

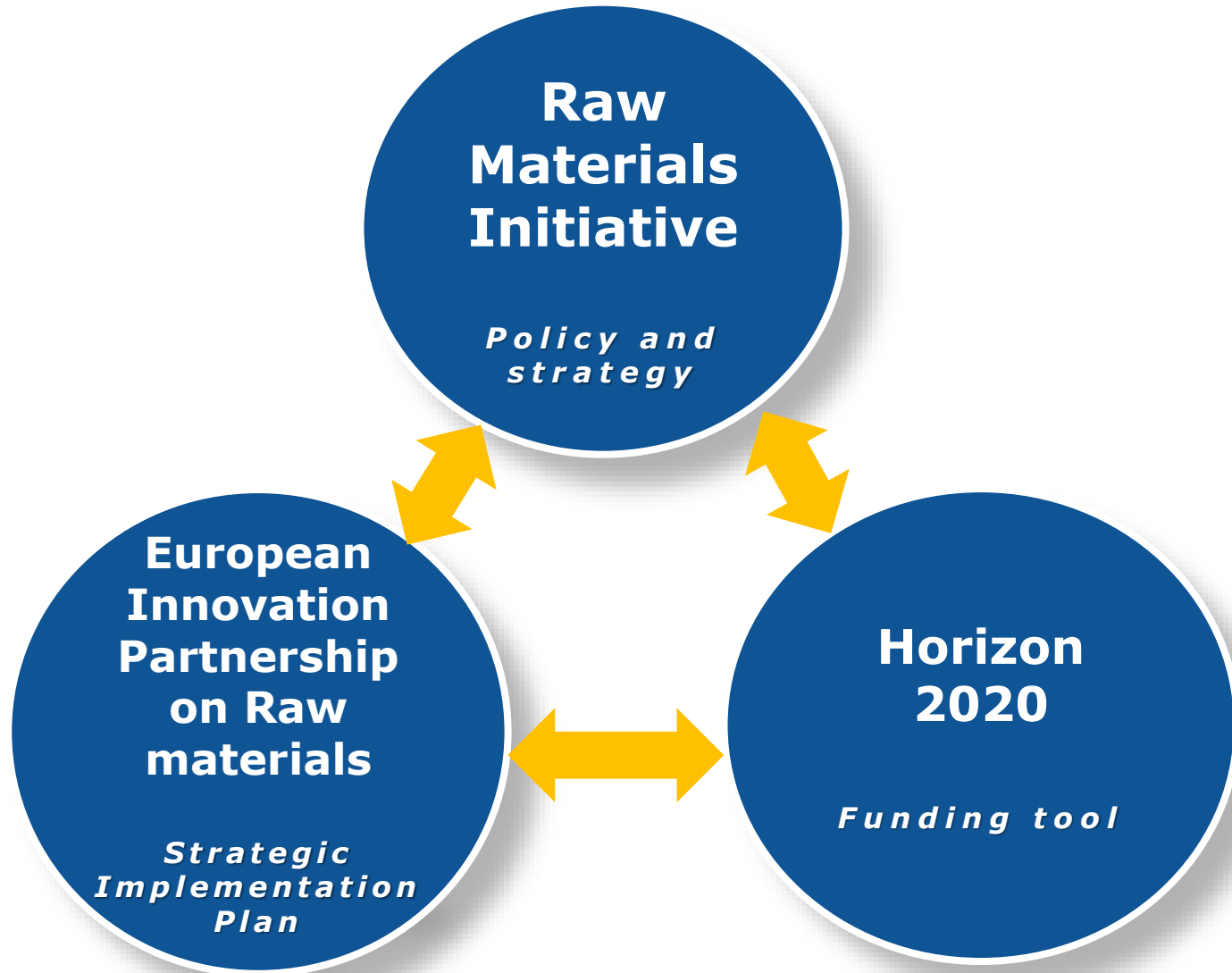
# International Cooperation on Raw Materials

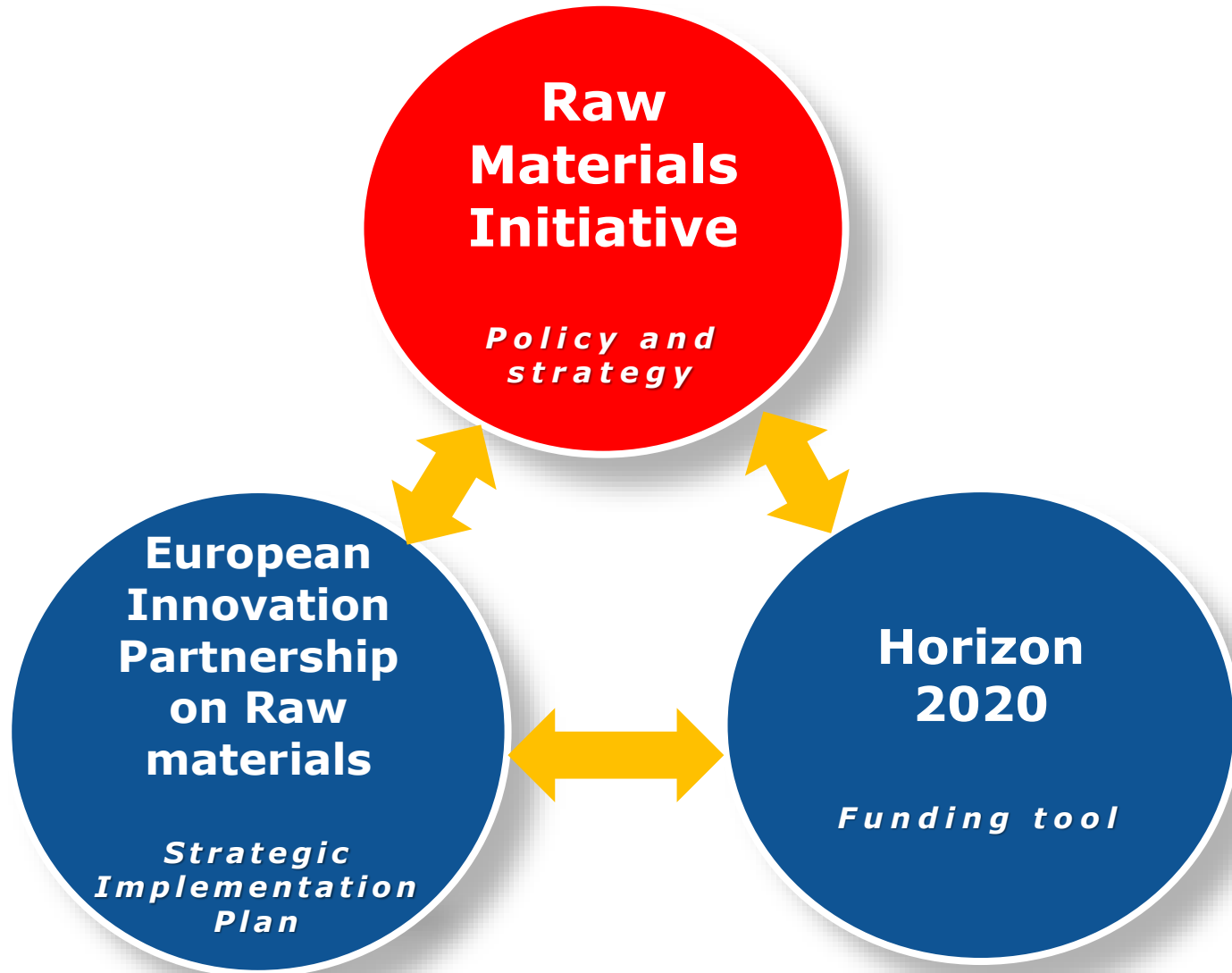


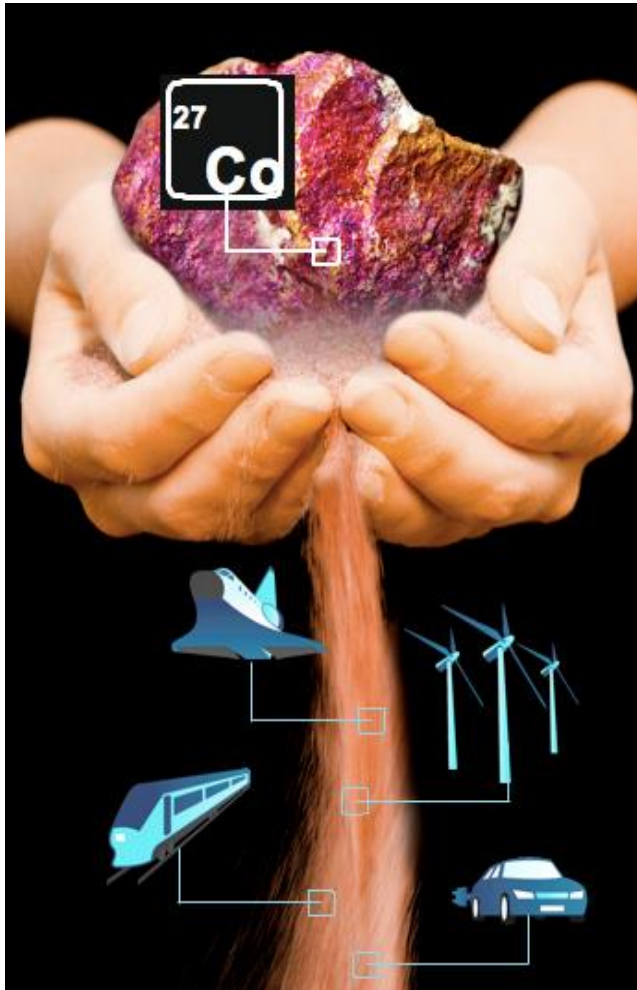
**GEO-CRADLE Workshop**  
**17 October 2016, Rabat**

***Mattia PELLEGRINI***

*Head of Unit Resource Efficiency & Raw Materials  
European Commission, GROW C2  
Directorate-General for Internal Market, Industry,  
Entrepreneurship and SME's (DG GROW).*

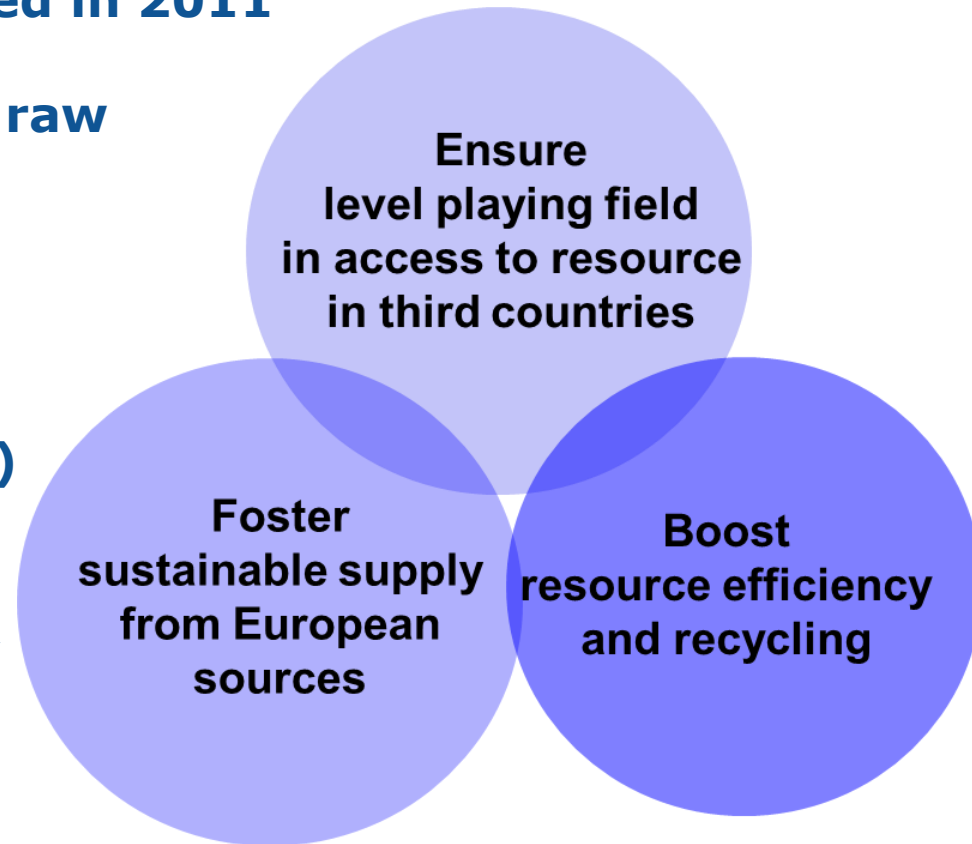


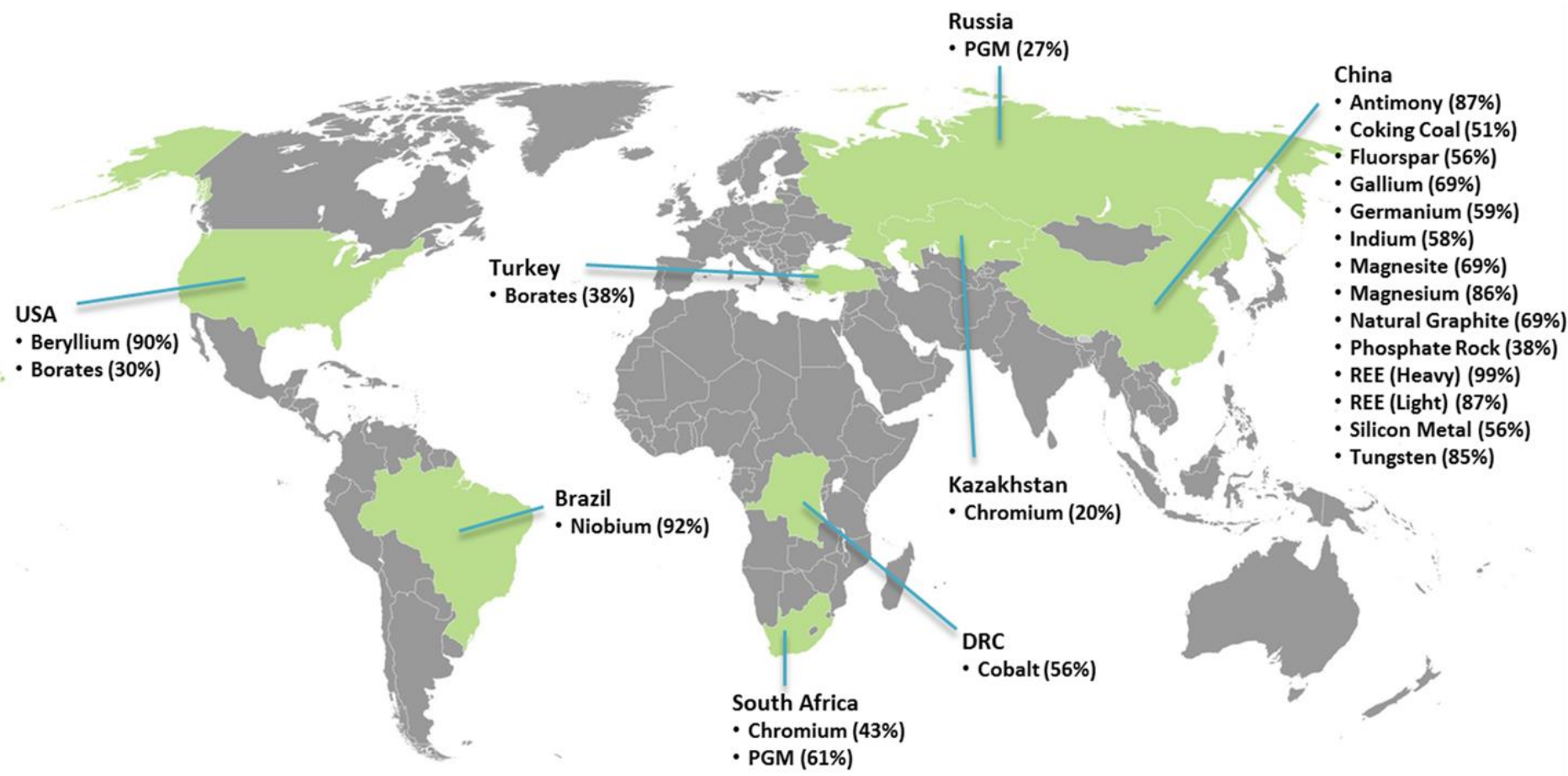




- ✓ **integrated strategy to respond to the different challenges related to access to non-energy and non-agricultural raw materials**

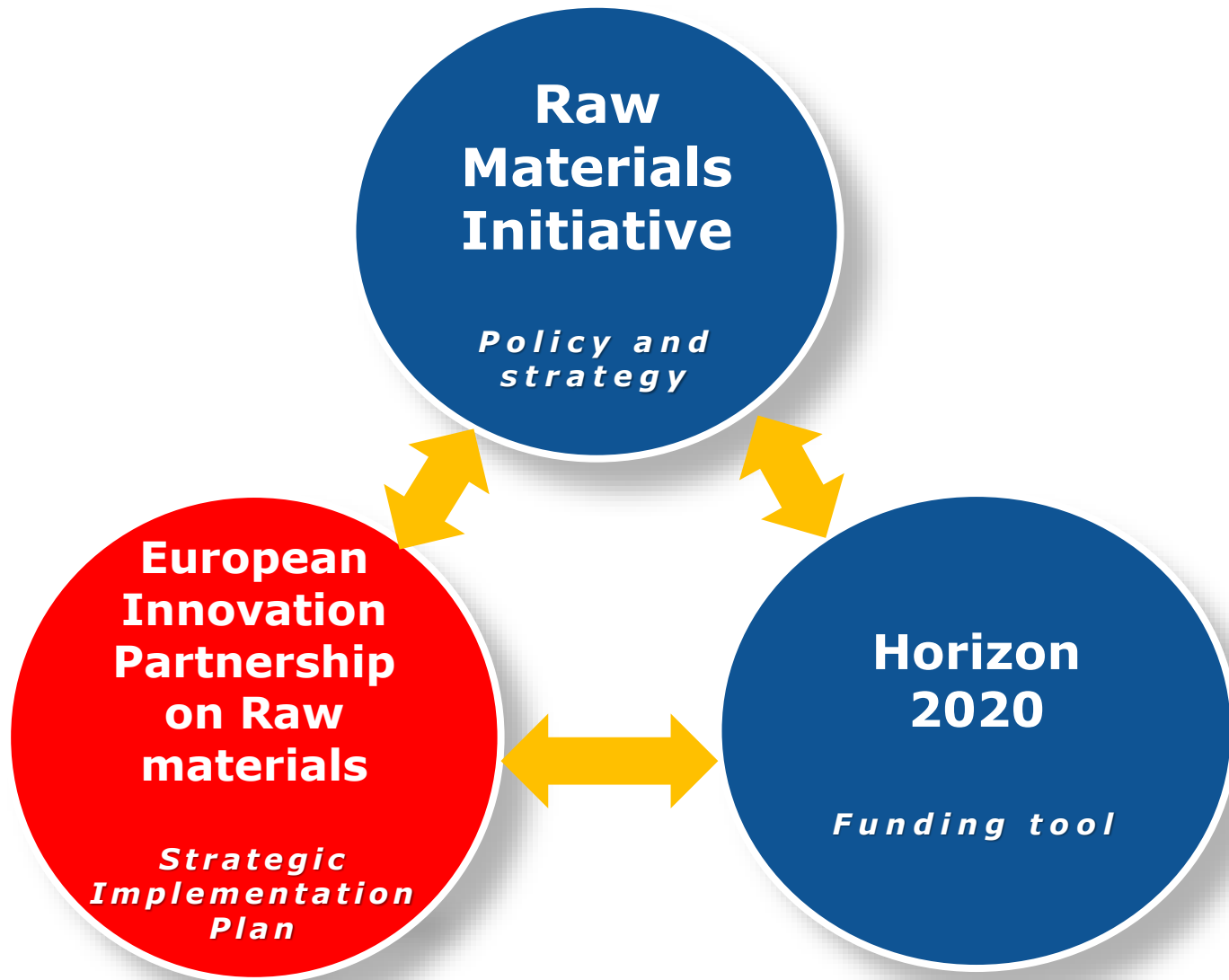
- **Launched in 2008, consolidated in 2011**
- **Non-energy, non-agricultural raw materials**
- **Connecting EU external and internal policies**
- **Integrated strategy (3 pillars)**
- **Introduced list of 14 Critical Raw Materials (CRM) in 2010, updated 20 CRMs in 2014**

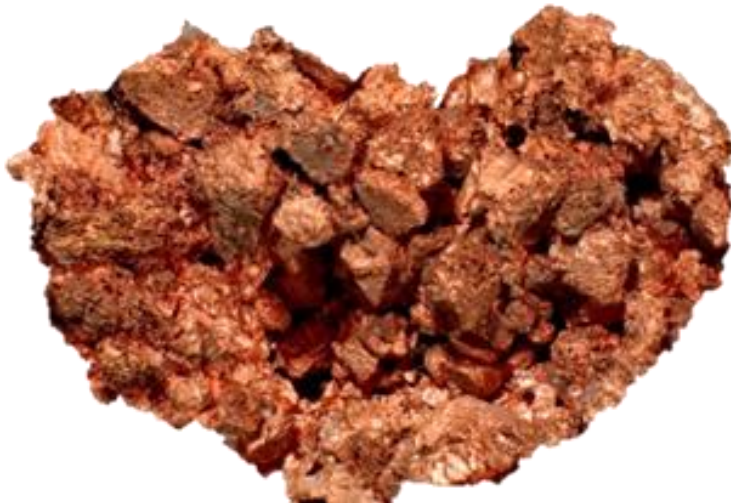




\* Communication on the review of the list of critical raw materials for the EU and the implementation of the Raw Materials Initiative - COM(2014) 297, 26.5.2014







- ✓ **...ensuring the sustainable supply of raw materials to the European economy...**



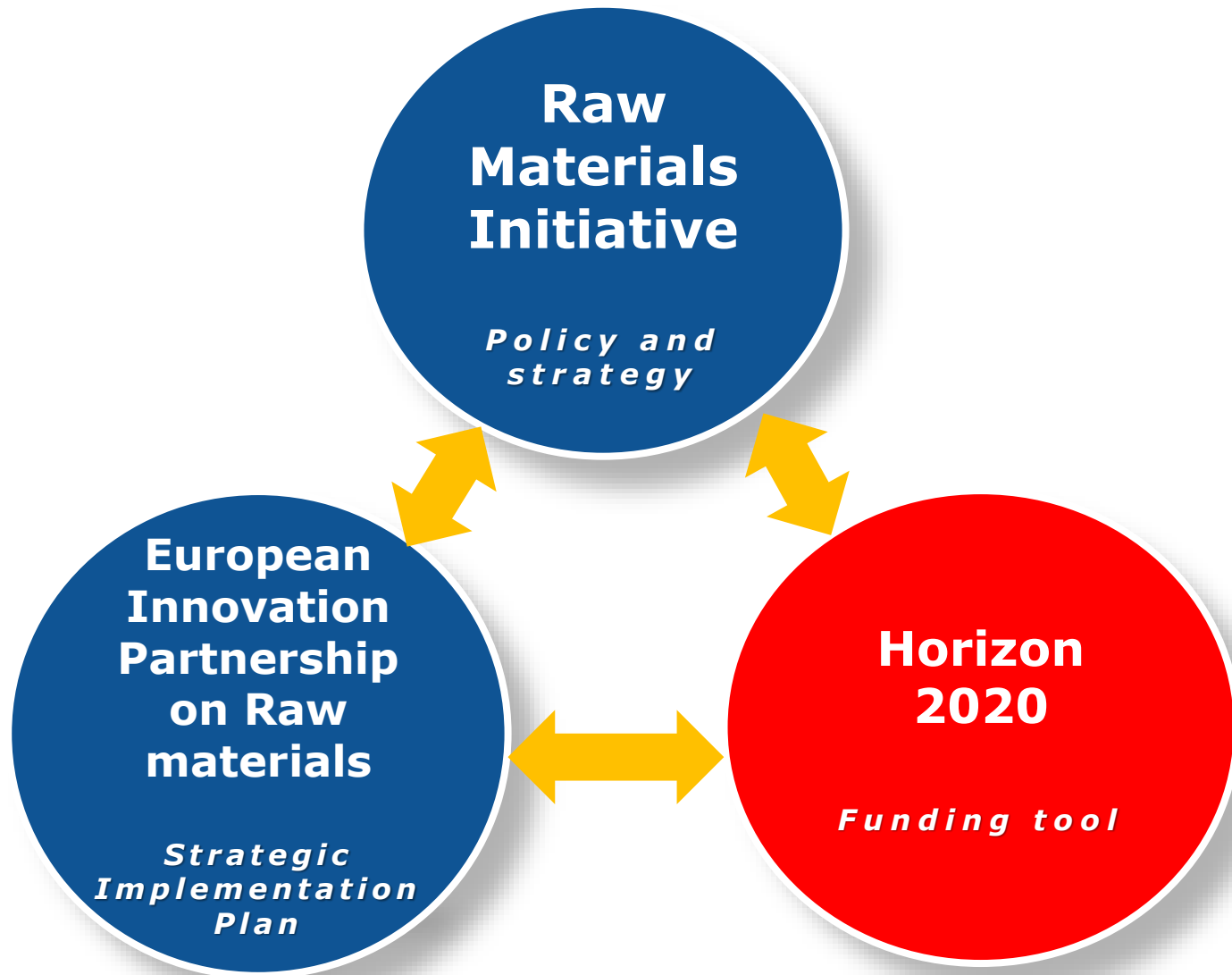
### EIP targets:

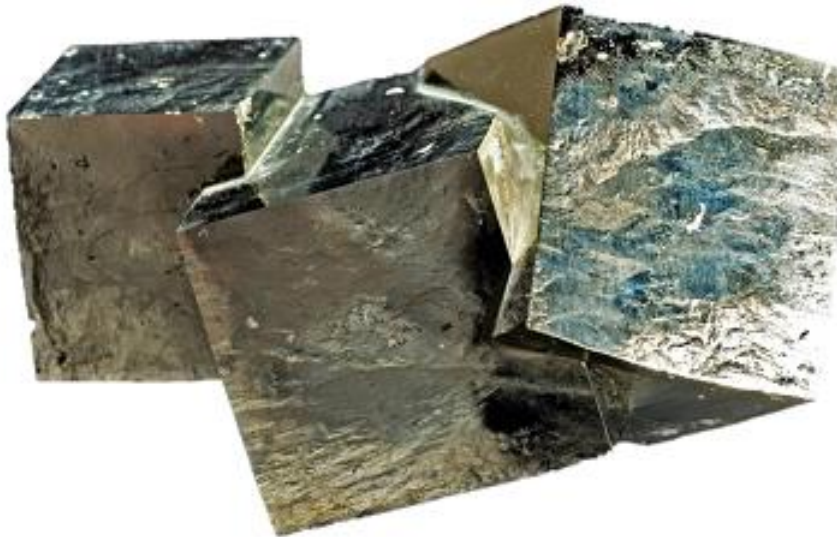
- Up to 10 innovative pilot actions
- Substitutes for at least 3 applications of CRMs
- Regulatory framework for primary and secondary RM
- EU RM Knowledge base
- International cooperation strategy...

➤ **Strategic Implementation Plan (SIP)** adopted on 25 September 2013

➤ Responded by **80 "Raw Materials Commitments"** with over **700 stakeholders**



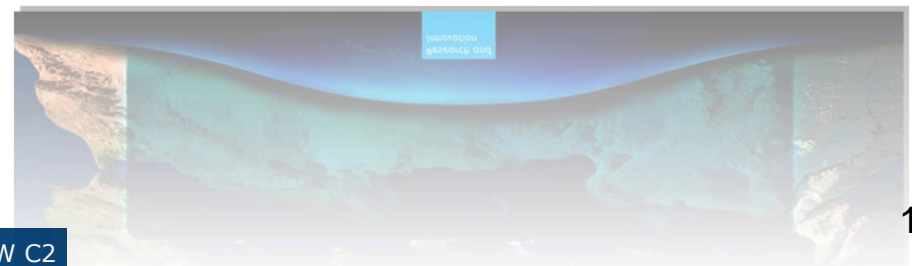




- ✓ **securing the EU's supply of primary and secondary raw materials through Research and Innovation**

## WHAT IS HORIZON 2020?

- **A €77 billion research and innovation funding program (2014 -2020)**
- **investing in future jobs and growth**
- **Focus on societal challenges: health, clean energy, transport, resources, etc.**
- **Coupling research with innovation: 'from lab to market'**
- **Open to participation: companies, universities, institutes in EU and beyond**



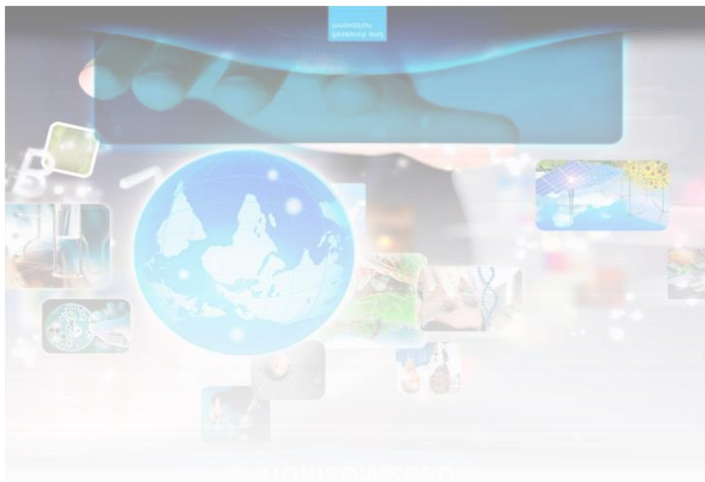
## HORIZON 2020: Open to the world



### Mutual benefits:

- ✓ access to knowledge
- ✓ open up markets
- ✓ sharing expertise
- ✓ improve research quality
- ✓ science diplomacy
- ✓ higher global profile





- **Applicants from non-EU countries are eligible to take part in Horizon 2020 programmes, even as coordinator.**
- All proposals must meet certain **minimum conditions** (in Rules for Participation)...
- ...for example for standard research projects: 3 participants from different EU Member States or associated countries
- Eligible for an automatic funding are the legal entities established in: EU Member States, Associated Countries, **Listed countries (Annex A)**, European Interest Organisations
- Some countries make funding available for their participants in Horizon 2020 actions

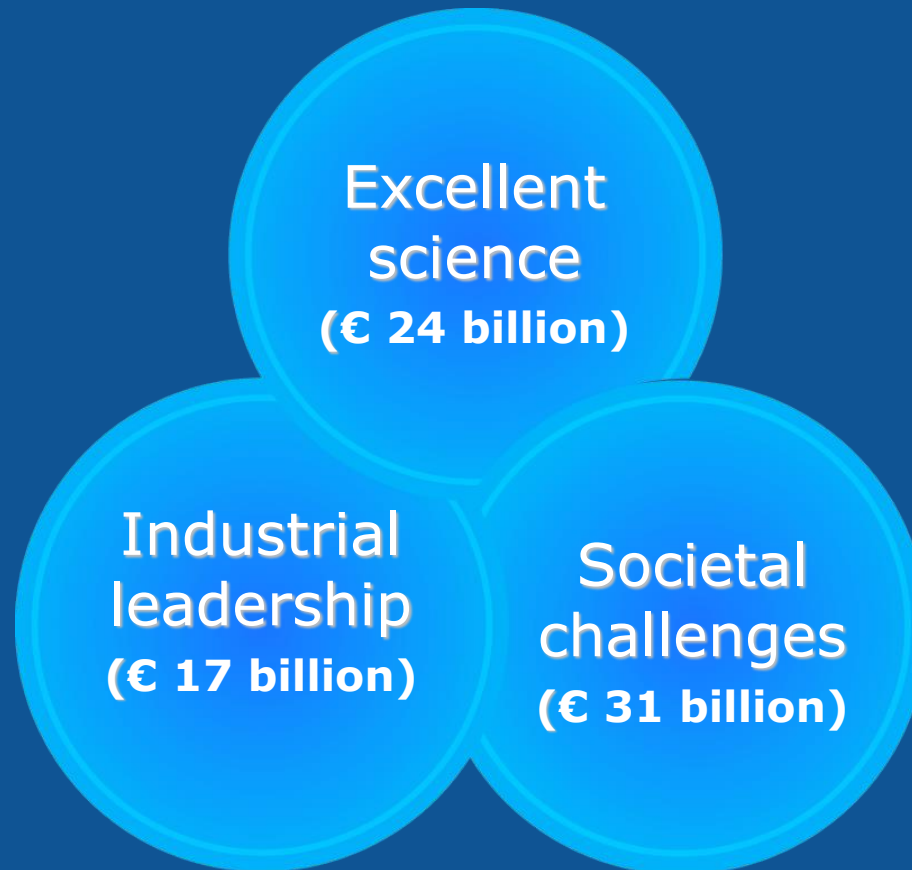
[http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/international-cooperation\\_en.htm#countries](http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/international-cooperation_en.htm#countries)



# Horizon 2020

## Context and overview

Horizon 2020



1. Health, demographic change and wellbeing
2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy
3. Secure, clean and efficient energy
4. Smart, green and integrated transport
- 5. Climate action, environment, resource efficiency and raw materials**
6. Inclusive, innovative and reflective societies
7. Secure societies

- **INTRAW - International cooperation on Raw materials**
  - Coordinator – Fédération Européenne Des Géologues, FR
  - Council For Scientific And Industrial Research, ZA
  - Australian Academy Of Technological Sciences and Engineering Limited, AU
  - American Geological Institute, US
- **STRADE - Strategic Dialogue on Sustainable Raw Materials for Europe (GA not yet signed)**
  - Coordinator - OEKO-INSTITUT E.V. - Institut Fuer Angewandte Oekologie, DE
  - University Of The Witwatersrand Johannesburg, ZA
  - DMT-Kai Batla (Pty) Ltd, ZA
- **PROSUM - Prospecting Secondary raw materials in the Urban mine and Mining waste**
  - Coordinator - Waste Of Electrical And Electronical Equipment Forum Aisbl BE
  - United Nations University, JP

- **HiTech AlkCarb - New geomodels to explore deeper for High-Technology critical raw materials in Alkaline rocks and Carbonatites**
  - Coordinator - University of Exeter, UK
  - GeoAfrica Prospecting Services cc, NA
  - A. Speiser Environmental Consultants, NA
- **INMET - Integrated innovative metallurgical system to benefit efficiently polymetallic, complex and low grade ores and concentrates**
  - Coordinator - Cobre Las Cruces SA, ES
  - MINTEK, ZA
- **BioMOre - New Mining Concept for Extracting Metals from Deep Ore Deposits using Biotechnology**
  - Coordinator - KGHM Polska Miedz SA PL
  - MINTEK, ZA

### Budget

- 2016: €64 million

### Deadlines:

- 8 Mar 2016 (RIA, CSA, and First stage of IA)
- 6 Sep 2016 (Second stage of IA)

### Topics (1)

- New solutions for sustainable production of raw materials (RIA)
  - 2016: Sustainable selective low impact mining
  - 2016: New technologies for the enhanced recovery of by-products
  - **2017: New sensitive exploration technologies**
- Raw materials Innovation actions (IA)
  - 2016: Intelligent mining on land
  - **2017: Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways**
  - **2017: Sustainable metallurgical processes**



## Topics (2)

- **Raw materials policy support actions (CSA)**
  - **2016: Expert network on Critical Raw Materials**
  - 2017: Good practice in waste collection systems
  - 2017: Optimising collection of raw materials data in Member States
  - 2017: Linking land use planning policies to national mineral policies
  - 2017: EU network of mining and metallurgy regions
  - 2017: EU network of regions on sustainable wood mobilisation (wood supply)
- **Raw materials international co-operation (CSA)**
  - **2016: Demand-supply forecast and raw materials flows at global level**
  - **2016: Advancing the idea of a World Forum on Raw Materials**
  - **2017: International network of raw materials training centres**
- **ERA-NET Cofund on Raw materials (2016, CSA)**



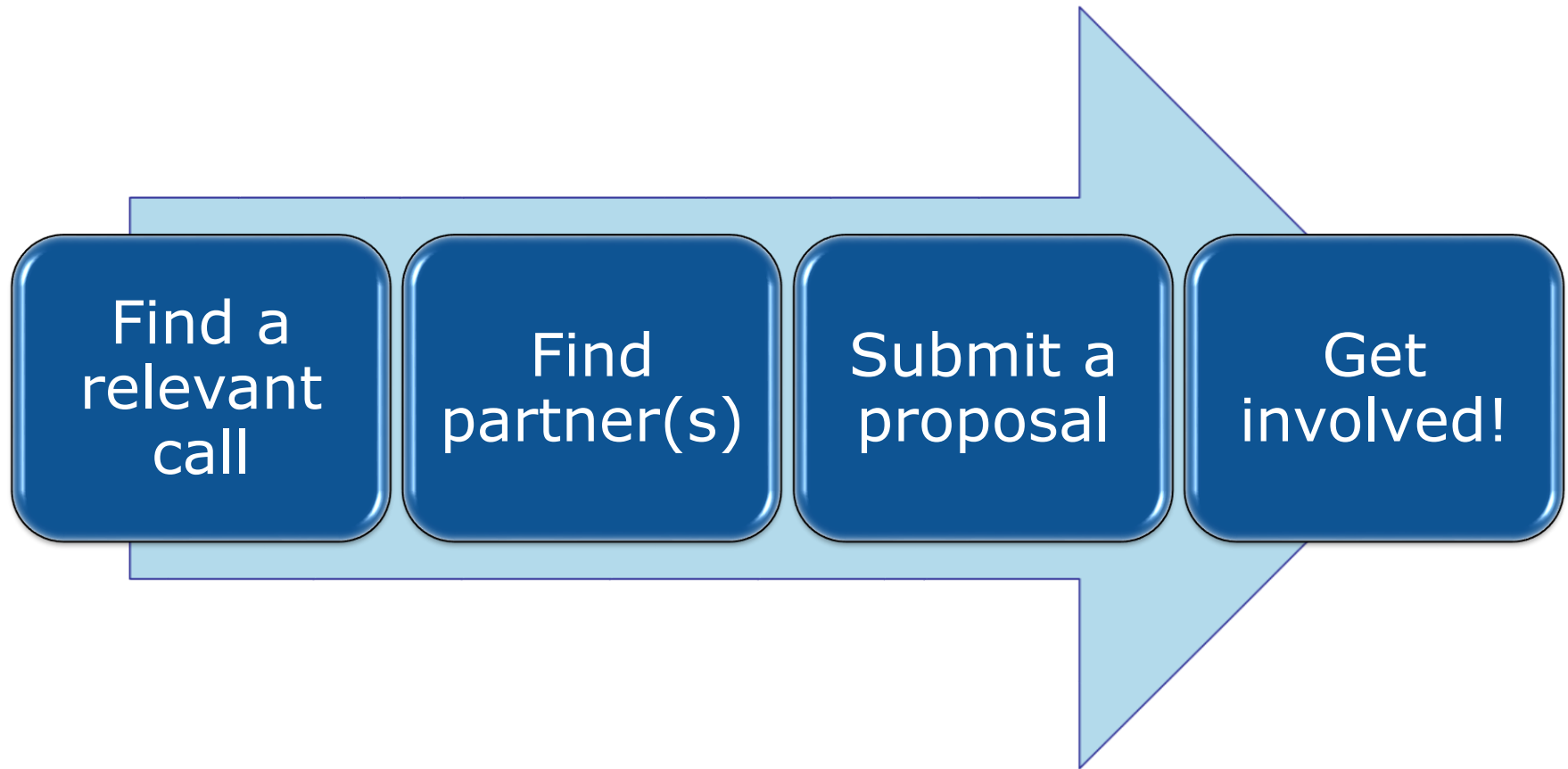


## SC5-16 c) International network of raw materials training centres (2017)

- **To create a self-sustainable long-term lasting international network of training centres for professionals.**
  - **involve educational and research institutions in the EU and the leading counterparts in third countries,**
  - **based on specific country expertise in the primary and secondary raw materials sectors.**
  - **map skills and knowledge in the EU and the third countries,**
  - **identify key knowledge gaps and emerging needs,**
  - **develop roadmap for improving skills and knowledge,**
  - **establish common training programmes in the raw materials sectors.**
- Indicative size of proposals: up to EUR 1 million

# How does it work?

Horizon 2020



## Partnership Instrument (PI): Opportunities for participation

- Major **innovation** of the EU Multiannual Funding Framework (MFF) external action package
- The World changes and emerging economies (ex: BRICS) play an important role in the international sphere, their influence on governance, foreign policy, economy, trade, multilateral forums shape the international response to global challenges
- **PI fills the gap** in the toolbox. EU external financing instruments were mainly focused on development cooperation.
- **PI promotes policy cooperation** with countries sharing strategic mutual interests, or no longer eligible for ODA.

# Partnership Instrument General Principles

- **Effective and flexible response** to the EU's evolving policy agenda with partner countries
- Actions should preferably be linked to **joint agreements, declarations and action plans** with partner countries
- **Complementarity** with other EU programmes with an external dimension (Competitiveness & SME, Horizon2020, Migration Fund, etc)
- **Complementarity** with other EU external instruments (DCI/GPGC, ENI, IPA): avoid overlapping

## Partnership Instrument Main Features

- **Global scope**: all third countries, regions and territories are eligible for cooperation under the PI Regulation but there is a particular focus on EU designated strategic partners
- PI supports **peer to peer relationships**
- No **ODA** requirement: as the PI is not a development instrument
- Budget for 2014-2020: **€ 954,8 M**

## Partnership Instrument Specific Objectives

1. Addressing major global challenges and policy support
2. Implementing the international dimension of the Europe 2020 Strategy (green growth, research and innovation, sustainability)
3. Improving market access & developing trade & business opportunities for companies through economic partnerships and business and regulatory cooperation
4. Enhancing widespread understanding and visibility of the Union on the world scenes by means of public diplomacy, education/academic cooperation & outreach activities



## Types of Actions/Projects eligible under **Partnership Instrument**

- **Stand alone**: large scale, extensive projects and programmes such as networks, platforms, etc.
- Dialogue **grant** scheme: activities that will complement and feed into the formal policy dialogue at government level.
- **Policy support facility (PSF)**: flexible concept aimed at supporting priorities defined by the EU and its partner countries/regions and to influence a mutual agenda positively.

## Examples of types of Project funded by **PI**

**PSF** – EU-Brazil Flagship Event on Climate Change

**PSF** – Seminar in Brussels: exchange of good practices on metal by-products recovery – technology and policy challenges

**Stand Alone Project** – EU-Canada minerals investment facility - study

**Stand Alone Project** – Low Carbon Business Initiatives in Brazil and Mexico

**Stand Alone Project** – International Urban Cooperation

**Stand Alone Project** – EU-Australia leadership forum

**Stand Alone Project** – Gateway to Japan

**Stand Alone Project** – Natural Capital Accounting and Valuation of Ecosystem Services (BR, IN, MX, CN, RSA)

# What **PI** opportunities for the mining sector



Through TAIEX, PSF or Stand Alone, PI can accompany Dialogue on Raw Materials and implement in areas such as:

- **Platforms** for continued and structured cooperation: example  
- between EU and LA mining sector (academia, policy-makers, business, etc)
- **Supply of technology and exchange of good practice**
- Short or long-term **Technical Assistance** in identified sectors
- **Improve skills and training** , at academic and technical levels
- **Policy support, studies, research**



# **Raw Materials week**

## **30 November - 2 December 2016**

### **Brussels**



## **EU raw materials webpage:**

[http://ec.europa.eu/growth/sectors/raw-materials/index\\_en.htm](http://ec.europa.eu/growth/sectors/raw-materials/index_en.htm)

## **Check the EIP website for fresh news and events:**

<https://ec.europa.eu/eip/raw-materials/en/meetings-listing>

## **Horizon 2020 - Raw materials webpage:**

<http://ec.europa.eu/programmes/horizon2020/en/area/raw-materials>

## **Partnership Instrument**

[http://ec.europa.eu/dgs/fpi/what-we-do/partnership\\_instrument\\_en.htm](http://ec.europa.eu/dgs/fpi/what-we-do/partnership_instrument_en.htm)

**THANK YOU !**