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EIT RawMaterials, a new European initiative in Raw Materials

Hanghøj, K.

EIT RawMaterials HQ, Anna-Louisa-Karsch Str. 2, 10178 Berlin, karen.hanghoj@eitrawmaterials.eu

The European Institute of Innovation and Technology (EIT) has awarded a Knowledge Innovation Community (KIC) on Raw Materials. This KIC, EIT RawMaterials is committed to increasing innovation capacity, competitiveness and sustainable growth in Europe in the area of raw materials, and does so by strengthening collaboration across the entire value chain, from exploration to recycling.

EIT RawMaterials has the vision of turning the challenge of raw materials dependence into strength for Europe. Its mission is to boost the competitiveness, growth and attractiveness of the European raw materials sector via radical innovation and entrepreneurship.

EIT Raw Materials will integrate multiple disciplines, diversity and complementarity along the three sides of the knowledge triangle, between research, industry and education, and across the whole raw materials value chain. The KIC consortium consists of more than a hundred partners from all parts of the value chain. The operational implementation takes place in six regional hubs jointly delivering Europewide coverage and providing a strong basis for global cooperation.

The three strategic objectives of EIT RawMaterials are, 1. Securing raw materials supply, 2. Designing solutions, and 3. Closing material loops. To achieve these goals, and secure an economically viable and sustainable raw materials supply, a range of options must be developed. Mining must be strengthened in Europe including in the Artic and from the seabed. Raw materials supply from secondary sources must be increased through innovations in recycling, extraction from industrial residues, tailings, urban and landfill mining. The involvement of EIT RawMaterials partners in the global system of trade and governance of RM must be reinforced. The activities carried out by EIT RawMaterials include Matchmaking and Networking, Education, Validation and Acceleration and Business creation and Support, and cover six main knowledge and innovation themes along the value chain:

- 1) Exploration and raw materials resource assessment
- 2) Mining in challenging environments
- 3) Increased resource efficiency in mineral and metallurgical processes
- 4) Recycling and material chain optimisation for End-of-Life products
- Substitution of critical and toxic materials in products and for optimised performance
- 6) Design of products and services for the circular economy

EIT Raw Materials expects to generate significant impact on European competitiveness and employment. This will be realised through the introduction of innovative and sustainable products, processes and services, and through focus on education in raw materials related fields. Educational activities will span from graduate courses through life-long-learning programmes to wider society learning, and will prioritise industry involvement and entrepreneurial skills leading to well-educated T-shaped professionals that will deliver increased economic, environmental and social sustainability to European society.