of the ERMA pipeline)
- Closing materials loops: 38 projects (around 30% of the ERMA pipeline)

EIT RawMaterials will use the BP2023-2025 as a guidance to close remaining gaps in the target achievement of EIT Core KPIs and Financial Sustainability. Compared to the Strategic Agenda 2021-2027 the BP2023-2025 is marked by a considerable funding cut through the EIT, which obviously triggers a further review of the initially assumed KPIs, as defined in the Strategic Agenda 2021-2027.<sup>3</sup> The portfolio activities will secure these target achievements and implement the main learnings from previous years. The key success factors and activities for the BP2023-2025 are:

- **Increased Business Creation budget and delivery function** for more start-ups created and supported as well as higher investments from the KIC into start-ups:
  - Regardless recent cuts in funding, the KIC has decided to boost the annual budgets for business creation.
  - This will be accompanied by a stronger organisational backbone with a central business creation support function and team. The central team will support the portfolio development, service the CLC business development function and support the negotiation of SAFE equity agreements.
  - As a collateral negative effect of the aforementioned funding cuts, the KIC will **not** be able to ramp up the cooperation with partners and third parties to scout for start-ups as planned. A review

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of the historically underlying Financial Sustainability targets becomes obvious and a matter of urgency.

- Despite the significant funding cuts, the KIC will still aim to support 210 new start-ups during 2023-2025 (>50% of the 2021-27 target; higher in 100% EIT funding scenario) and a good opportunity for KIC investments and backflow.
- The additional more than 130m EUR of investments attracted by the start-ups will further leverage the KIC's investments and will contribute to a targeted overachievement of the 7-year Strategic Agenda target by a factor higher than 5.
- New activities in education and innovation will foster the creation of more start-ups, despite the funding cuts: In education, the new 'Lab2Market' initiative will create up to five new start-ups p.a. with labelled students. Together with at least three new start-ups p.a. from innovation projects, the KIC will deliver more than 30 new start-ups-created in the years 2023-2025 (higher in 100% EIT funding scenario).
- **Increased Education budget and delivery function** for more EIT-labelled graduates and more start-ups created:
  - The EIT-labelled Masters programmes have been extended by three additional ones to nine, which will lead to additional 75 labelled graduates p.a. from 2024 onwards. In total, close to 400 new labelled graduates will be delivered during 2023-2025 (30% of the 2021-2027 target; higher in 100% EIT funding scenario).
  - In the 100% EIT funding scenario, the KIC might implement up to three additional EIT-labelled Masters programmes, ramping up the total annual output of labelled graduates to higher than 200 p.a. from 2024 onwards.
  - The RM Academy will be developed into new fields of activity and potential in close collaboration with the EIT and the European Commission, fully complementing strategically important initiatives (HEI, DTTI, GGC).
- **Optimised Innovation budget and delivery function** for highly performing up-scaling projects for more marketed innovations and more start-ups / spin-offs created as well as backflow:
  - The call, evaluation and selection procedures will be reviewed and further optimised towards KPI and Financial Sustainability performance criteria. The ERMA investment pipeline will be used to scout for up-scaling projects and include new partners into the KIC.
  - The portfolio monitoring approach will be intensified, project review cycles will be shortened and projects that are underperforming will be discontinued faster.
  - New revolving monitoring cycle on the achievement of societal KPIs.
  - Stronger communication and dissemination of impact achievements and overall degree of implementation of the KIC's impact creation.
  - ERMA will be more strongly used to commercialise up-scaling projects. This will be complemented by a stronger organisational backbone in access-to-finance.



- **Optimised budget for RIS Activities** for more partners, start-ups and students from RIS countries:
  - The annual targeted budgets for RIS Activities will go beyond the minimum 10% contribution of the annual EIT funding, depending on the quality of proposals and additional EIT funding in 2024 and 2025.
  - Reinforced RIS implementation guidance that includes best practices in the RIS raw materials sector and RIS outreach activities through ERMA investment cases and the ERMA partnership.
  - A thorough review and re-application process of all existing and new RIS Hubs that fully adhere to performance and partnership extension objectives will be conducted.
- **Implementation of operational and process-related improvements** including:
  - Good governance principles along all organisational bodies, functions and practices.
  - Strengthened central Project Management Office (PMO) and partner management functions for productivity gains in project and investment deliveries.
  - Continuous Improvement Process with the aim to rigorously deprioritise and discontinue non-key actions, budgets and projects.
  - Further improvement of the IT architecture of EIT RawMaterials in close collaboration with the EIT Cross-KIC Shared Services activity.

### **Financial Sustainability**

During 2023-2025, EIT RawMaterials will deliver on all Financial Sustainability (FS) targets as outlined for the respective years in the Strategic Agenda 2021-2027. All necessary activities to achieve the long-term FS targets beyond 2025 will be implemented during this period.

EIT RawMaterials has decided to intensify its focus on business creation and access to finance, where in both functions a stronger organisational backbone with central functions and teams will be further built up during 2023-2025, depending on the available funding. Together with the Work Package (WP)-driven activities in business creation and other critical WPs, this will support realising business and investment opportunities, generate a highly attractive portfolio of start-ups and scale-ups and increase the asset values of EIT RawMaterials:

- The number of start-ups created and supported will be increased compared to the Strategic Agenda 2021-2027 targets, even in the light of a lower EIT funding;
- The survival rate of start-ups (currently >80%) and the level of investment attracted (forecasted to overachieve the 7y-target by factor 5.5) will be kept high;
- Backflows will be realised based on the SAFE equity holding approach and complemented by returns from investing into up-scaling projects.

It is expected that the 2023-2025 SA target for RoI & Equity will only be (over)achieved in the full-fledged 100% EIT funding scenario and if assuming a success rate of at least 25% for all up-scaling and start-up investments, thus still leaving good upside potential looking at the high survival rate of ventures. The KIC's



growing access-to-finance network and its strong engagement in equity investments and ERMA will help to achieve those numbers. The KIC has also engaged senior experts from finance and investment to further extend this network and to work on the possible launch of an investment fund to support realising and leveraging the KIC's investments.

EIT RawMaterials is profiting from actively supporting the commercialisation of business ideas and scaling of ventures through service and success fees. This development will be further triggered by the realisation of milestone and success fees that have been negotiated to profit from the successful matching of projects and investment cases with investors and customers. Additional income from open innovation challenges such as Hackathons are further complementing the services and consulting income stream.

EIT RawMaterials is the world's leading and largest partnership in the raw materials sector with partners from all sides of the Knowledge Triangle. These partners are the key asset and of the highest importance for EIT RawMaterials to achieve its long-term impact goals for the European raw materials sector and the EU Green Deal. The KIC will therefore further its partner retention and acquisition activities, extend its high-value partner network into adjacent and international markets and set membership fees at a level to provide the necessary co-funding to the business plans and for own co-investments. The partners, as well as non-partners, benefit from the RM Summit and the RM Expert Forum, which have both advanced into leading world-wide events generating impact and income streams for the KIC. In 2022, for example, the RM Summit has been ranked as one of the most important world-wide mining event (see <https://www.axora.com/insights/top-mining-events-to-attend-in-2022/>).

## **1.2 Methodology**

### **KIC Ecosystem**

EIT RawMaterials represents the world's largest community in the raw materials sector. With its more than 300 partners, it covers the entire raw materials value chain, education at all levels and innovation from mid to high TRL levels to commercialisation and investment. Thanks to the openness of our annual Calls for Education, Innovation, Business Creation and RIS projects, 70 new partners joined our organisation in 2022, with a significant number of SMEs and start-up that joined being actively part in the newly selected innovation projects. Further start-ups and SMEs are expected to join the partnership through the ramp-up of the supported start-ups during 2023-2025 (300 start-ups supported in 100% EIT funding scenario) and by using the new Network Partnership Category allowing smaller entities to enter EIT RawMaterials at a price of 3k EUR p.a.



With the services we have developed and provide, both on education (e.g. The Race) and on innovation (e.g. Open Innovation Challenges), we have been able to initiate good relations with the main actors in the global mining industry in 2022. Through targeted partner acquisition programmes and based on services sold, new partners will be gained for the KIC with membership fees materialising in 2023-2025. This ecosystem has also strongly benefitted from the launch of the European Raw Materials Alliance (ERMA) in 2020, which currently counts more than 600 partner organisations from industry, Associations, NGOs, Universities and RTOs and even Governments (see Fig. 4). Over half of these partners (around 380) are not yet members of EIT RawMaterials (including about 220 Industry, 15 RTO and 5 University entities). Therefore, ERMA is a very important mechanism to scout for new EIT RawMaterials members.

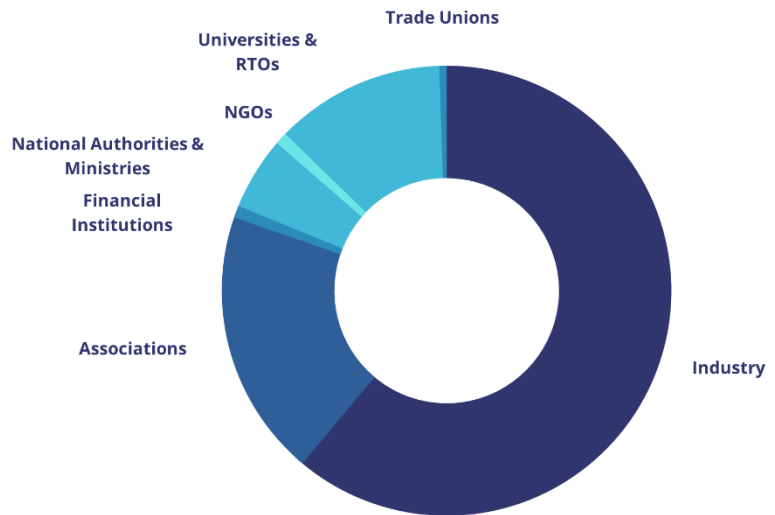


Fig. 4: ERMA Partnership

The KIC’s ecosystem will further benefit from EIT RawMaterials’ leading role in the new capacity building initiative for Higher Education Institutions (HEI) and its strong foothold in the East and Southeast European area and RIS countries (see chapter 2.3). Thanks to this diversity, the large community we have been able to build and to the panel of activities we support, we have observed a very high knowledge triangle integration in partner-driven projects we support on Education, Innovation and RIS activities, that we are convinced will continue to drive the excellence and create a strong impact in the raw materials chain (see Fig. 5).

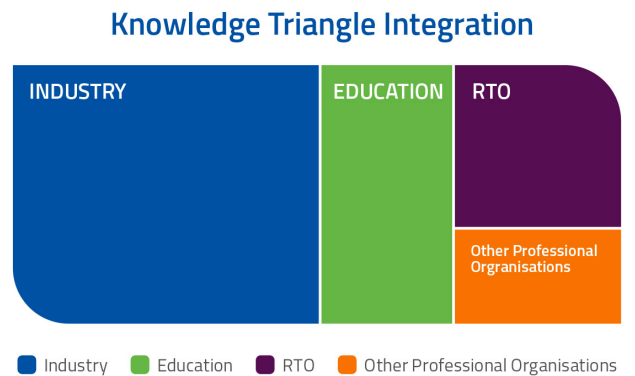


Fig. 5: Partner categories in all running projects in 2022

**Gender Dimension**

EIT RawMaterials is well-balanced and diverse throughout the KIC community and organisation, with a wide variety of geographical and professional backgrounds. At the level of the Executive Board, which also represents the Shareholder Meeting, the participation of women as members has been tripled to a 30% female



representation (see Fig. 6a). The same tendency can be observed at the level of the entire KIC organisation where the majority of employees are women (see Fig. 6b). We achieved this impressive result by integrating best-in-class people practices to ensure that equality is an intrinsic part of our culture. This includes a transparent, gender-neutral recruitment process, flexible working schedules, education about discrimination and biased behaviour in the workspace, an implemented Diversity and Inclusion Policy as well as tracking and analysing diversity data across the organisation. Another indicator for the high diversity of EIT RawMaterials are the different nationalities in the staff: The 73 FTEs represent almost 30 different nationalities, i.e. almost every second employee comes from a different country.

Female Representation on the Executive Board Level  
2019 - 2022

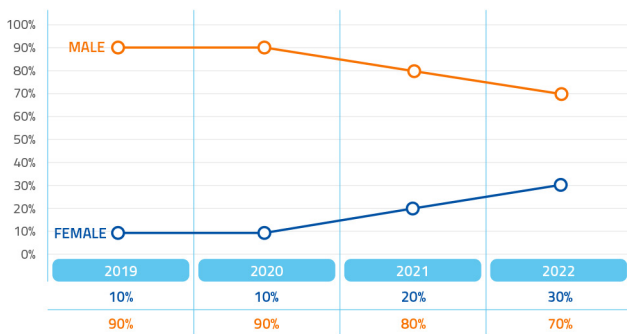


Fig. 6a: Female representation Executive Board team

Female Representation Across the Team  
2019 - 2022

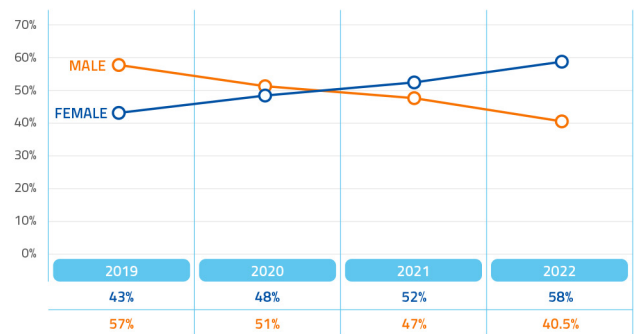


Fig. 6b: Female representation across the team

This positive trend on diversity is also visible in the Education programmes of EIT RawMaterials. For example, the RACE, which is a 2-week challenge-based learning programme across the raw materials value chain involving about 50 EIT-labelled and 20 other Masters students, regularly achieves balanced participations of females and males (see Fig. 7 for 2022 representation). The Girls Go Circular programme is primarily designed to attract girls at the age of 14-19 into the field of raw materials and Circular Economy – with outstanding success of almost 11,000 girls that have been trained in 2021 alone (see also later WP Education).

Gender Balance  
RACE 2022

Male  
Female

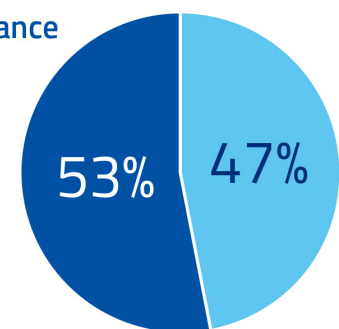


Fig. 7: Female representation RACE 2022

### KAVA Calls – strong focus to merit-based projects

In 2021, EIT RawMaterials decided to radically change the format of the previous annual KAVA Calls, to a new merit-based 2-stages process call, that includes a first screening (Phase 1) of the applications and only





allow applications that fulfil all the selected criteria to submit a final proposal (Phase2). With this new process, and in the case of the up-scaling activities we support through these calls, the alignment with the EIT RawMaterials strategy, the innovativeness and the potential impact of the proposal are examined at Stage 1, and on top of that to support the financial sustainability of the organisation, the following additional criteria complete the Stage 1 evaluation:

- The commercial attractiveness must be supported by a short description of products and services developed, end users and customers, the market dynamics and forecast, and the business model, with concrete numbers on the pricing range, the expected production capacity, the CAPEX and OPEX, and the sales ramp up.
- The commercialisation capacity to enter the market with a description of who will produce what, and who will commercialise what, the background of the members of the commercialisation organisation(s) and their access to the potential end users and future customers for validation and piloting,
- The pay-back model with information on which organisation will provide the pay-back, what amount and the timeline, payback calculation based on sales forecast and a proposed methodology. This can be based on sales revenue sharing with or without a threshold related to break-even in case of investment needed before start of production, or by taking shares in the company.

Once the call is launched, the applicants have around two months to develop the draft proposal (5 pages document) for Phase 1. They need to submit it on our registration platform (SeedBook) on time to have it evaluated by experts. The ones that fulfil all five criteria are selected for Stage 2. The same process applies for applications on Education and RIS activities, with specific criteria for each category of activities (e.g. different criteria applied for Lifelong learning and Doctoral schools on Education).

At this stage, and based on the three calls already run under this format, only half of the draft proposals are selected to go to Stage 2 of the process. The successful applicants have around 2.5 months to finalise the project consortia and the proposal that should fulfil a new set of criteria in Eligibility, Strategy and Quality. The two first ones are evaluated internally and the third one by a panel of external evaluators. Each proposal is being evaluated by three of them with a consensus meeting organised at the end of the individual evaluations and the designation of a rapporteur in charge to provide the final scoring and the evaluation report.

The Strategy criteria given in Call texts are used as the basis for the internal evaluation by the EIT RawMaterials Operational Management Team (OMT) and are designed to ensure that the overall portfolio is composed of high-quality projects and is aligned with the scope and goals of EIT RawMaterials, including the financial sustainability of the organisation and the targeted KPIs. At the end of the process, the EIT RawMaterials Management Team proposes a portfolio of projects to be funded based on the quality and strategy criteria ranking and the overall available funding. The Executive Board approves the portfolio of projects to be submitted to the EIT for funding in the next Business Plan.

For up-scaling projects, the evaluation focuses mainly on the strength and impact of the business case, the potential number of marketed innovations and start-ups created, the co-funding, and the contribution to the KIC's financial sustainability. Education projects are positively evaluated mostly for their impact in terms of KPIs, the actions scheduled for the continuation of the project after the funding period, and the contribution to



the long-term strategy of the RM Academy. For the RIS projects, their capacity-building possibilities and potential for continuation after the funding period are the most relevant questions.

With this new 2-stage evaluation process, we noticed a much higher strategic and quality scoring level of the final proposals. Only merit-based proposals are selected by the EIT RawMaterials Management Team. Additionally, this approach decreases the workload, enabling the KIC to run two calls per year. By better promoting the KAVA Calls outside the organisation and thanks to their openness, also more non-partner organisations applied at the submission stage (Stage 1). In that way, we succeeded in bringing many new organisations and their expertise to projects and the community (e.g. 70 new organisations joined in 2022). In each project we select, there is a mandatory dissemination WP, to provide open access to research results such as publications, and all the selected projects address at least one of the UNSDGs, as well as one of the six environmental objectives criteria.

In order to monitor that these running projects will achieve the indicated goals, a cycle of project reviews is organised annually in spring. In that regard, in a 2-hour meeting, the project coordinator of each running project pitches in front of EIT RawMaterials representatives, including Operations, CLC representatives and a Senior Advisor. The review covers items such as project budget, timeline, KPIs, technical progress, Go-to-market strategy, and potential change-requests. Based on the meeting and documents provided, EIT RawMaterials staff decides whether the project should be flagged or not. If so, an action plan with mitigation actions is requested within a month and an additional meeting is set up in autumn to check if the corrective actions are in place. All information and comments received during the project review are uploaded in the project management database (BlueBook). A close-out meeting is organised at the end of the project with the same participants to determine if the project achieved its goals, what else needs to be done to accelerate access to market and to secure the realisation of backflow for the KIC.

In 2023, we aim to improve the project review process, particularly with respect to the following aspects:

- Adapt project review and documentation templates for more technical and economic feasibility data included
- Adapt the project reviews in relation with the timeline of the project: project review year 1 should be different from project review year 2 and year 3, and the importance of the year 2 project review should be emphasized
- Request a more stringent uploading of project review documents on time
- Increase number of consortium members in project review meetings to ensure credibility of data provided and to extend discussion context

In the coming KAVA Calls, we will continue to design them according to the three strategic objectives of the KIC and adopt very strong criteria at each of the 2 stages of the selection process to maximize the impacts in the many raw materials value chains and to challenge the commercialisation partners on their go-to-market strategy and expected revenues and backflow to the KIC. For up-scaling projects, we link them with ERMA for access to additional funding that will be crucial for the implementation of new industrial facilities, supporting the production of new materials, either from primary resources or recycling, or new equipment for the overall raw materials value chain. In parallel, we will support RIS Capacity building projects at a level of



10% of the EIT funding, as we believe that these projects might become the embryo of new activities in the RIS countries for the benefit of Europe.

### **Booster Calls for Start-ups**

In the recent EIT report “2021 – Overall Monitoring Report –KIC Business Creation Activities – Selection of Start-ups / Scale-ups”, EIT RawMaterials was the only KIC recognised for the transparent selection process description in the business plan and in the grant reporting. Overall, EIT RawMaterials’ selection processes for beneficiaries in the Booster KAVA is open, transparent and merit based with an engaged pool of more than 40 external evaluators. The selection criteria are similar to the EIC Accelerator (Excellence, Impact, Team criteria) with additional ones that were added to safeguard the return on investment (Financial Sustainability). The Booster call, evaluation, and selection process during 2022 is briefly summarised:

- The open Booster Call 2022 was launched in early February 2022 and remained open throughout the year with three cut-off dates, namely 8 April, 6 June and 5 September. Applicants are invited to submit their application documents online by one of the cut-off dates.
- In each cut off, a first screening is performed by EIT RawMaterials staff within each Innovation Hub (CLC) for eligibility of applications as defined in Booster Call Guidelines. The eligible applications are invited to pitch their idea in an online session to a mix of external (minimum 3 per case) and internal (EIT RawMaterials staff) evaluators.
- Evaluated cases above threshold aligned with Financial Sustainability strategy of EIT RawMaterials are proposed for funding, requiring Managing Board approval.
- Selected cases are invited for negotiations on Financial Sustainability (equity participation using the SAFE model) and once concluded initiate their projects.
- Start-ups are constantly monitored for their performance. Investments are staged and depending on the proven track record and development of the venture (to mitigate risks from investments into early-stage ventures).

## **2. Impact**

### **2.1 KIC’s pathways towards impact**

Since its establishment, EIT RawMaterials has succeeded in generating a positive impact exceeding the initial expectations, with the most notable achievements to date (2016-2021; sources: EIT 7-Year Mid-Term Review; EIT Interim Report 2021) being:

- Supporting the competitiveness of the European raw materials sector by
  - 32 new Key Enabling Technologies (KET) being in progress (130% of 2016-2021 target)
  - Creating more than 1,000 jobs (105% of 2016-2021 target)



- Driving the European innovation agenda in raw materials through
  - More than 1,400 pilot/demo plants and prototypes (300% of 2016-2021 target)
  - Developing one new advanced material (overachievement of target 2016-2021 of 0)
- Contributing to the development of new talent for the European Green Transition by educating and training
  - More than 11,000 participants in non-labelled courses (190% of 2016-2021 target)
  - Over 40% of females in EIT-labelled Master programmes (115% of 2016-2021 target)
- Facilitating business creation and investments into the European raw materials sector through enabling
  - More than 270m EUR investments attracted to start-ups (590% of 2016-2021 target)
  - More than 90m EUR investments attracted to ERMA scale-ups and investment cases (no target)

EIT RawMaterials has contributed to all societal impact targets, e.g.:

*Investment attracted in primary resources and advanced materials development:*

EIT RawMaterials has a strong track record and position in attracting investments to start-ups where the 2016-2021 target has been overachieved by factor 6 with more than 270m EUR attracted by the end of 2021. In 2021, EIT RawMaterials has additionally attracted 91m EUR to scale-ups and investment cases supported via ERMA. Similar to the investments attracted to start-ups, this number is expected to strongly increase in the course of 2022 and beyond during the BP period 2023-2025. For example, in 2022, the investments attracted to ERMA scale-ups and investment cases have already exceeded 500m EUR. The investments attracted are expected to further rise over proportionally.

The overall impact EIT RawMaterials generates through ERMA for the European agenda is remarkable: 30 of the 38 (79%) prioritised investment cases in Stage 3 in the portfolio of ERMA are directly contributing to the new RePowerEU programme and its priorities (see Fig. 8a) as well as the list of critical raw materials (CRM; see Fig. 8b).

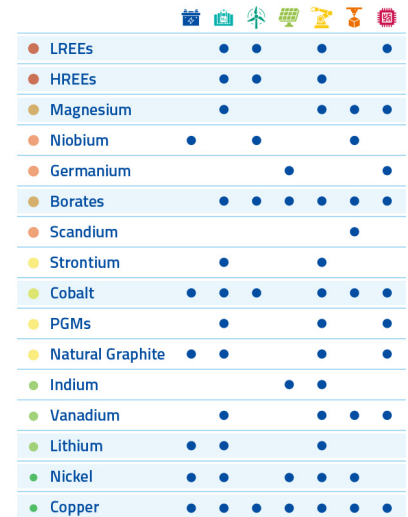
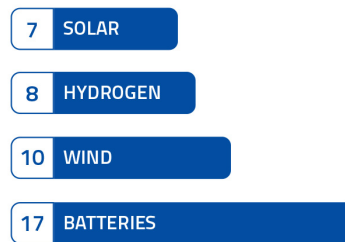


Fig. 8a: Cases in RePowerEU  
 Fig. 8b: Contribution to selected CRM

*Number of new advanced materials developed:*

Advanced materials are produced to substitute critical raw materials or to increase the functionalities and performance of materials. Many up-scaling projects support their development. Among them, the Sirius project



managed by the Nanomakers aimed to secure the raw materials supply by working on two aspects: On the one hand, the use of silicon gas precursors to obtain silicon metal and the partial substitution of graphite; on the other hand, the development of high-capacity anodes to reduce the anode materials quantity in batteries. Working hand in hand with SGL Carbon, which was a partner of the project and is preparing the commercialisation of high-capacity silicon-carbon composites anodes for lithium-ion batteries targeting high density applications, Nanomakers has produced large quantities of nanomaterials for SGL Carbon, which has developed new composites that are currently tested at industrial scale by anode manufacturers.

*Women graduating from RM-related courses:*

Since 2016, EIT RawMaterials has strongly focused on the development of new Master courses to produce talents covering expertise and skills addressing the entire raw materials value chain from exploration to recycling. Considerable success has been made in their labelling and in encouraging gender balance in promotional campaigns and the recruitment process at University partners. This is why we have obtained very encouraging gender diversity numbers: The number of graduated females and enrolled ones in Masters programmes is at a level of more than 40%. This was just re-confirmed at The Race 2022, which is a flagship event that aims to bring Masters students to industrial facilities, networking events with industrials partners and RTOs and group work on company challenges: 38% of females were attending this event organised this time in Sweden and Finland.

EIT RawMaterials contributes a high level of impact to the overall targets of the Strategic Agenda 2021-2027. For a number of KPIs, the KIC will even overachieve the 7-year targets as outlined in the Strategic Agenda. These include, for example, marketed innovations from up-scaling projects where the expected overachievement is factor 1.4 (see Fig. 9a) and investment attracted by start-ups with factor 5.5 (see Fig. 9b).

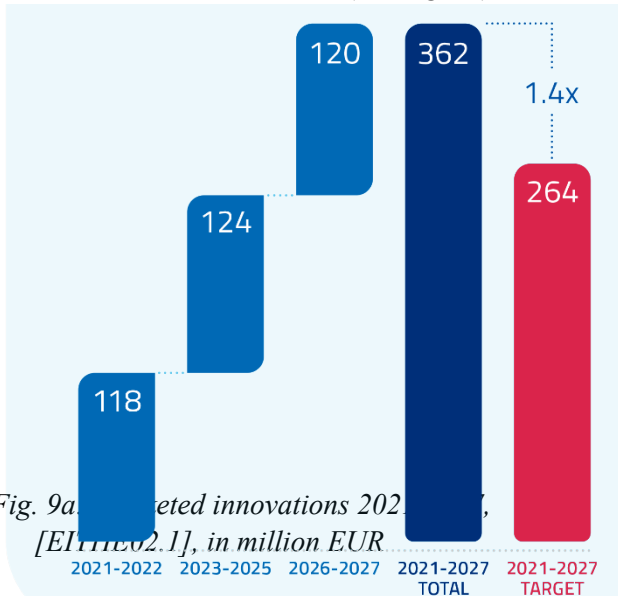


Fig. 9a: Marketed innovations 2021-2027, [EITHE02.1], in million EUR

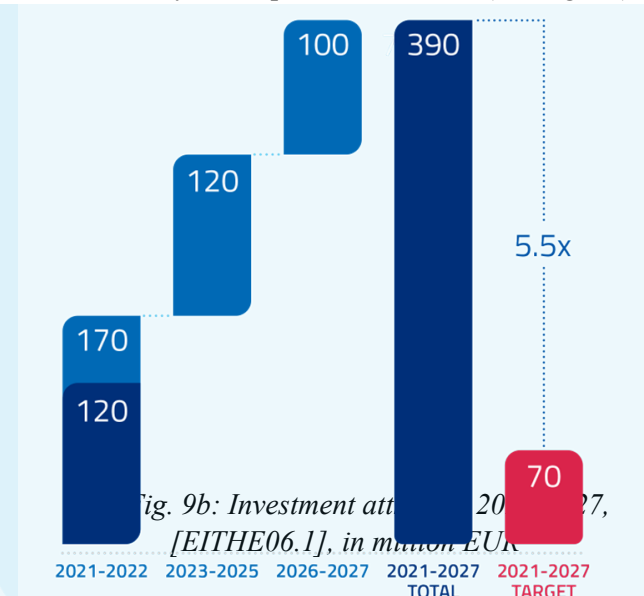


Fig. 9b: Investment attracted by start-ups 2021-2027, [EITHE06.1], in million EUR

In order to maximise the success of creating impact in the raw materials value chain, a couple of requirements and barriers have to be overcome and mitigated. On the one hand, changing the negative perception of mining



in Europe and gaining increased public acceptance of responsible mining operations and their linked materials processing chains is a pre-requisite for establishing sustainable and resilient raw materials supply chains for the EU. Today, a lack of a so-called Social License to Operate (SLO) is the key bottleneck to increase domestic production. Many EIT RawMaterials up-scaling and education projects address this topic through a results-driven engagement process within a clearly pre-defined project framework, including a dedicated NGO engagement process with over 15 global and regional NGOs. In order to allow better benchmarking of activities in the ESG and SLO area, EIT RawMaterials has mapped projects to the United Nations Sustainability Goals and uses the United Nations Framework Classification for Resources to assess ERMA investment cases. Furthermore, EIT RawMaterials organised two online courses dedicated to SLO in 2022: Course 1: “Stakeholders’ engagement and earning social license to operate in exploration & mining”; Course 2: “The Social License to Operate from a European Union perspective: peculiarities, tools and opportunities” and will continue to develop actions supporting the SLO.

On the other hand, large investments by the European industry have to be realised in order to reduce the dependency on non-EU supply of critical raw materials – from new industrial sites applying innovative routes for manufacturing materials or recycling of end-of-life products to the operation of new mines and processing facilities equipped with the most modern, automatised machines and tools. Take the example of the rare earths and magnet sector with China that exports more than 16,000 t of magnets to Europe, which corresponds to 98% of the market. Indeed, their high energy density makes it possible to design electric motors and generators with highest power density and torque moments, which translate in high compactness and energy efficiency as well as lowest weight configurations. Therefore, they represent the best technological solution for electric machines at various length scales, from small servo motors for electronics, robots, manufacturing machines, water pumps, household appliances, to EV drivetrains and wind power generators, and EIT RawMaterials promotes collaborative, large-scale innovation projects in the rare earth sector. This includes, for example, the **RareGreen** project focusing on upscaling innovative and sustainable rare earth processing technologies at a rare earth mine in Norway, which aims at an annual production of 2,000-6,000 t of NdPr oxides, which corresponds to an equivalent amount of permanent magnets in terms of tonnage. The **CSyARES** project provides a software solution that integrates sustainability standards, Life Cycle Assessment, and supply chain traceability of rare earths. The tool will enable industry to better monitor and track supply, which is a key first step to mitigate supply risks and to promote competition. The EIT RawMaterials funded start-up of **MagREESource** commercializes innovative magnet recycling routes based on hydrogen decrepitation that have the potential to deliver the most sustainably produced rare earth alloy powders: end-of-life magnets are recycled by directly regaining the alloy powders at high purities, which are then directly re-sintered.

Nevertheless, in the EV sector alone, global rare earth magnet demand will grow from 5,000 t in 2020 to up to 70,000 t in 2030 and tackling this challenge the downstream product manufacturing industry and the recycling sector in Europe would need huge investments at a level indicated in the following diagram, to build up a strong and diversified REE and magnet sector in Europe (see Fig. 10). This is also where the European Raw Materials Alliance (ERMA) with its leverage in terms of commercialisation, access-to-finance and international outreach and market expansion comes in and is instrumental for EIT RawMaterials to realise and leverage its impact creation (see text box).



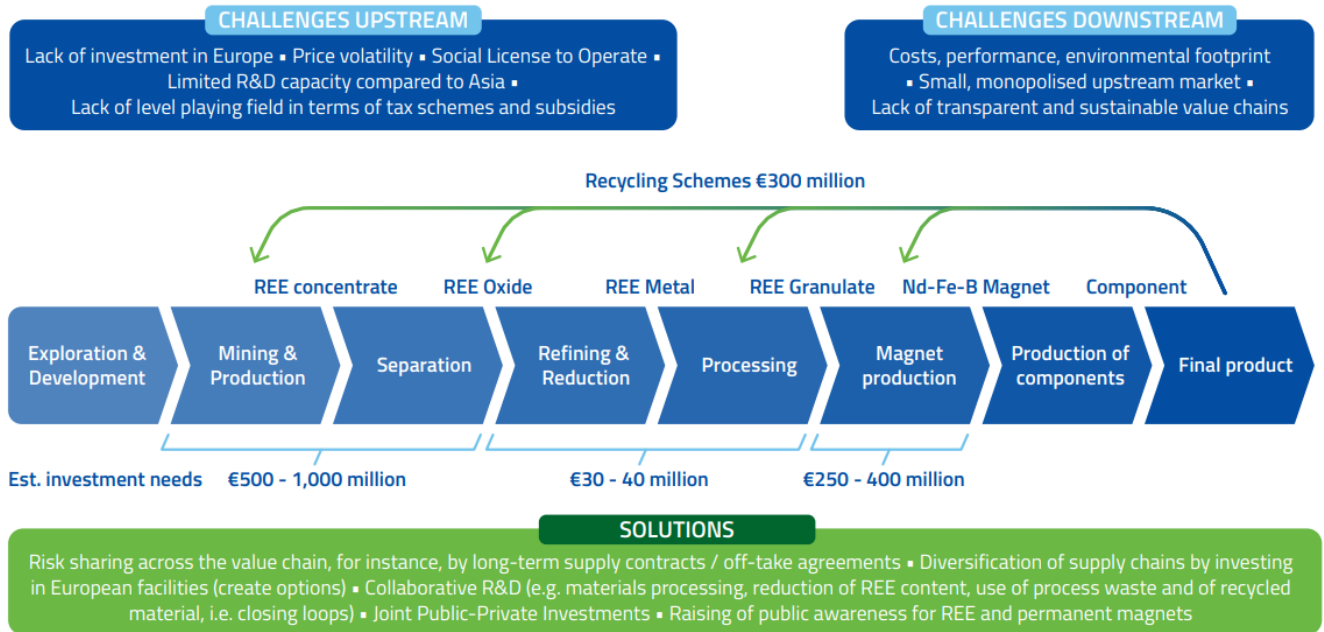


Fig. 10: Challenges, solutions and investment needs in the EU REE and magnet sector (ERMA REE Action Plan)



For the BP2023-2025, the EIT RawMaterials’ contribution to the EIT Core KPIs is shown in the following table<sup>4</sup>:

**Table 2.1. List of EIT Core KPIs<sup>5</sup>**

EIT area	KPI Code	EIT KPI	Target	Indicate WP(s)
<b>Innovation</b>	[EITHE02.4]	Innovations launched on the market with a sales revenue of at least 10 000 EUR documented	120	1-2-3-4-5
<b>Business Creation</b>	[EITHE04.4]	Start-ups created having a financial transaction of at least 10 000 EUR for a service/product (result of the KIC KAVA) sold to customers	18	2-3
	[EITHE05.1]	Start-ups created by students enrolled and graduates from EIT-labelled programmes	21	1

<sup>4</sup> All within the originally submitted business plan stipulated objectives and activities were subject pending to 100% budget allocation. They have been modified proportionally / pro rata to the final budget allocation confirmed by the EIT in the grant allocation letter from 1 December 2022. Example: In case of 83% EIT funding allocation (now 71%), numbers of start-ups supported have been reduced from up to 300 to up to 240 (now 210) over the three years period.

The figures of the Strategic Agenda 2021-2027 are expected to be matched or even overperformed once full budget allocations of 100% EIT funding for 2024 and 2025 have been approved and included after respective business plan amendments.

All target numbers are estimates and constitute statements relating to intentions, future acts and events which are generally classified as “forward looking statements”. These forward-looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties, and other important factors (many of which are beyond EIT RawMaterials’ control) that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed in this table. For example, RoI & Equity targets may be based on market conditions that may vary significantly from current levels (e.g. related to supply chain disruptions due to the ongoing war between Russia and the Ukraine). These variations may materially affect the timing or feasibility of particular developments. The forward-looking statements made in this table relate only to events as of the date on which the statements are made.

<sup>5</sup> The Business Plan proposal 2023-2025 is based on the partial funding allocation modalities communicated by the EIT. This means that 100% of the budget are allocated upfront for 2023, while only 75% of the budget are allocated upfront for 2024 and 2025. It is expected that more funding will be allocated for 2024 and 2025 to meet the Strategic Agenda budget and KPI targets. This implies that the KPI planning in the original version of the Business Plan was not based on the full budget for 2023-2025 but on an 83% budget, which has been further reduced by another 12% due to the EIT’s final grant allocation as communicated in December 2022 (also Financial Sustainability targets have been corrected). KPI targets might be subject to further adjustments and amendment to future amended funding allocations by the EIT.



<b>EIT area</b>	<b>KPI Code</b>	<b>EIT KPI</b>	<b>Target</b>	<b>Indicate WP(s)</b>
	[EITHE06.1]	Investment attracted by KIC-supported start-ups and scale-ups	132.5 M€	2-4
<b>Education</b>	[EITHE07.1]	Graduates from EIT-labelled programmes	448	1
<b>Leveraging investments in R&amp;I</b>	[EITHE11.2]	Financial sustainability coefficient - Total non-EIT financing generated by the KIC Legal Entity	38%	7
<b>Horizontal outputs</b>	[EITHE18.1]	% of less represented gender in top governance and management positions combined	27%	5


**Table 2.1. List of EIT KPIs<sup>6</sup>**

EIT area	KPI Code	EIT KPI	Target	Indicate WP(s)
<b>Innovation</b>	[EITHE02.1]	Innovations launched on the market	124	1-2-3-4-5
	[EITHE02.2]	Innovations launched on the market by organisations from EIT RIS countries	16	1-2-3-4
<b>Business Creation</b>	[EITHE03.1]	KIC Supported Start-ups/Scale-ups	210	2-4
	[EITHE03.2]	KIC Supported Start-ups/Scale-ups registered in EIT RIS countries	71	2-4
	[EITHE04.1]	Start-ups created	18	1-2-3-4
	[EITHE04.2]	Start-ups created in EIT RIS countries	5	1-2-3-4
	[EITHE06.2]	Investment attracted by KIC-supported start-ups and scale-ups established in EIT RIS countries	13.7 M€	2-4
<b>Education</b>	[EITHE05.2]	Start-ups established in EIT RIS countries by students enrolled and graduates from EIT-labelled programmes	3	1
	[EITHE07.2]	Graduates from EIT-labelled programmes with citizenship in EIT RIS Countries	131	1
	[EITHE08.1]	Participants in non-labelled education and training	8,834	1-3-4
	[EITHE08.2]	Participants in non-labelled education and training with citizenship in EIT RIS countries	1,502	1-3-4

<sup>6</sup> The Business Plan proposal 2023-2025 is based on the partial funding allocation modalities communicated by the EIT. This means that 100% of the budget are allocated upfront for 2023, while only 75% of the budget are allocated upfront for 2024 and 2025. It is expected that more funding will be allocated for 2024 and 2025 to meet the Strategic Agenda budget and KPI targets. This implies that the KPI planning in the original version of the Business Plan was not based on the full budget for 2023-2025 but on an 83% budget, which has been further reduced by another 12% due to the EIT's final grant allocation as communicated in December 2022 (also Financial Sustainability targets have been corrected). KPI targets might be subject to further adjustments and amendment to future amended funding allocations by the EIT.



EIT area	KPI Code	EIT KPI	Target	Indicate WP(s)
<b>Knowledge Triangle Integration/KIC ecosystems</b>	[EITHE10.1]	Active partners collaborating in the KIC	264	5-6
	[EITHE10.2]	Active partners registered in the EIT RIS countries collaborating in the KIC	101	5
<b>Leveraging investments in R&amp;I</b>	[EITHE11.1]	Total financing generated by the KIC LE (absolute value in EUR)	50.4 M€	7
<b>Leveraging investments in R&amp;I</b>	[EITHE12.1]	KICs SIA funding rate	68%	5
	[EITHE13.1]	Financial asset valuation	1.5 M€	5
<b>Strengthening entrepreneurship and innovation capacity of higher education institutions</b>	[EITHE20.1]	Number of new partnerships established as a result of the HEI Capacity Building Initiative	34	5-6
<b>RIS-specific indicators</b>	[EITHE22.1]	Number of new and established KIC Partners from RIS countries	9/92	5

## 2.2 Measures to maximise impact – Communications, dissemination and exploitation, and stakeholders engagement

### Contribution to the development of the EIT Community brand

EIT RawMaterials will continue to execute **EIT Community brand guidelines** across the entire portfolio. The KIC will ensure consistent EIT Community and EU funding brand visibility by implementing best practices in all design work. A dedicated team will work on brand guidelines webinars with partners and internal training.

Under the EIT RawMaterials Academy, EIT RawMaterials has established six Master programmes with the highest quality seal in the EIT Community, the **EIT Label**. The KIC will promote the successful Master School to future top talent. Students will be introduced to real industrial challenges to demonstrate leading industry exceptional deep tech knowledge and the quality of EIT-Labelled programmes.



The efforts will be reinforced via the **EIT RawMaterials Alumni** network. EIT RawMaterials Alumni brand visibility will be strengthened with the development of the Alumni platform, including community engagement, content creation and branding. Alumni members will participate in key large-scale EIT RawMaterials events like the RawMaterials Summit and Expert Forum to gain maximum brand visibility, attract new members and promote the value of the network.

EIT RawMaterials is leading the cross-KIC **EIT HEI Initiative**. Aligned with EIT Communications and EIT Community, the KIC will position the initiative as the go-to instrument for capacity building in Europe's higher education and innovation landscape by communicating its value to key stakeholders. This will include comprehensive campaigns encompassing the full range of marketing and communication activities.

EIT RawMaterials follows a thorough internal process to identify outstanding achievements to present best-in-class nominees at the **EIT Awards**. The communications campaign is tailored to the public to broadcast cutting-edge developments from the EIT Community that are tangible proof of Europe's progress towards becoming an innovation powerhouse. EIT RawMaterials will continue and enhance these annual awareness campaigns.

### External communication activities

As defined in the KIC Strategic Agenda 2021-2027, communications targets are currently set at achieving 9,000 followers on Twitter, 12,000 followers on LinkedIn, with 170 press articles and 270,000 website visitors by the end of 2025. The updated Communications Strategy will further define these targets by integrating metrics to demonstrate engagement and message breakthrough.

Key audiences for EIT RawMaterials communications activities are employees of current and potential KIC partner organisation; the KIC's current and potential partner base, policymakers, NGOs/civil society, education community, RTOs, media, start-ups/entrepreneurs. In 2023-2025, the KIC's communication will engage more proactively with the public. The following table shows the goals related to each target audience for owned, paid and earned media (see Table 2.2).

**Table 2.2. Preliminary list of expected results for dissemination**

Target audience	Communication goals	Communication activities and channels
Current / potential KIC partners from industry, research and academia	<ul style="list-style-type: none"> <li>- Highlight or reinforce KIC achievements, benefits and service offering</li> <li>- Communicate KIC activities and opportunities</li> </ul>	<ul style="list-style-type: none"> <li>- Sponsorship and speaker opportunities at EIT RawMaterials flagship events</li> <li>- Quarterly CEO Newsletter</li> <li>- Partner success promotion</li> <li>- Content creation across multiple platforms including leveraging to key media</li> </ul>
Policymakers	<ul style="list-style-type: none"> <li>- Raise awareness of the important challenges related to raw materials</li> <li>- Position EIT RawMaterials as a trusted authority on raw materials issues</li> </ul>	<ul style="list-style-type: none"> <li>- Share CEO Newsletter updates for EU stakeholders</li> <li>- EC representatives at KIC flagship events</li> <li>- Highest level CEO speaking engagements</li> <li>- Content creation</li> <li>- Media relations to leverage EIT RM's position on key policy issues</li> <li>- Engage in EU policy updates, issue position papers</li> </ul>





Investors	<ul style="list-style-type: none"> <li>- Raise awareness of raw materials investment needs and opportunities</li> <li>- Demonstrate KIC's success in identifying solid investment cases</li> </ul>	<ul style="list-style-type: none"> <li>- Promote the establishment of a European Raw Materials Fund to media</li> <li>- Attract investors promoting case studies and long-term impact of investment in the sector</li> <li>- Feature key institutional investors as panellists at the RM Summit</li> </ul>
NGOs / civil society	<ul style="list-style-type: none"> <li>- Advocacy and Community Building</li> <li>- Demonstrate the importance of raw materials to solving societal and environmental challenges</li> </ul>	<ul style="list-style-type: none"> <li>- Involvement of NGOs as keynote speakers and panellists at the RawMaterials Summit</li> <li>- Engage NGOs more proactively to build trust and broaden support for EIT RM's mission</li> </ul>
Education Community	Demonstrate how the KIC is meeting the future demands of EU's reindustrialisation skills gap	Engage more closely to strengthen relationships with education and innovation influencers to increase exposure and take-up of EIT RawMaterials education programmes
RTOs	Increase awareness of the EIT RawMaterials innovative success	Engage more closely to promote success stories from funded projects
Media	Relationship building to increase engagement of media for sector	Engagement with top-tier journalists to increase EIT RawMaterials' exposure
Start-ups / Entrepreneurs	Position the KIC as a thought leader in identifying, coaching and funding most promising start-ups	<ul style="list-style-type: none"> <li>- Strengthen relationships with start-up media</li> <li>- Increase and amplify through media and social media platforms newsworthy success stories</li> </ul>
Public	Increase awareness of the importance of raw materials to our everyday functioning and well-being	<ul style="list-style-type: none"> <li>- Engage mainstream society on the importance and necessity for raw materials in Europe using key educational facts, stats, interesting visuals and stories to get the message across</li> </ul>

### Dissemination of results

In conjunction with the KAVA Call application, EIT RawMaterials provides Project Communication and Dissemination guidelines on science communication and how to develop and implement a communication plan. The objective of dissemination is to transfer knowledge & results to maximise the impact and value of EU-funded projects. Partners of consortia are encouraged to publish their results in peer-reviewed international journals and conference proceedings. These are typically listed as deliverables in the KAVA.

EIT RawMaterials uses a range of established tools to disseminate project results including media, ERMA and EIT RM websites, LinkedIn, Twitter, Instagram, Facebook, YouTube. The KIC organises and participates in high level local and large-scale events with speakers' placements from successful KAVA projects, issues press releases and engages in media relations. The CEO is particularly active and participates in up to three high level speaking engagements monthly. The KIC's communication is evolving to place increased focus on audio and video content to improve message articulation, audience engagement and broaden audience reach.

### Stakeholder engagement



Through the success of its flagship event, the RawMaterials Summit, an active partner base, a robust programme portfolio and a highly visible CEO, the brand of this KIC is going from strength to strength. This places the KIC in a stronger position to share insight on issues, challenges and the great opportunities that exist. It places the KIC in a unique position to share its stance on key policy and industry issues as well as showcase its leadership by bringing different communities together to solve or develop solutions to specific goals such as changing the perception of mining in Europe.

EIT RawMaterials is therefore well poised to make a significant impact through its communications outreach. A strong awareness campaign will be deployed working with its partner base closely to highlight success in the development of breakthrough achievements, promoting the workings of the knowledge triangle, and the entrepreneurial and innovation skills demonstrated within that. The Communications team will proactively identify, develop and disseminate success stories, as well as its position on issues and opportunities pivoting off key industry and partner discussions, speeches etc, to industry and media within Europe and where possible, to international audiences. In parallel, there is the task ahead of demonstrating effective leadership in engaging with mainstream EU populations to generate more understanding of the importance of raw materials and the critical role that they play in the future well-being of Europe's security, health and prosperity.

### **IPR Strategy**

The IPR Strategy of EIT RawMaterials is based on the rules as defined in the Partnership Agreement following Horizon Europe Rules for Participation and in the Internal Agreement of EIT RawMaterials. The participant of the specific KAVA generating a KAVA result owns it. As an exception, the KIC LE may own or share the ownership of particular KAVA results if needed for the long-term financial sustainability of EIT RawMaterials. This is the e.g. case for activities like RM Summit, RM Expert Forum, InfoCenter, RACE or ERMA. The Financial Sustainability Strategy and Mechanisms of the KIC foresee revenue sharing, including mark-ups and equity-based models, rather than owning or sharing the ownership of IP resulting from projects financed in innovation and business creation areas. For lifelong learning courses, franchising or co-servicing models will be evaluated for their feasibility.

New IP developed within partner-driven-KAVA should be actively exploited and efficiently turned into products and services by the involved parties as part of the commercialisation process. The KIC LE actively monitors the generation and exploitation of KAVA results. Access Rights are handled in accordance with the provisions of the Partnership Agreement. Rather than establishing an IP support or portfolio management, EIT RawMaterials will further develop its project investment controlling in order to secure the backflow from successful innovation and business creation projects. The possibility to act as an IP broker of unused IP will be further evaluated for its feasibility.

### **2.3. Expected impact of the activities for 2023-2025 under the Regional Innovation Scheme**

EIT RawMaterials had a strong focus on RIS countries from the start of its activities in 2015, especially because many RIS countries are endowed with raw materials deposits and producing assets which can significantly contribute to domestic supply of raw materials to Europe. When preparing RIS activities 2023-2025, EIT RawMaterials considered the new EIT RIS Implementation Guidance and included best practices in the raw materials sector in RIS countries. We will continue to deliver for and in the RIS region mainly through the three following areas of activity:



- Up to 7 RIS Hubs which will act as local outreach points offering KIC activities and connecting with local institutions interested in participating in such. Following a thorough review of existing RIS Hubs combined with a needs analysis conducted in 2022, RIS Hubs for up to 5 present locations will be re-selected and up to 2 new ones will be selected, all via an open call. The establishment of an additional RIS Hub will be implemented in line with the EIT RawMaterials Strategic Agenda, after a thorough needs assessment and in alignment with EIT. The locations will reflect our strategic interest, potential impact and value to be created. EIT RawMaterials will also support the EIT RIS Hubs consolidation process.
- RIS KAVA projects, both ongoing ones (led by EIT RawMaterials Partners) and new ones selected from next KAVA Calls. They will cover all types of activities: acceleration, education and capacity building. RIS Capacity Building segment was introduced in KAVA Call 8. This is supposed to be the first steppingstone into other, more advanced RIS KAVA projects (primarily Upscaling) for both Partners and non-Partners. As per KAVA Call requirements the consortia working on these RIS projects are formed by integrating entities representing all sides of the Knowledge Triangle (existing KIC Partners and also new groups from academia, research and industry). This is further supported by the more open format of the KAVA Call. As an example, the RIS KAVA project LiBre, planned to start in January 2023, aims to decrease EU's 100% import dependency of boron (B) and lithium (Li) through the development of the world-class Valjevo Deposit in Serbia. Valjevo contains 9.6 million metric tonnes (Mt) of lithium and 44.3 million Mt of borates, the latter being sufficient for 100% of sustainable supply of Europe for the next 100 years. The LiBRE consortium, which consists of both existing and new Partners, aims to pilot sustainable extraction and processing technologies for Valjevo's lithium and borate ore.

While RIS is aiming at increasing the innovation capacity of the RIS countries, and participation of RIS entities in KIC's activities, EIT RawMaterials also seeks opportunities to tie it to the financial sustainability requirements. This is mainly focused on the following areas: RIS Upscaling projects (where the conditions for return on investment are structured the same as for other Upscaling projects; and include min. 30% co-funding), RIS Capacity Building projects (where the average co-funding rate of projects selected for funding in 2022 is >18%, and a clear continuation plan for activities to achieve the objective of becoming financially sustainable needs to be prepared at the time of proposal submission already) and RIS Entrepreneurship program where EIT RawMaterials will offer support to start-ups and SME's from RIS countries to bring them into our regular programs like Accelerator and Booster (where they ultimately need to enter into financial sustainability agreements).

EIT RawMaterials will (via open calls for all KIC's RIS Hubs, also on existing locations) foster the financial sustainability of the RIS Hubs. The organizations selected to lead the RIS Hubs during 2023-2025 and onward, will need to provide (already as part of their application) a multi-annual plan / business model with financial figures and performance indicators towards achieving a level of co-financing from non-EIT sources of 10% in 2023, 15% in 2024, 20% in 2025, 30% in 2026, 50% in 2027 and 100% until 2029.

Also, there are many raw materials investment projects located in the RIS region, which have the potential to become ERMA cases in the next years and contribute to the FS of the KIC. EIT RawMaterials will also implement a new RIS Outreach activity through ERMA and ERMA partnership (with more than 650 partners) to funnel more RIS entities into KIC's activities.



EIT RIS KPIs (as presented in Table 2.1.) will not only be achieved by the RIS activities of the KIC, but also from all other programmes, such as Upscaling KAVA projects, Labelled Education programmes, Accelerator, Booster, and also activities implemented by the EIT RawMaterials Innovation Hubs (CLCs).



## 3. Quality and efficiency of the implementation

### 3.1 Work plan and resources

The overall development of the KAVA portfolio of EIT RawMaterials is designed according to and fully aligned with the three Strategic Objectives as described in the Strategic Agenda 2021-2027 and in this BP2023-2025 (see chapter B). For the first time, the KAVA calls have taken up portfolio gaps and proactively call for projects that contribute to closing them.

The BP2023-2025 portfolio of activities are well-balanced along the areas and segments of EIT RawMaterials. The KIC continues to be one of the leanest in terms of administration and management costs while producing a strong value proposition to its partners and a high level of impact creation to the EIT. The area of Acceleration including up-scaling projects and business creation through start-ups remains to be the most important area for EIT RawMaterials, also in the light of the newly founded European Raw Materials Alliance (ERMA) and the KIC's mandate to secure a sustainable supply of raw materials to the European Union.

The budget allocation reflects the different levels of support needed by the different activities we support, as well as the many different value chains we cover. With the objective to support innovation on RM in several strategic RM value chains (e.g. batteries, e-motors, fuel cells) with projects addressing several segments of the value chain (from exploration to recycling) to create a significant impact, and with a 2-4 m€ funding /project that is necessary to scale up a new technology, this brings innovation and acceleration to the highest level of funding in our KIC. The situation is different for the Education projects that even if they need to address learners along their entire life cycle, there do compose a smaller group of projects, with a smaller funding level /project. On top of that, the number of projects addressed in each category of activities, their strategic importance and quality is also contributing to this budget split.

### 3.2 Capacity of participants and KIC partnership consortium as a whole

Compared to the Strategic Agenda 2021-2027 the principles of the legal structure will be maintained, likewise for the governing and executive bodies as well as for the organisation.

As of the beginning of EIT RawMaterials, in 2015, the provision of funds to its partners is, from a financial point of view, the area with the highest exposure to potentially fraudulent activities. Having this in mind the selection of new KAVA, the preparation of the BP and the final approval for submitting the BP to EIT have been separated. Proposals are being reviewed by the support of external experts, the selection supported and implemented by the KIC LE and the final decision on funding is subject to the approval of the Executive Board. Such projects are being mainly implemented by KIC partners as beneficiaries, though they are obliged to regulations in the underlying R&I Framework programme, since 2021 Horizon Europe. As such the partners are subject to regular checks, like in the course of the CFS process and other additional reporting routines often coordinated by the EIT. Similarly, the KIC is running regular checks when it comes to project monitoring.

With the transition to the so-called cascading system from 2023 onwards the responsibility of EIT RawMaterials will be higher, esp. as the day-to-day monitoring will be with EIT RawMaterials completely. As a result the monitoring activities, driven by the operations team, will be even more intensified. Ultimate



goal is to ensure that only well running projects, contributing to the implementation of the SA, are part of the portfolio and that other projects will be stopped following a defined and structured process. To ensure compliance with regulations of Horizon Europe EIT RawMaterials will continue to contribute to monitoring procedures of the EIT, implement learnings from them and moreover exchange with the other KIC's, and any other suitable organisation, to update its processes and structures. Concrete measures are for example the participation in the Cross-KIC Cluster on Shared Services with the other KIC's, providing opportunities for exchange, joint developments (like the work in 2022 to prepare a subgranting agreement to be used by all KIC's) and likewise administrative processes like the CFS process to be implemented on the level of subgrantees and KIC LEs.

EIT RawMaterials represents an organically grown Knowledge and Innovation Community in the raw materials and advanced materials sectors. Its fundamental approach to innovation is to bridge the gap from idea creation to commercialising products and services (see Fig. 11).

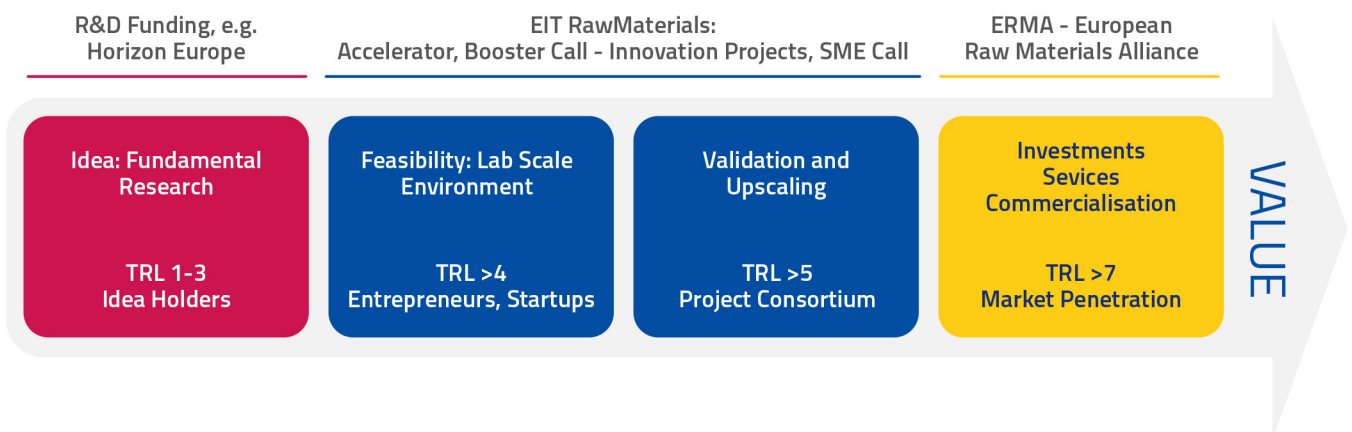


Fig. 11: EIT RawMaterials and the European Raw Materials Alliance are bridging the gap from idea to market, from prototype to commercialised product.

Practically this is done by mobilising the EIT RawMaterials partnership, particularly via dedicated matchmaking events focused on the three strategic objectives: 1. Responsible sourcing, 2. Designing materials solutions, 3. Closing materials loops.

This includes the RM Expert Fora that are used to matchmake partners across the KIC and to attract new partners across Europe and worldwide. They are organised according to Lighthouse topics (Responsible Sourcing, Designing Materials solutions, and Closing materials loops). At the meetings, industry partners (including start-ups and SMEs) express specific needs in terms of expertise and skills, as well as materials demands, whereas universities and research organisations have the chance to present their latest lab technology developments and the assets they are able to mobilise to develop new course. Each RM Expert Forum act as platforms to integrate innovators and thinkers from across the value chain and stakeholder groups, and is articulated around sessions specific to the most significant value chains (e.g. Hydrogen technologies,





Lightweight materials), including the ones represented in the ERMA clusters (e.g. Batteries, Magnets and e-motors) to mobilise all the actors which is vital for co-creation and the formation of project consortia and creation of impact.

On top of that, at CLC level cross-CLC events are organised on specific thematic topics all related to the three strategic objectives to bring together partners from different Innovation Hubs, and the so-called Partner Days which run under dedicated innovation topics and improve information exchange and collaboration on a regional level. This way, new opportunities of networking for the partners are created with the support of KIC staff members in developing the best matches. Due to the EIT funding cuts of 12%, however, the budgets for all events will have to be cut by about 20%.

Through our events and due to the openness of our calls for projects, we are convinced that we will continue to attract new members in our organisation and by that way be able to fill the gaps in the different value chains, we support and create a greater impact in the raw and advanced materials sectors. In that regard, we observed at the Expert Forum organized in 2022 that 30% of the participants were from non-EIT RM partners organizations, and we succeeded to onboard 70 new partners newly involved in the partner driven KAVA projects selected in 2022.

This integration of SMEs and start-ups in up-scaling projects is partly the result of our business creation activities through which we support young innovative companies and connect them with large companies to develop their business, or with RTOs and Universities to scale up their technology. By this way we provide them opportunities to grow very fast, by getting access to all the infrastructures and expertise of RTOs and Universities they need, and by fine tuning their business model and getting access to first customers.

We are connecting start-ups and members with industrial partners that are engaged in open innovation initiatives by organising Hackathon initiatives that accelerate the innovation capacity of companies and create new opportunities of business.

On top of that, through the RIS Capacity building initiatives supported with dedicated KAVA calls, EIT RawMaterials regards the RIS regions as areas where there are outstanding opportunities to make an impact in line with our objectives. This is always accompanied and complemented by the overall aim of increasing the innovation level of RIS countries, an initiative that is supported by the RIS Hubs.

The annual Raw Materials Summit represents a major international conference that is centred around raw materials, advanced materials and Circular Economy, and it attracted more than 600 stakeholders in 2022. It is a venue to present the latest raw and advanced materials related achievements in innovation and education, but also to create an interface to policy makers, investors and the wider society. Indeed, innovations are only as good as they are accepted by society and find suitable investors. In the context of the European Raw Materials Alliance (ERMA), two additional kinds of stakeholder interaction take place: regular cluster meetings focusing on the identification of regulatory bottlenecks to innovation in the raw and advanced materials sectors as well as bilateral meetings with owners of investment cases seeking funding.

With its comprehensive toolset and partnership, EIT RawMaterials is very well suited to contribute solutions that support Europe's transition to a green economy. Raw materials are the foundation and key enabler of the European Green Deal. EIT RawMaterials can proactively support this major initiative, as through ERMA, 30 of the 38 (79%) prioritised investment cases in Stage 3 in the portfolio of ERMA are directly contributing to



the new RePowerEU programme and its priorities (17 on batteries, 10 on windmill, 8 on hydrogen, and 7 on solar)

Indeed, ERMA is fully integrated with the business creation and innovation strategy of EIT RawMaterials as it supports the final link in the progression of KAVAs to fully commercial projects.

ERMA is also heavily involving start-ups and SMEs. These are strategically crucial companies in the resources sector, yet, under-represented in the European ecosystem, as most of the junior exploration and mining companies operating in Europe are either Australian or Canadian.

On top of that, ERMA has supported the European Commission in driving the partnership with Ukraine and continues to represent the KIC in high-level joint activities with Canada and Australia. Following the model developed for Ukraine, ERMA is leading the development of a comprehensive partnership with Kazakhstan and Serbia. Discussions with the governments of Norway, Spain and Greenland on mechanisms to support ERMA projects in the respective countries are ongoing. ERMA is supporting to build an EU-Africa business network in critical raw materials value chains through the Africa-MaVal Horizon Europe project. ERMA has represented the KIC in the Latin America partnership on raw materials and is currently working with the Commission on the development of a strategic framework to extend activities in South America, particularly in Chile, Argentina and Brazil.

All KIC LE and CLC operations are designed to ensure that the activities carried implemented by partners and the KIC meet all the necessary legal obligations, such as imposed on EIT RawMaterials by the Grant Agreements, Horizon Europe and the Partnership Agreement signed with EIT. Regular trainings to staff and partners take place.

The decision-making bodies of KIC EIT RawMaterials include the General Assembly and the Executive Board of the EIT RawMaterials e.V., which are overseeing and, where needed, approve the activities of the KIC. The General Assembly is composed of the partners of EIT RawMaterials and defines the mission and strategy of the organisation. The Executive Board is composed of six top management people from core partners (one from each CLC) as well as six external members with relevant network and experience with the Chair of the Executive Board being amongst their number. The board members are nominated by a Nomination Committee with members from all CLCs and are elected by the General Assembly. In addition, members of the Executive Board have been selected to represent the diversity of the partners, balanced both over the entire value chain and within the knowledge triangle. This set-up provides a clear structure of the responsibilities. Incl. control mechanisms and opportunities from our partnership to steer the direction of the KIC.

During the course of 2023-2025, certain members and positions within the Executive Board are, based on ending terms, subject to re-election by the General Assembly. The Nomination Committee leading this process has been re-elected in the autumn 2021 GA. Based on an updated election order e.g. containing an open call for new Board members, the Nomination Committee of EIT RawMaterials takes care of this process and suggests candidates to the General Assembly for its voting.