



RawMaterials

Connecting matters



Catalyco<sup>®</sup>

Advanced ZnO from industrial waste

Brokerage Event & Expert Forum<sup>3</sup> | 13-14 October 2021



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# SHORT DESCRIPTION OF THE IDEA

- PROBLEM - ZnO is irreplaceable and Scarce material
  - Demand and volume of ZnO is increasing;
  - ZnO is scarce material;
  - ZnO containing waste amounts are increasing.
- SOLUTION - a circular economy ecosystem for the production of ZnO
  - Extracting ZnO from metallurgical waste;
  - Recovering ZnO from used adsorbents and catalysts;
  - Reducing consumption of ZnO.



# THEMATIC SCOPE OF THE PROJECT PROPOSAL

Category of activity:

- Education/Upscaling/RIS

Link with the topics addressed in KAVA Call 9:

- **Raw Materials and Circular Societies Lighthouse:**
  - Recycling of end-of-life products containing Strategic Materials and/or CRMs
  - Supply of Strategic Materials and/or CRMs
  - Resource and Energy efficient in metallurgical and Mineralogical processing
- **Sustainable Materials Future Mobility Lighthouse:**
  - Resource efficient design
  - Innovative technical and business solutions in process design, plant engineering and construction
  - Development of an improved Life Cycle Inventory database
- **Sustainable Discovery and Supply Lighthouse:**
  - Targeted exploration of Strategic Materials and/or CRMs
  - Supply of Strategic Materials and/or CRMs
  - Environmental-Social-Governance (ESG)

# CURRENT STATUS OF THE PROPOSAL

- Current status of the proposal: Discussing the idea and forming the consortium.
  - Looking for industrial partners for the supply of ZnO containing source materials from steel industry and petrochemicals industry, to validate these materials for ZnO recovery;
  - Looking for industrial partners for validation of ZnO applications in rubber industry, ceramics and glass industry, chemical industry
- Type of expertise requested:
  - Expertise in Zn or ZnO containing source streams;
  - Expertise in rubber compounding and vulcanization;
  - Expertise in chemical industry (adsorbents, catalysts) and fertilisers;
  - Expertise in glass and ceramics coating;

# CONTACT PERSON

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