



RESEARCH & INNOVATION PROGRAMME ON RAW MATERIALS TO FOSTER CIRCULAR ECONOMY



Co-funded by the Horizon 2020 programme
of the European Union

Ms. Dina Carrilho
ERA-MIN 2 project coordinator
FCT- Foundation for Science and Technology (Portugal)

*Horizon 2020 Raw Materials Information and Brokerage Event
13th November 2018 / Brussels, Belgium*

About ERA-MIN 2 (2016-2021)

- **Horizon 2020 ERA-NET Cofund on Raw Materials (SC5 Climate Action)**
- **EU Raw Materials Initiative**
- **European Innovation Partnership on Raw Materials**
- **EU's transition to a Circular Economy**
- **Secure the sustainable and responsible industrial supply of primary and secondary resources**

Pan-European network of 21 research funding organisations

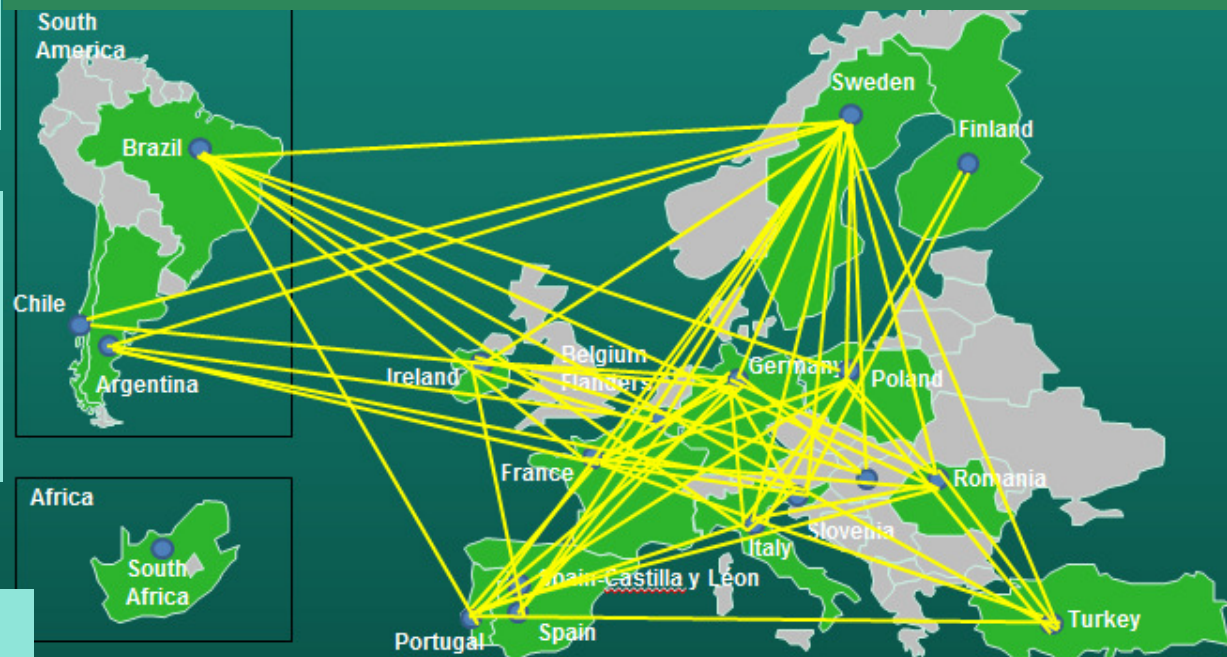
11 EU Member States countries; 2 EU MS regions; 1 EU Associated Country (Turkey); non-EU countries (Argentina, Brazil, Chile, South Africa)

94 submitted pre-proposals
493 applicants
27% Enterprises

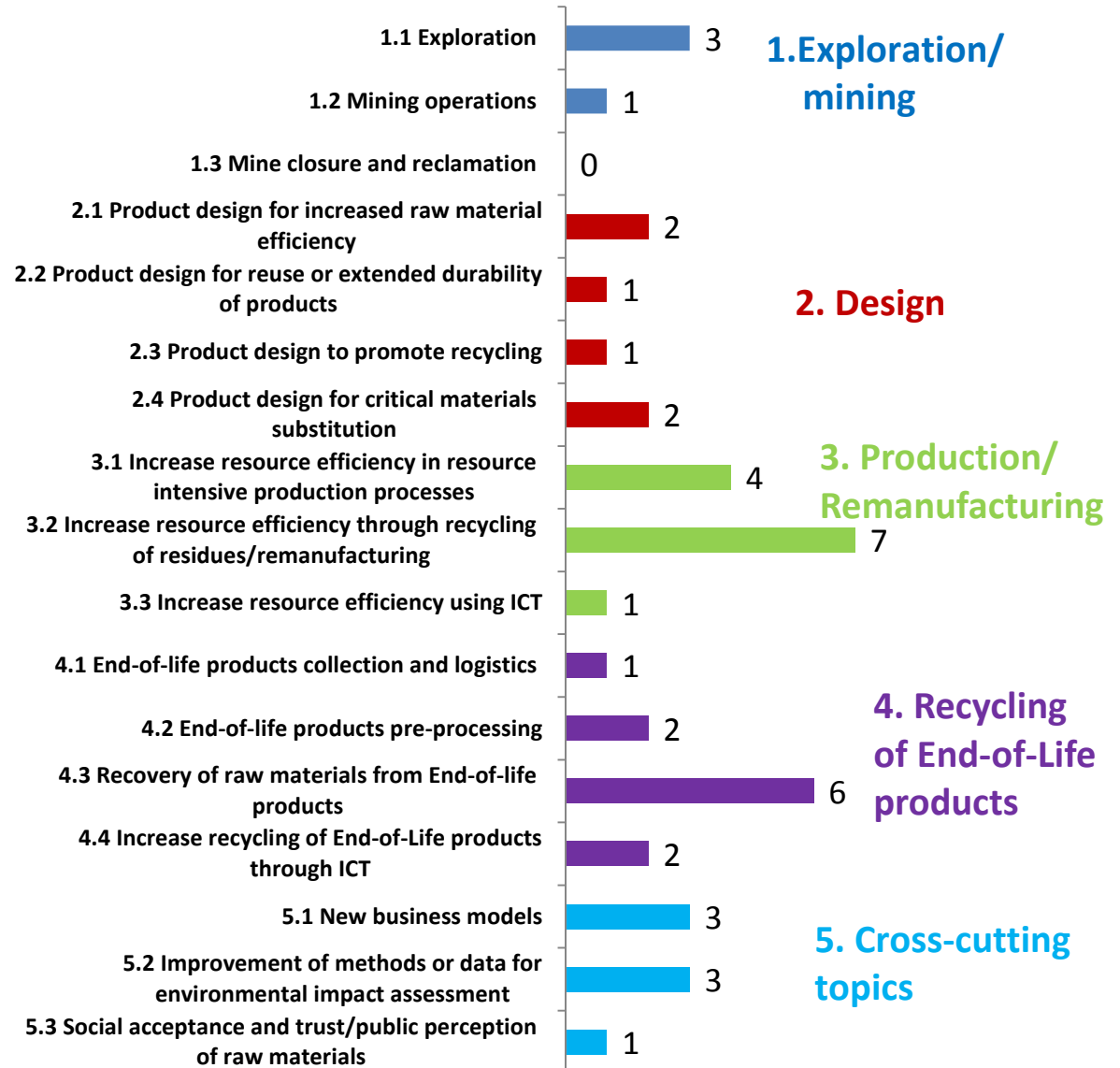
16 transnational projects
selected for funding
34 out of **88** are Enterprises
80% projects: academia-industry

€12.3 million - Total funding
€16 million - Total costs

ERA-MIN Joint Call 2017 - EU co-funding: €5 million



Call sub-topics addressed by the 16 funded projects



ERA-MIN Joint Call 2018

- Call calendar
- Participating countries/regions
- Call scope and topics
- Eligibility criteria
- Who can apply
- Recommendations
- Partner search tools

ERA-MIN Joint Call 2018 at a glance

- 31st October 2018 - Call Publication
- 20th November 2018 – Call for proposals opens (ESS)
- **31st January 2019 – Deadline for proposal submission**
- **14th May 2019 – Communication of results**
- 1st November 2019 – latest project's start date

Participating countries/regions

18 EU Member States/Associated countries and regions:

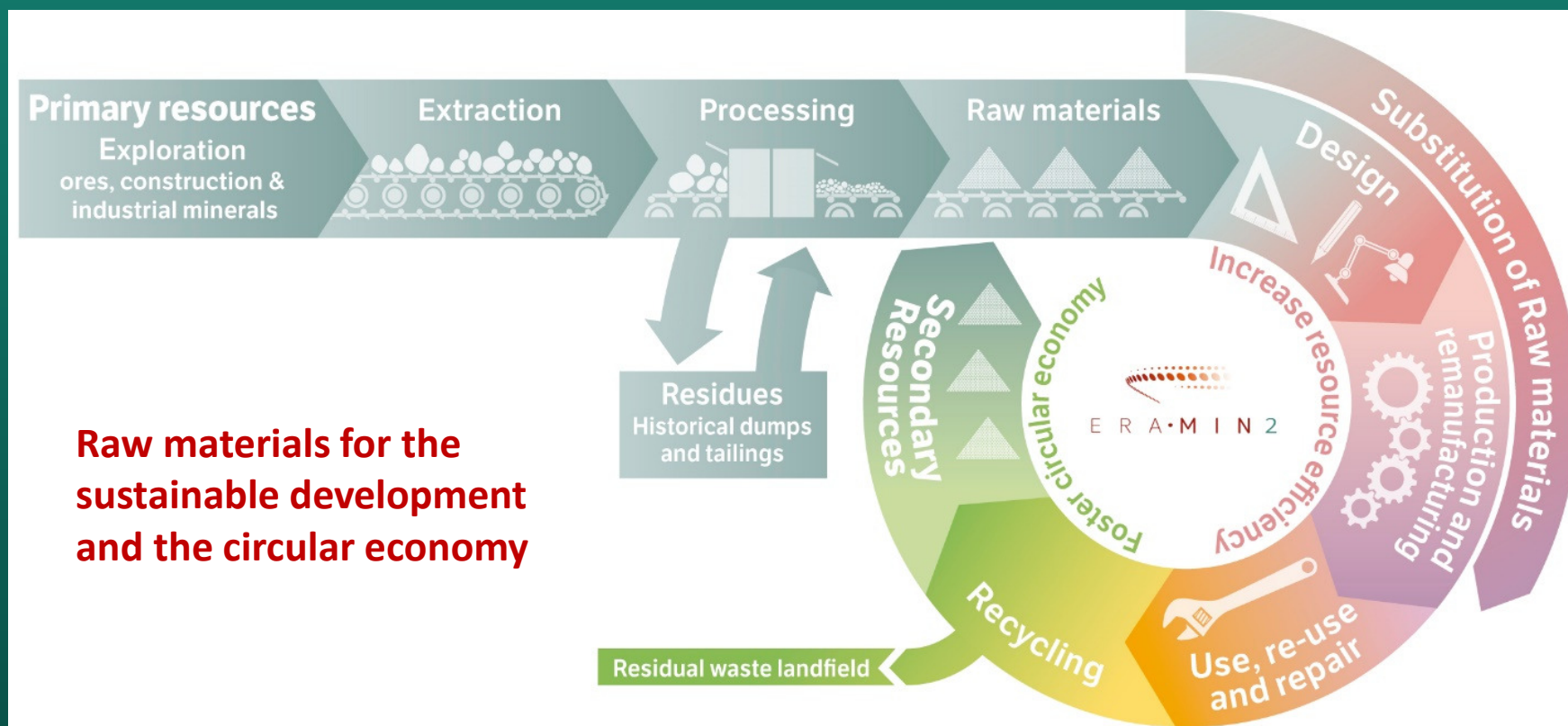
Belgium- Brussels; Belgium-Flanders; Belgium-Wallonia; Finland;
France; Germany; Greece; Italy- Calabria (*to be confirmed*); Ireland;
Poland; Portugal; Romania; Slovakia; Slovenia; Spain; Spain -
Castilla y León; Sweden; Turkey

4 non-EU countries: Brazil; Canada-Québec; Chile; South Africa

€14.5 million- Total call budget – sum of national/regional budgets

ERA-MIN Joint Call 2018 at a glance

SCOPE: demand-driven research and innovation on **primary and secondary resources of metallic, construction and industrial minerals and substitution of Critical Raw Materials** in a circular economy approach.



ERA-MIN Research Agenda is available (<https://www.era-min.eu/publications>)

ERA-MIN Joint Call 2018 – Topics described in CALL TEXT

- 1. Supply of raw materials from exploration and mining**
- 2. Design**
- 3. Processing, Production and Remanufacturing**
- 4. Recycling and Re-use of End-of-Life Products**
- 5. Cross-cutting topics**

ERA-MIN Joint Call 2018 – main topics and sub-topics

1. Supply of raw materials from exploration and mining

1.1. Exploration

1.2. Mining operations

1.3. Mine closure and reclamation

Objectives and expected impacts:

- responsible and sustainable mine development, through increasing the raw materials supply while reducing impacts on the environment. Both onshore and offshore proposals will be supported (subject to national/regional regulations).
- It is encouraged to incorporate :
 - cross-cutting topics
 - eco-efficient waste management
 - sustainable management of closed mines and quarries.

ERA-MIN Joint Call 2018 – main topics and sub-topics

2. Design

- 2.1. Product design for **increased raw material efficiency**
- 2.2. Product design for **reuse or extended durability of product**
- 2.3. Product design to **promote recycling**
- 2.4. Product design for **critical materials substitution**

Objectives and expected impacts

- innovative product design that contribute to the efficient use of raw materials (**eco-design**)
- **circularity of products** (extension of the product durability; facilitation of its re-use, remanufacturing or recycling)
- strategies and technologies for the **substitution of 'substances of very high concern' (SVHCs) of the REACH regulation** or substances for which a scarcity may be foreseen.
- quantify the expected impact of the new product design on resource efficiency, using appropriate metrics and **life cycle thinking**.

ERA-MIN Joint Call 2018 – main topics and sub-topics

3. Processing, Production and Remanufacturing

- 3.1. Increase resource efficiency in **resource intensive production processes**
- 3.2. Increase resource efficiency through **recycling of residues or remanufacturing of used products and components**
- 3.3. Increase resource efficiency using **information and communication technologies (ICT)**

Objectives and expected impacts:

- innovative technologies or methods **re-designing industrial processes**; address reduction of waste and/or recycling of waste and energy efficiency, environmental, and social impact could be considered.
- high impact both in terms of the **market opportunity** they address, and the **environmental/societal benefits** they will enable
- include **new business models**, e.g. for remanufactured products.
- A full understanding of the innovation and research needs across the **life cycle** is required

ERA-MIN Joint Call 2018 – main topics and sub-topics

4. Recycling and Re-use of End-of-life products

- 4.1. End-of-life products **collection and (reverse) logistics**
- 4.2. End-of-life products **pre-processing: pre-treatment, dismantling, sorting, characterisation**
- 4.3. **Recovery of raw materials** from End-of-life products
- 4.4. Increase recycling of End-of –Life products through **information and communications technologies (ICT)**

Objectives and expected impacts:

- recycling of raw materials from **complex products**
- new concepts, technologies and services which increase the supply of raw materials, especially critical raw materials
- Could address innovative business models, energy efficiency, social impact or environmental issues
- Assessment of the potential impact of the proposed innovation on raw materials efficiency should consider the **whole life cycle of the products.**

ERA-MIN Joint Call 2018 – main topics and sub-topics

5. Cross-cutting topics

5.1. New business models

5.2. Improvement of methods or data for environmental impact assessment

5.3. Social acceptance and trust/public perception of raw materials

Objectives and expected impacts:

- **non-technological innovations** in order to increase the economic, environmental and social sustainability in the raw materials sector
- new business models; development of new, efficient methods of **Life Cycle Analysis** and stock flows, also for environmental monitoring (including real time monitoring); gaining **public trust** in industrial activities;
- **We encourage inclusion of cross-cutting topics in proposals addressing the other topics (if supported by funding organisations).**

ERA-MIN Joint Call 2018 at a glance

- Joint application & evaluation but **national/regional funding**
- **International evaluation of proposals** based on the **H2020 evaluation criteria**: 1) Excellence, 2) Impact and 3) Implementation.
- Selection of projects following a **ranking list** recommended by the Scientific Evaluation Board.
- **National/regional funding rules and regulations apply:**
 - **Topics and sub-topics** supported by the participating funding organisations (**see Table 2 of CALL TEXT**)
 - **Legal entities** (academia, industry, SMEs, NGOs, public authorities) eligible for funding (**see Table 3 of CALL TEXT**)
 - **Research types** (fundamental, applied research or innovation - Technology Readiness Level (TRL) from 1 to 9) eligible for funding (**see Table 3 of CALL TEXT**)

ERA-MIN Joint Call 2018 – Who can apply

All stakeholders in the raw materials value chain, including **academia, SMEs, industry, NGOs, public authorities** and civil society.

Consortia may include players from the **public and private sector** with different backgrounds, e.g. physical scientists, engineers and technology developers, but also **social scientists and policy advisors** working closely together and covering different parts of the raw materials cycle.

Applicants **not requesting funding** may be partners of the consortium on the condition that they provide evidence of the availability of their own funds to cover their costs.

Applicants are obliged to check with their **national/regional contact point** about the relevant national/regional regulations.

ERA-MIN Joint Call 2018 – Eligibility criteria (1/2)

Consortium: **three independent legal entities (minimum)**
eligible to request funding of
two countries (minimum): one EU MS/EU AC (Turkey) (minimum)

Consortium coordinator eligible for funding;
established in a country/region participating in the Call.

Each researcher can only submit **one proposal** as the consortium **coordinator**

Total efforts of one country cannot exceed 70% of the total project efforts
(measured in person-months).

Project duration: 12 - 36 months (depending on funding organisation).

ERA-MIN Joint Call 2018 – Eligibility criteria (2/2)

The coordinator submits the proposal **via the Electronic Submission System** by the **deadline 31st January 2019, 17:00 CET.**

Each partner requesting funding must **comply with the national/regional funding criteria and regulations** of their respective Funding Organisation

Each consortium partner requesting funding must sign a **Statement of Commitment (Form B)**

Partners not requesting funding, or not eligible for national/regional funding, must sign a **Statement of Own Funding (Form C)**

The language of the proposal is **English.**

The **proposal technical description (Form A)** cannot exceed **27 pages.**

The **ethics issue table**, the **CVs of key personnel** and the **Forms B** and **Forms C** must be attached.

ERA-MIN Joint Call 2018 – Recommendations

No limits on the consortium size;
Each partner should have a significant contribution for **the transnational added value of collaboration**.
Address **gender equality**.

Consortia involving **both academic and industrial organisations**

Cover the **entire innovation chain** from idea to end-user/market

Include **cross cutting topics** in all topics;
Address **more than one topic** for a holistic view of the value chain.

Pay special attention to **reconnecting raw materials to society**.

Focus in one, or more, of **the 27 Critical Raw Materials (2017)**

Online partner search tools

- The platform set up by the **NCPs-CaRE website**:
<http://partnersearch.ncps-care.eu/>
- The **European Commission Partner search services**:
 - https://ec.europa.eu/research/participants/portal/desktop/en/organisations/partner_search.html
 - <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/partner-search>
- The **Enterprise Europe Network** is active in more than 60 countries worldwide: <https://een.ec.europa.eu/>



Our project ERA-MIN2
was made possible
thanks to #H2020 funding

€30 billion is still
available in the 2018-20
Work Programme!

#InvestEUresearch



Coordination/Joint Call Secretariat: FCT– Portugal

Coordinator: Ms. Dina Carrilho

Manager: Ms. Ana Lavado

E-mail: eramin@fct.pt



Follow us: Website: www.era-min.eu



@eranetmin2