



RESEARCH & INNOVATION PROGRAMME
ON RAW MATERIALS
TO FOSTER CIRCULAR ECONOMY



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

Strategy for cooperation beyond ERA-MIN 2

Dina Carrilho, PhD
ERA-MIN 2 project coordinator

Department of international Relations
Foundation for Science and Technology (FCT), PORTUGAL



ERA-MIN 2 Final Conference, 18 - 19 November 2021, Online

ERA-MIN 2 Ambition/Achievements

Indicators	Ambition	Achievement
EU Associated partners/ Observer organisations	18	30
non-EU Associated partners/ Observer organisations	6	4
Joint transnational calls	3	3
Funded projects	30	40
Allocated public funding (EUR million)	30	29

**8 Battery related
projects
(€6 million)**

In 2021, 34 Associated partners/Observer organisations

ERA-MIN 2 main outcomes and impact

Pan-European Raw Materials network

1. A Pan-European public platform of regional, national funding bodies that coordinate R&I funding programmes for knowledge sharing and mutual learning
2. A long-term collaboration between R&I programmes in the raw materials sector beyond Horizon 2020.

3. ERA-MIN 2 facilitated the **mutual learning** of funding programmes through joint activities in the field of raw materials achieving a **more efficient use of national/regional funds, time and personnel**

4. ERA-MIN 2 supported non-fuel non-food raw materials R&I through **joint collaborative projects** which contributed to SIP of EIP Raw Materials

3 Joint Transnational Calls

5. an attractive tool to internationalise the national/regional R&I community in the raw materials sector across Europe and globally, in particular for newcomers and SMEs

6. complement other EU funding instruments (Horizon 2020; EIT RawMaterials).

7. Contribution to a **Raw Materials R&I programme**

17 ERA-MIN+ 40 ERA-MIN 2

R&I projects

Project summaries and final reports



<https://www.era-min.eu/results>

Improve Resource
Efficiency and Minimize
Environmental
Footprint

New Eco-innovative
Materials for Mining
Infra

Application of nano-
bubble technologies to
mining industry
operations

Environmentally
friendly and efficient
methods for extraction
of Rare Earth Elements
from secondary sources

Optimization of
bottom ash treatment
for an improved
recovery of valuable
fractions

A novel circular
economy for
sustainable RE-based
magnets

Re-generating (raw)
materials and end-of-
life products for re-use
in Cement/Concrete

Recycling of End-of-Life
Products (PCB, ASR,
LCD)

Design of a product for
SUBSTITUTION of
phosphate rocks

Integrated process for
the recovery of Rare
Earth Elements and
Scandium from Bauxite
Residues

....

transnational R&I projects

Benefits

Testimonials from

Project coordinators



Transnational projects
allow the best research
worldwide

ERA-MIN instrument is
an excellent start for an
international
collaboration in
common research goals

Access to international
level researchers and
large R&D centres
motivates small
companies

✓ Set up of
international
collaborations with
academic and/or
industrial partners

✓ Opportunity to
strengthen existing
knowledge networks
with experienced
institutions

✓ collaborative
transnational networks
of fundamental and
applied science

✓ Exchange of
knowledge and
cooperation for joint
actions and technology
transfer

✓ Allows the
submission of risky
projects (including low
TRL)

all TRLs and both
upstream and
downstream outcomes
within a single action

Consortium is easier to
create and operate than
the European projects

The application and
selection stages are
easier than the
European projects

✓ Supports ambitious
goals while keeping
consortia and budgets
at reasonable sizes

transnational R&I projects

Tips for a sucessfull proposal

Testimonials



•“First find the question
and then the partners”

•Enhance former
cooperation between
partners towards
development of new
ideas

•Make use of the Partner
Search Tool for
consortia building

Start early building the
consortium, especially
with industrial partners

Start project idea and
preparation 6 months
prior submission

Check the eligibility of
the consortium partners
by country

Clear information and
objectives between
enterprises and
universities

Projects must be
pertinent for new
industrial developments
(innovation)

Project should be
oriented towards an
industrial development
and application

Must have concrete and
measurable outcomes

Network with other
projects and
communicate openly
and frequently

Budget and requested
funding must be
reasonable for the
proposed activities

ERA-MIN3



Raw Materials for the Sustainable Development and the Circular Economy

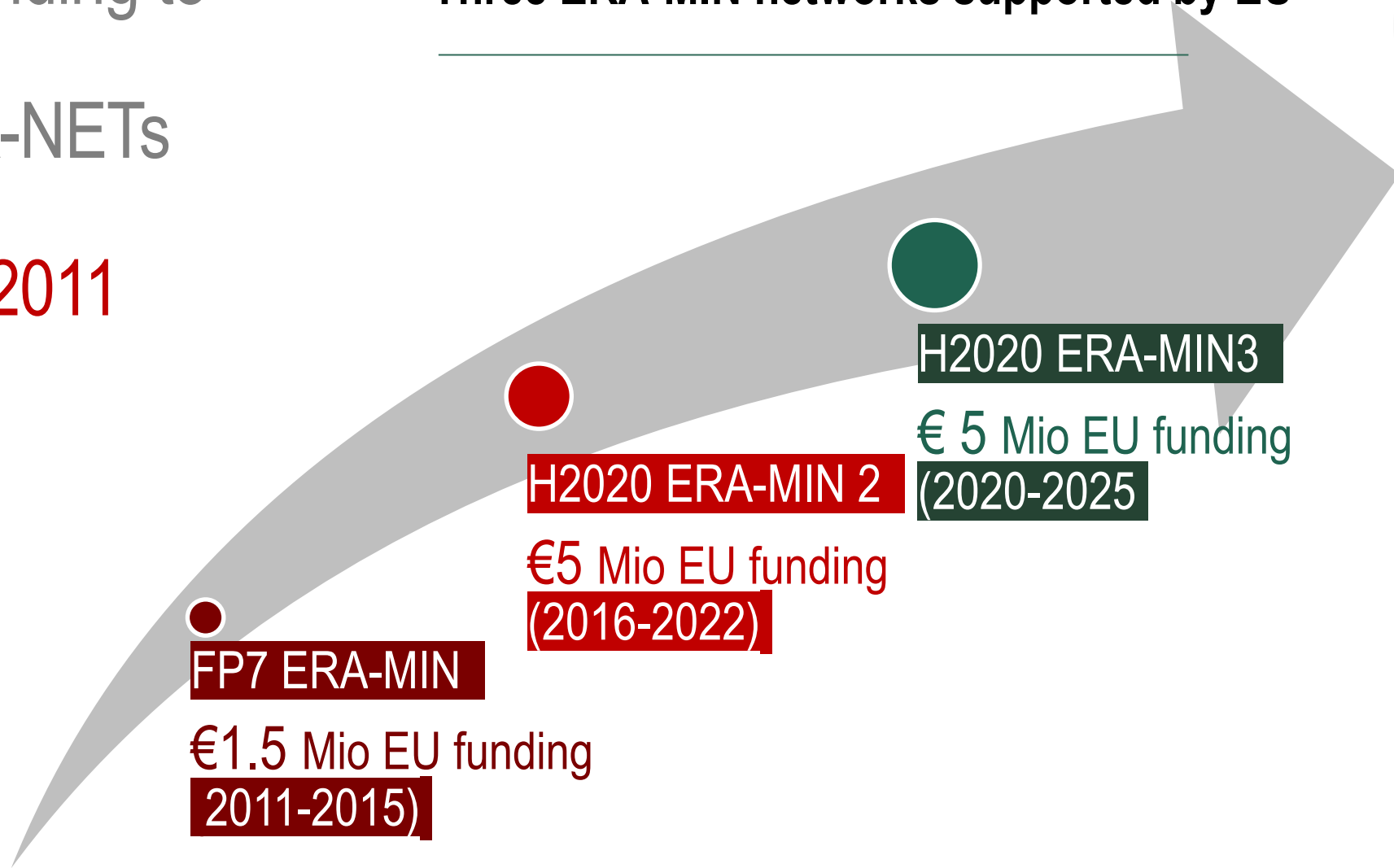
19 November, 2021



EU funding to ERA-NETs

since 2011

Three ERA-MIN networks supported by EU



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ERA-MIN3
Raw Materials for the Sustainable Development and the Circular Economy

ERA-MIN3 Consortium

7 New partners to ERA-MIN 3 network



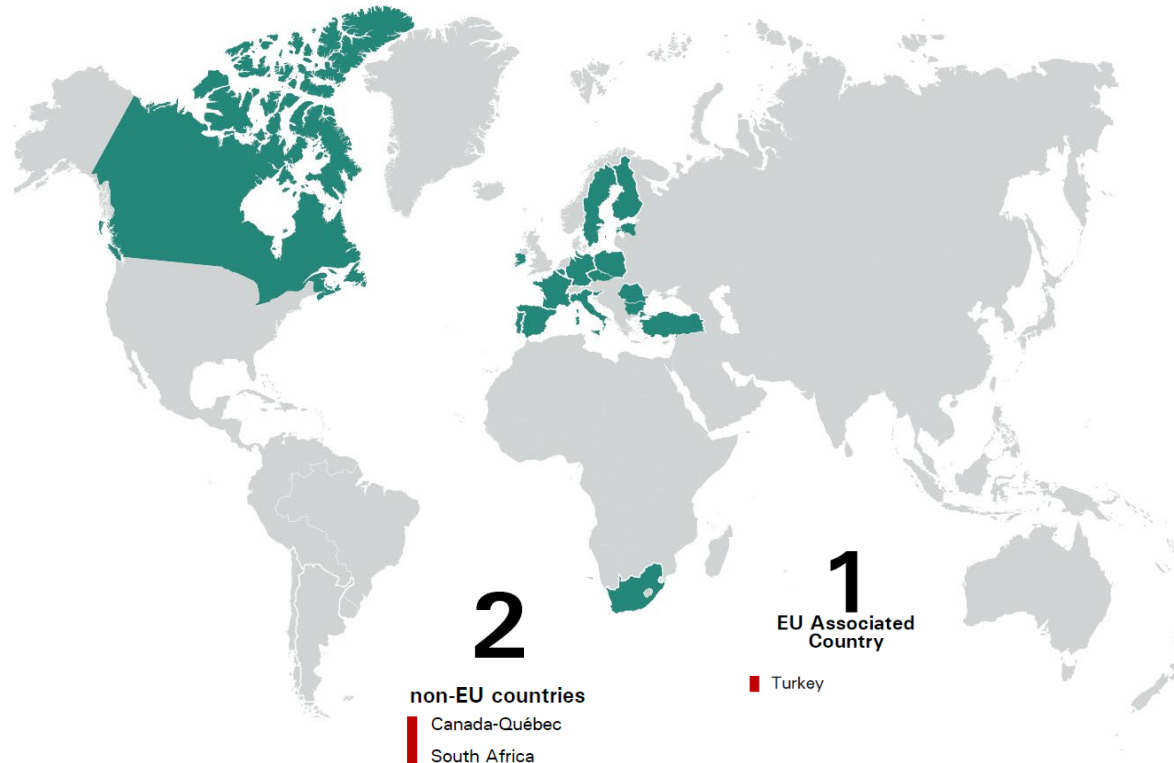
In ERA-MIN3, Quebec in Canada, Bulgaria, Czech Republic, Estonia, Slovakia, Wallonia and Navarra joined the ERA-MIN network for the first time

15
EU Member States
countries

- Bulgaria
- Czech Republic
- Estonia
- Finland
- France
- Germany
- Ireland
- Italy
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden

3
EU Member States
regions

- Belgium-Flanders
- Belgium-Wallonia
- Spain-Navarra



Brazil intends to join the network



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EU co-funded ERA-MIN Joint Call 2021
Raw Materials for the Sustainable Development and the Circular Economy

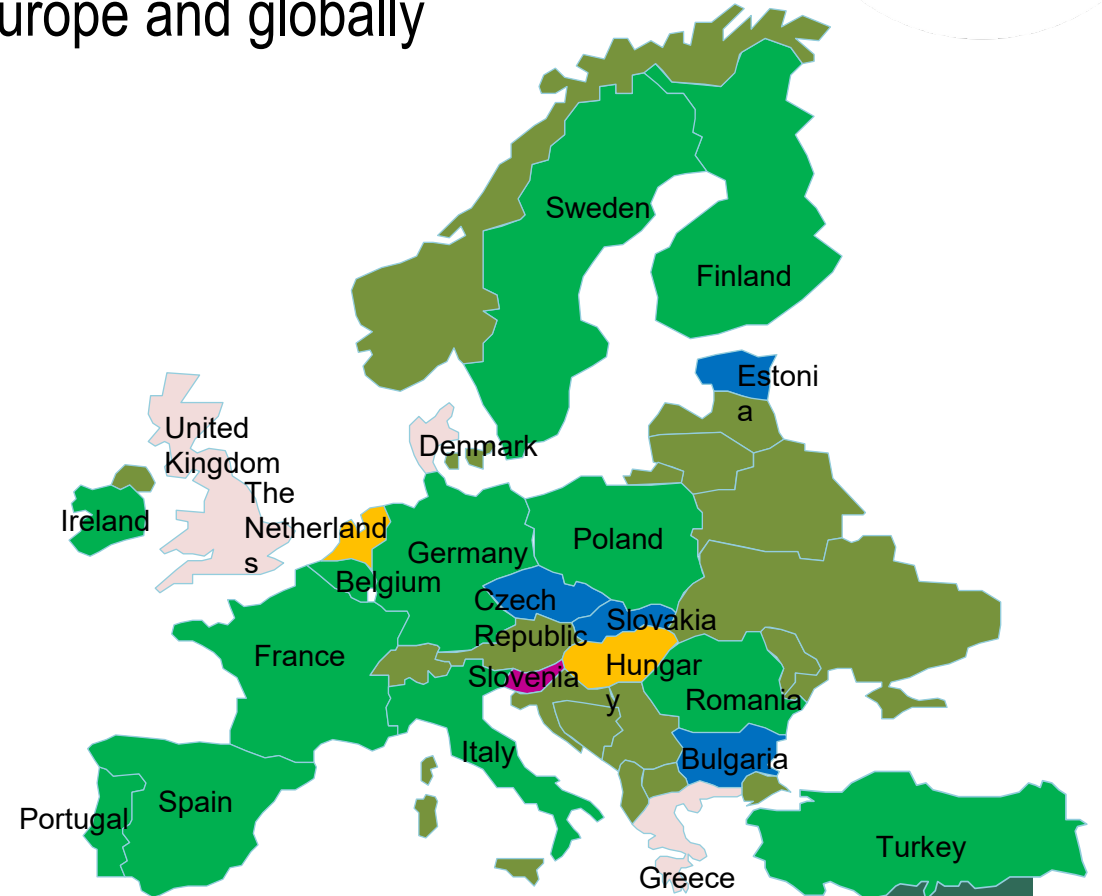
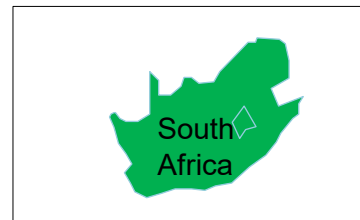
ERA-MIN Consortium

Countries involved in ERA-MIN network



Evolution since 2011

since 2011, the network was expanded to more countries across Europe and globally



EU co-funded ERA-MIN Joint Call 2021



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

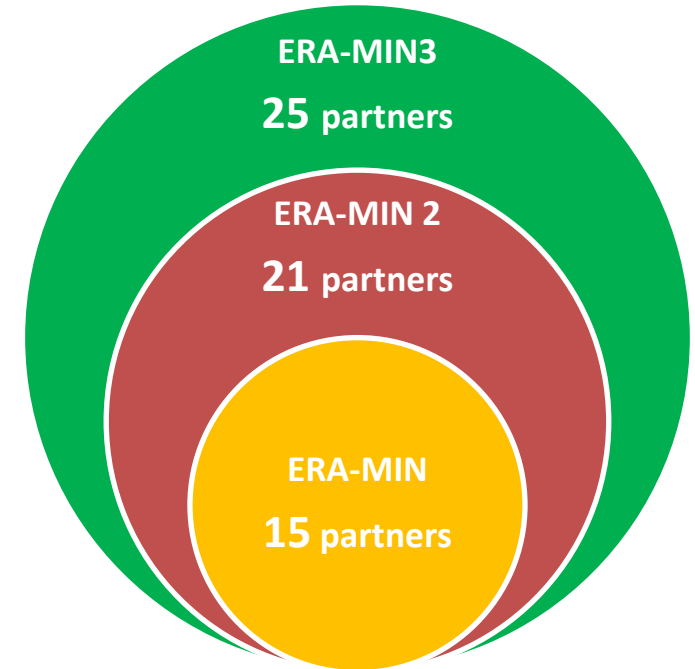
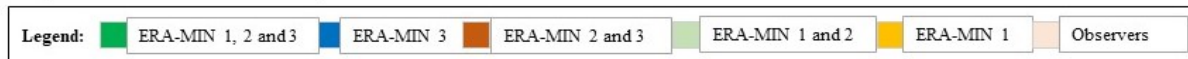
Legend	ERA-MIN 1, 2 and 3	ERA-MIN 2 and 3	ERA-MIN 1 and 3	ERA-MIN 1 and 2	ERA-MIN 1	ERA-MIN 2	Observer
	Green	Pink	Blue	Magenta	Light Green	Yellow	Pink

ERA-MIN Consortium

EU Member States Countries/regions
EU Associated Country (Turkey)
Non-EU countries



Evolution since 2011

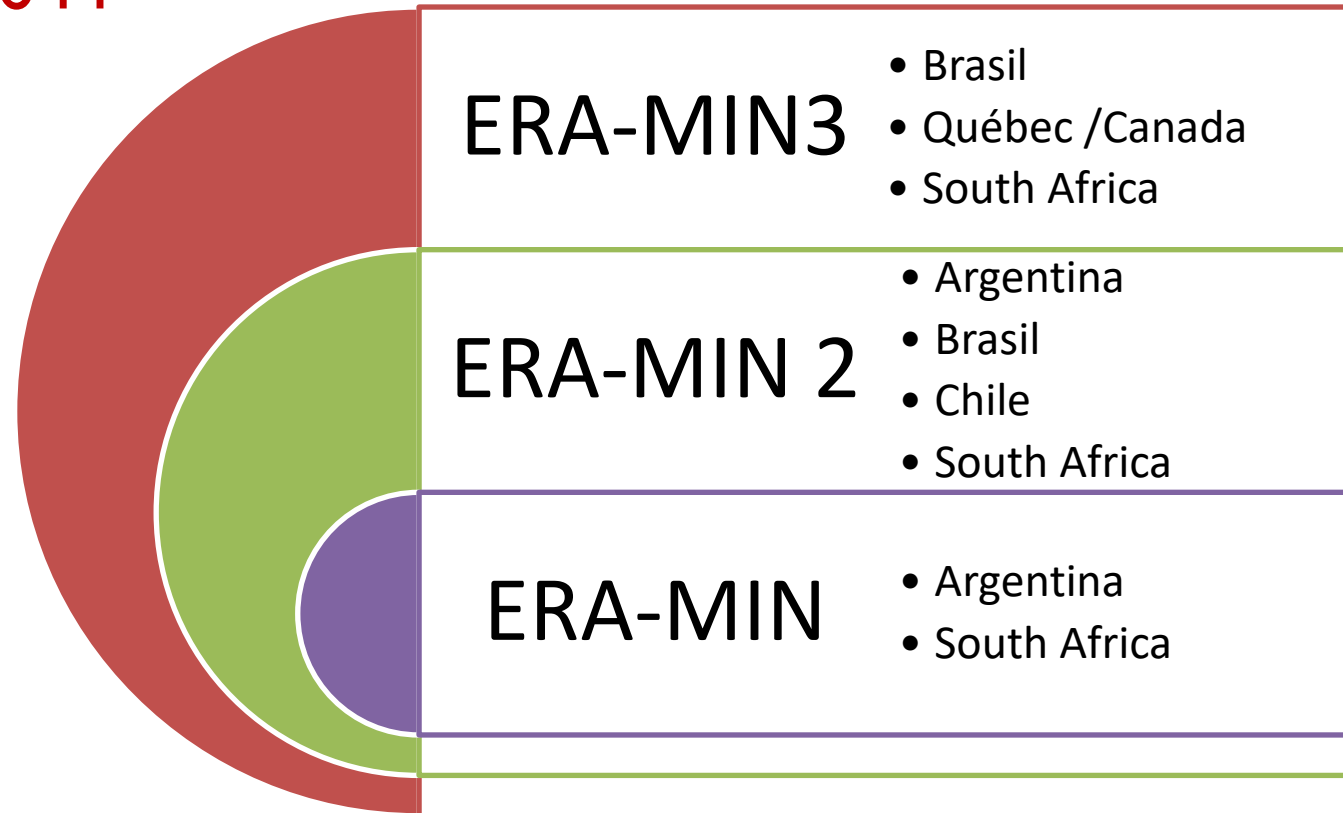


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Evolution since 2011



ERA-MIN3

Objectives

Pan-European, Innovative and Flexible Network of Public Research and Innovation Funding Organisations

01 Secure the sustainable and responsible supply of **non-food, non-fuel mineral raw materials** for a **carbon-neutral and a circular economy**

02 Promote **world-wide** research and innovation (R&I) cooperation through **coordinated funding**

03 **Reduce the fragmentation of R&I** funding across Europe and globally

04 Implement **Joint Calls for transnational R&I projects on “Raw materials for the sustainable development and the circular economy”**

05 Support international R&I projects between **universities, research institutes, small, medium and large enterprises**, NGOs, public authorities, etc



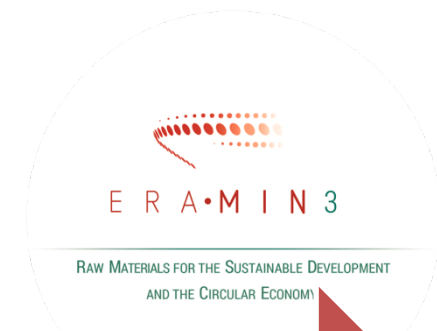
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ERA-MIN3
Raw Materials for the Sustainable Development and
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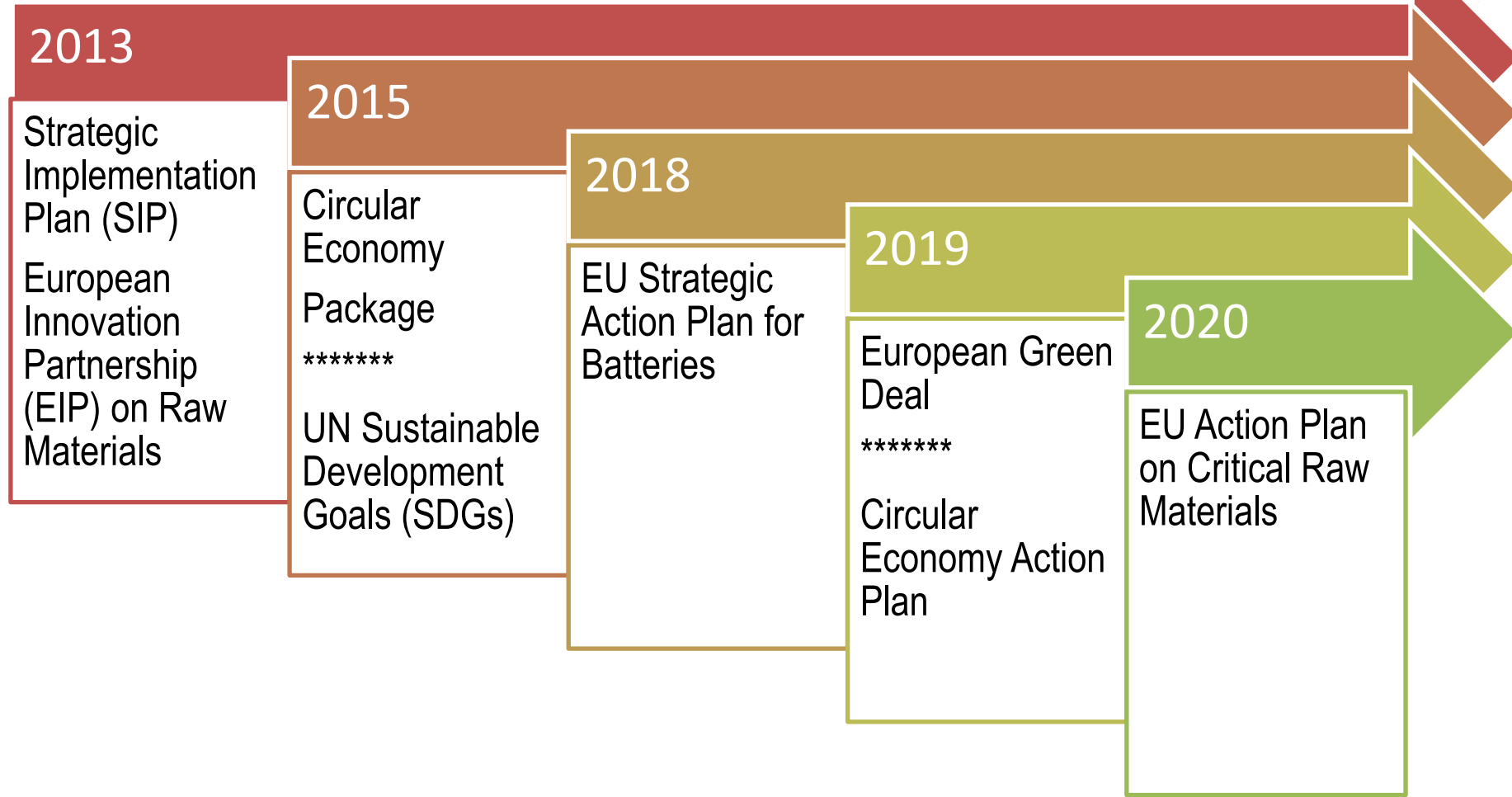
EU Raw Materials

landscape

ERA-MIN networks support EU RM policies



since the launch of the
EU Raw Materials Initiative
in 2008



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ERA-MIN3
Raw Materials for the Sustainable Development and the Circular Economy

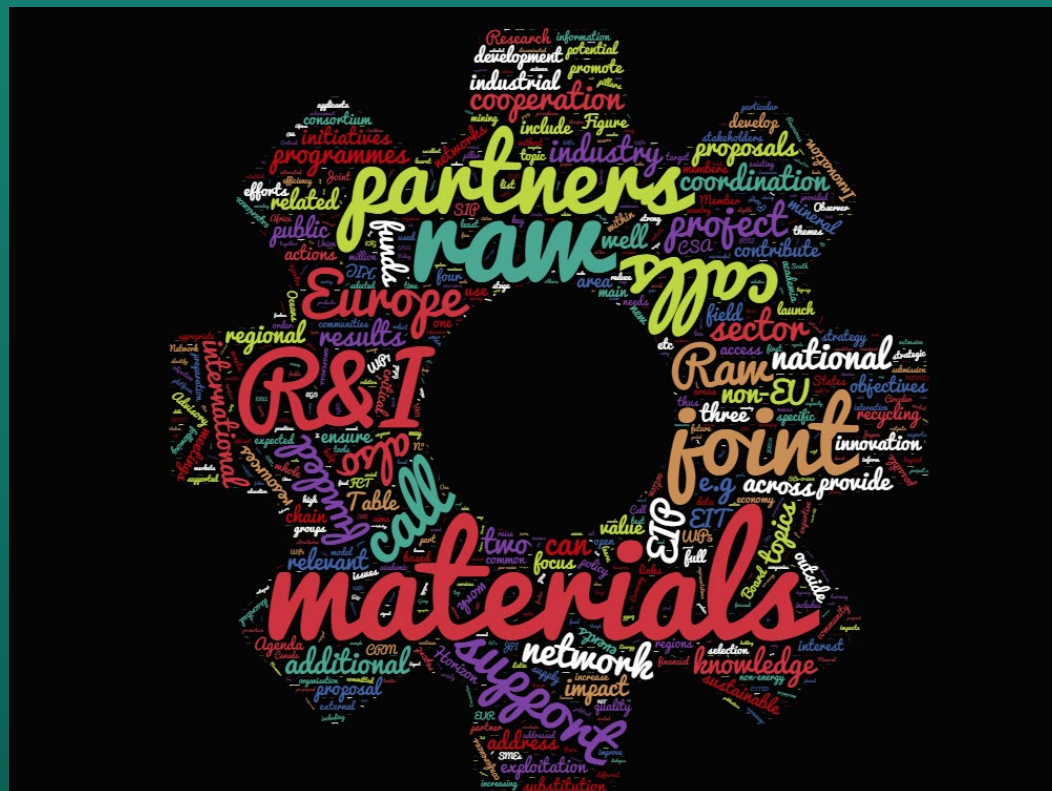


Joint Calls

2022 - The **excellent transnational R&I projects** of €19.5 Mio EU co-funded Call 2021 will start in May.

2023 - Launch the second joint call for transnational R&I proposals **only with national and regional funds.**





Thank you very much!

Muito obrigada!



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