



Demystifying Horizon Europe Research Projects

13th March 2025



Housekeeping

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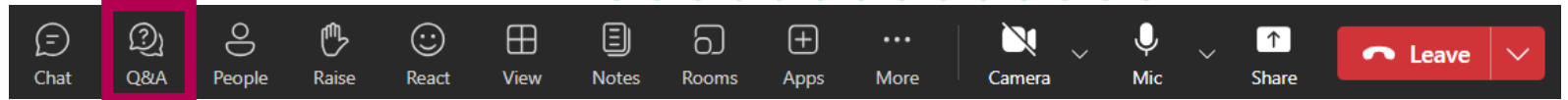
We be making this presentation (and recording) available by emailing out the link and making it available online.

Please post questions in the **Q&A function** at the top of the screen. We will answer at the end.

Approximately:

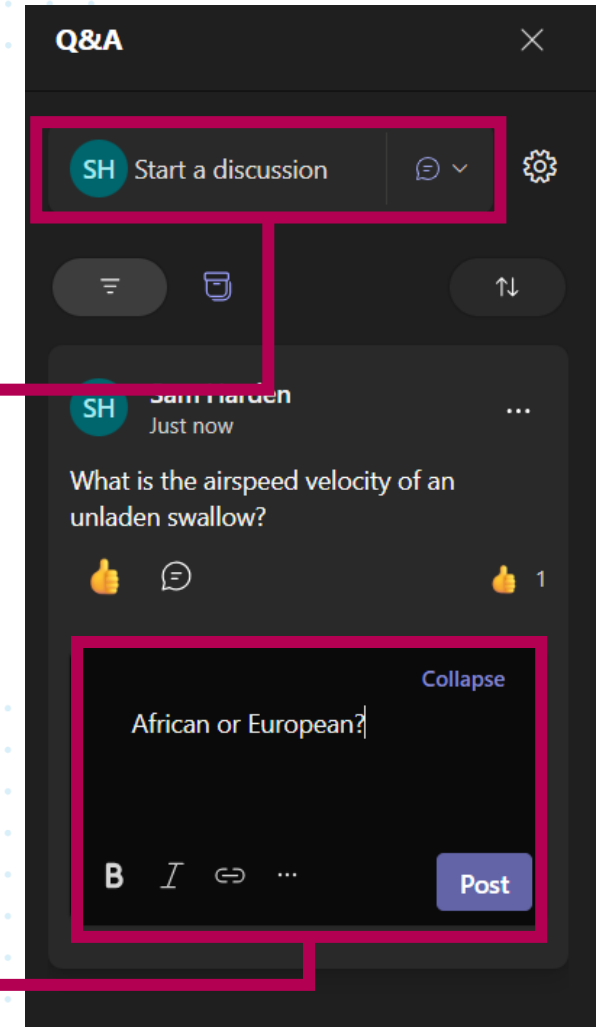
60 mins of presentations.

30 mins for a Q&A / discussion.



You can click the **Q&A** button at the top of the screen to post questions throughout.

Clicking '**Start a discussion**' will allow you to post your question. You can also comment and like other questions.



Webinar Agenda



**Introduction to Horizon
Europe and why get
involved**

Tom Hudson
Chief Executive Officer



**Forthcoming calls for
proposals – CRMs and
related topics**

Richard Wrigley
Associate Director



**Next steps and how to be
successful**

Jayne Evans
Operations Director

Beta Technology

We connect people, knowledge and funding to promote innovation

Company Profile

Established in 1984 and became part of Innovare Group in 2024

8 employees and access to 50+ associates

Work with companies, universities and public sector

International client base in Europe, Brazil and Trinidad

Expertise



Access to Funding

Our experts can help you navigate complex funding schemes and prepare winning proposals.



Research Impact

Working with research teams providing an innovative approach to dissemination.



Project Management

We have the skills and systems in place to seamlessly manage multifaceted projects.



Taking Ideas to Market

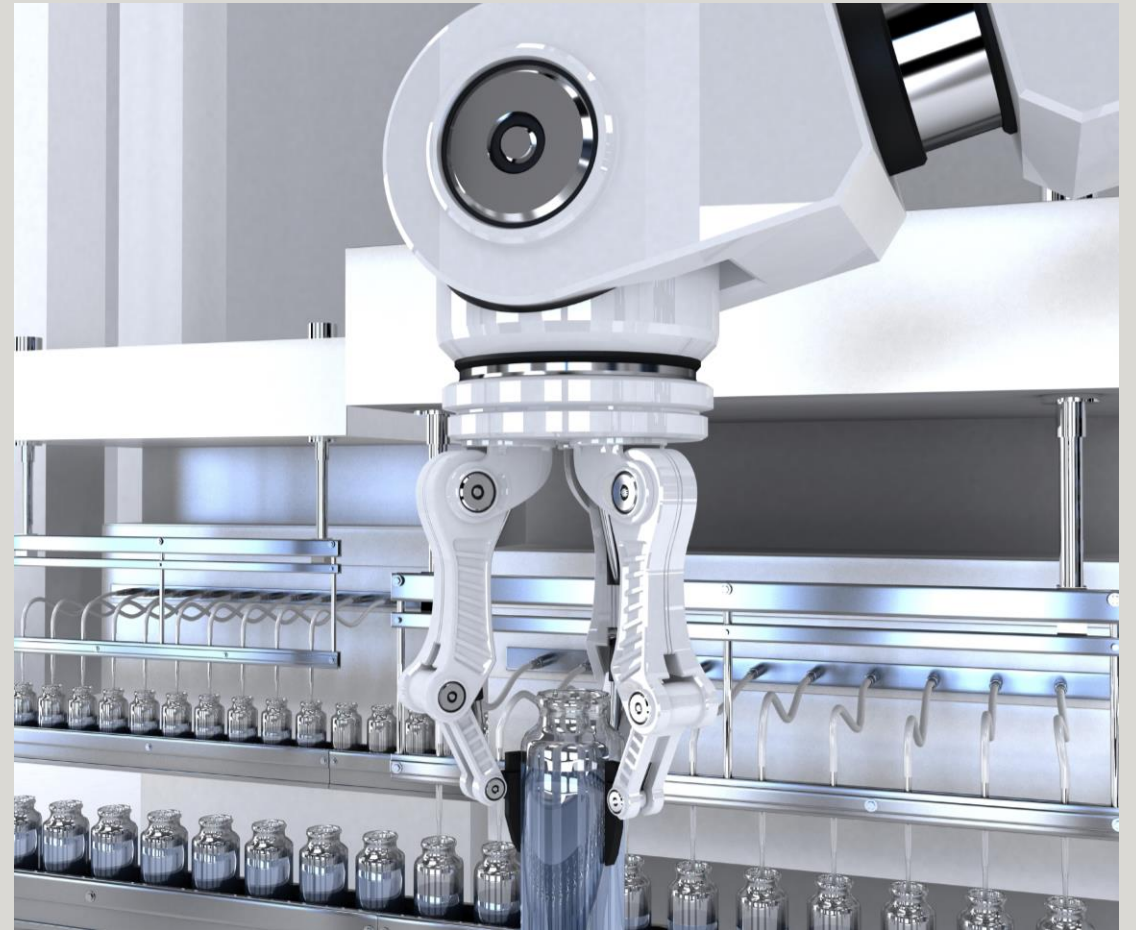
We provide a fresh perspective on your technology, helping to grow its value and accelerate commercialisation.

Navigating the Innovation Ecosystem



Introduction to Horizon Europe and why get involved

Tom Hudson



Collaborative Research

It's not just about the money!

Share resources with partners to access the market

Access to key sectors that can use your technology

Explore ▶ develop ▶ trial



Find solutions to complex challenges

Shared risk

Expand networks and develop strategic collaborations

Key Background

- Horizon Europe is the EU's flagship research and innovation funding programme.
- It is designed to support projects that 'address global challenges' and improve Europe's competitiveness.
- It will run from 2021 to 2027.
- It has a budget of around €95.5 billion. Over €12.8bn is due to be spent in 2025, with € 12.9bn spent in 2024.
- It is one of the largest research and innovation funding programmes in the world.

www.betatechnology.co.uk

Key objectives of Horizon Europe:

Promote Scientific
Excellence

Horizon Europe funds a wide variety of research across disciplines.

Tackle Global
Challenges

The programme focuses on addressing global societal challenges.

Enhance Industrial
Innovation

Seeks to foster innovation that drives growth and job creation in Europe.

Key Background

- There are three main pillars of Horizon Europe.



Features and Funding Opportunities

There are several key features to Horizon Europe:

- **Interdisciplinary Approach** *Encourages cross-disciplinary research to tackle complex challenges.*
- **International Collaboration** *Encourages collaboration with non-EU countries and international organisations.*
- **Open Science** *Emphasises open access to research publications and data.*
- **Missions** *Mission-oriented approach to address specific global challenges (such as climate adaptation).*
- **Public-Private Partnerships (PPP)** *Collaborative partnerships between the EU, industry, national governments to innovate and bring solutions to market.*

Funding opportunities are divided into four different types:

Collaborative
Projects

Funding for projects involving a consortia of multiple organisations.

Individual
Fellowships and
Grants

Funding for individual researchers or small teams on specific topics.

Innovation Grants

Support for innovation development and commercialisation.

Partnerships

Funded collaborations between EU member states, private entities, and research organisations.

Application Process and Eligibility

Calls for Proposals

The European Commission publishes calls for research proposals, typically once a year. They outline **priorities** and **expected outcomes**.

Submission

Proposals are submitted through the **EU Funding and Tenders Portal**.

Evaluation

Proposals are evaluated by experts based on criteria such as **scientific excellence, impact** and **implementation**.

Grant Agreement

Successful proposals are awarded funding under a **'grant agreement.'**

Who is eligible for funding?

- **Participants:** *Universities, research organisations, private sector, SMEs, public authorities, non-profit organisations across EU member states and associated countries.*
- **Collaborative Projects:** *Projects typically involve partners from at least three different EU member states or associated countries.*
- **Small and Medium Enterprises (SMEs):** *Special funding opportunities exist to support innovation in SMEs.*



LongITools studies the interactions between environmental, lifestyle and biological factors ('exposome') to determine the risks of cardiovascular and metabolic diseases.

18 Partners, 5.5 Years
€12m

Project Examples



Studying healthy ageing and multi-morbidity using a 'life-course' approach. Aims to study people's living environments, social stressors, and the biology of ageing healthily.

22 Partners, 5 Years
€19.9m



Bmup2Baby and Me aims to develop and evaluate an innovative healthcare intervention to prevent maternal and childcare diabetes and weight issues. This includes other non-communicable diseases.

9 Partners, 5.5 Years
€4.4m

EXPOSIGNALZ

EXPOSIGNALZ is exploring the effects of environmental pollutants on brain health. This will examine neurodegenerative diseases, particularly Alzheimer's disease. They will focus on a range of chemical pollutants.

6+ Partners, 5 Years
€9.3m



Obelisk is researching childhood obesity, aiming to enhance the health, quality of life and life span of people in Europe by preventing obesity at younger ages.

15 Partners, 5 Years
€11.2m

Forthcoming calls for proposals – CRMs and related topics

Richard Wrigley



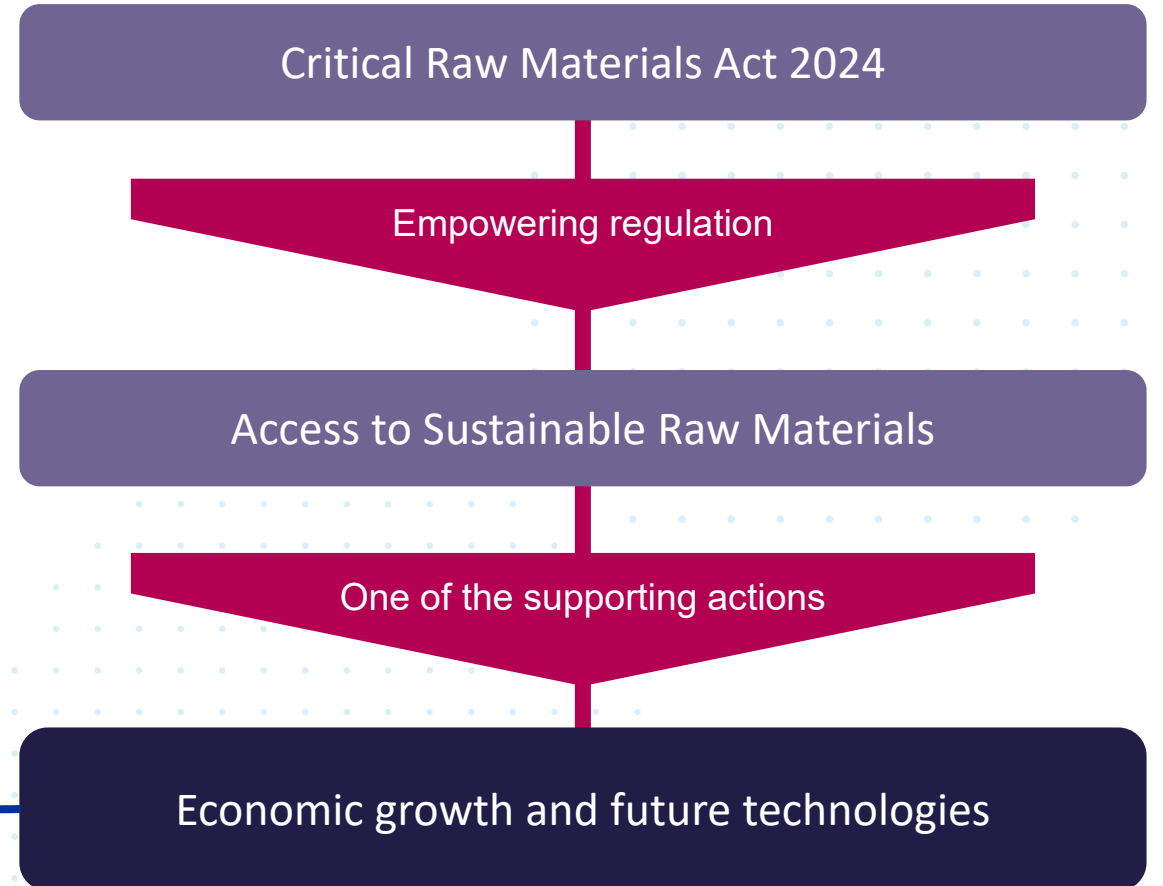
EU Critical Raw Material Context

- Raw materials required globally
- Europe is vulnerable due to historic reliance on imports
- EU strategy developed over past 20 years
- Global super-powers “buying” access to raw materials

Beta is a member of the Critical Raw Materials Alliance, which support engagement with the EC on policy.
(<https://www.crmalliance.eu/>)



OBJECTIVE



FT

FINANCIAL
TIMES

War in Ukraine + Add to myFT

What are the terms of the US-Ukraine minerals deal?

Kyiv obtained some concessions from the Trump administration, but no postwar security guarantees

“EU urged to add industrial kiln commodity to list of key raw materials”



REUTERS

Exclusive: China's BYD holds mining rights in Brazil's Lithium Valley, documents show

Post-COVID, China is back in Africa and doubling down on minerals

Pressure grows on EU to freeze minerals deal with Rwanda over DRC fighting



Visual explainer

As countries scramble for minerals, the seabed beckons. Will mining it be a disaster?

The
Guardian

Is Trump mulling a minerals deal with conflict-hit DR Congo?

B B C

Putin offers Russian and Ukrainian rare minerals to US

Critical & Strategic Raw Materials

Critical Raw Materials List

Economically important with a potential supply risk

First list produced in 2011.
Fifth list in 2023 (Current)

Strategic Raw Materials List

High strategic importance

First List produced in 2023 as part of CRM Act

Revised list
due by
24/05/2027

Bauxite	Cobalt	Helium	Niobium	Strontium
Antimony	Coking Coal	Heavy rare earth elements	Platinum group metals	Tantalum
Arsenic	Feldspar	Lithium	Phosphate Rock	Titanium metal
Baryte	Fluorspar	Light rare earth elements	Copper	Tungsten
Beryllium	Gallium	Magnesium	Phosphorous	Vanadium
Bismuth	Germanium	Manganese	Scandium	Nickel
Boron/Borate	Hafnium	Natural Graphite	Silicon metal	

Sourcing Critical & Strategic Raw Materials

Europe is dependent on importing most raw materials.

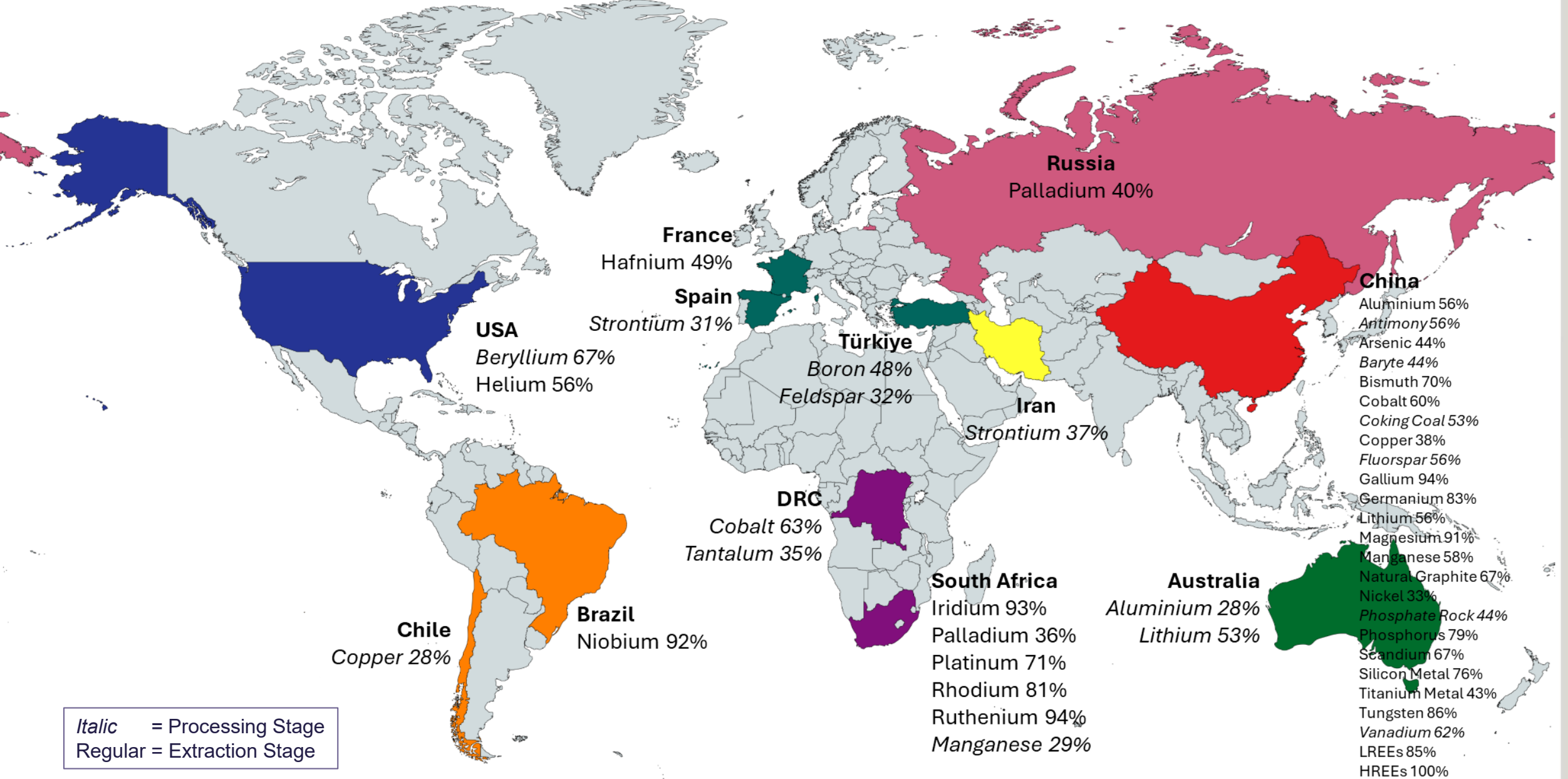
Europe is also reliant on key states such as China for the processing of raw materials.

Europe's objectives for CRMs are to:

- Reduce their use
- Increase their recycling
- Increase processing of ore and recycled material in Europe
- Explore for new sources
- Develop strategic relationships with 3rd countries



Finnis lithium project in development near Darwin, Australia



Source: European Commission Study on the Critical Raw Materials for the EU 2023.

EU Funding for CRM projects

EIT Raw Materials

European Institute of Innovation and
Technology

ERMA Booster Call

**Regional Innovation Scheme
(RIS) Projects**
(Capacity Building and
Innovation)

<https://eitrawmaterials.eu/>

Horizon Europe

Pillar 2

Cluster 4

Digital, Industry and Space

https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-4-digital-industry-and-space_en

Cluster 5

Climate, Energy and Mobility

https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-5-climate-energy-and-mobility_en

EIC

European Innovation Council

Pathfinder

https://eic.ec.europa.eu/eic-funding-opportunities/eic-pathfinder_en

Horizon Europe Cluster 4 (1)

Horizon Europe: Cluster 4 - Digital, Industry and Space (2025 Work Programme) Draft version 5.07

DRAFT

HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-61:

Technologies for critical raw materials and strategic raw materials from End of Life products (IA)

EU contribution €7 – 8 m per project. Indicative topic budget €24m

Expected outcomes include:

- Increased recovery rates of critical and strategic raw materials
- Improved competitiveness of secondary raw materials
- Improved efficiency of technologies for separation and recycling
- Improved responsible supply of raw materials from EoL streams

Horizon Europe Cluster 4 (2)

Horizon Europe: Cluster 4 - Digital, Industry and Space (2025 Work Programme) Draft version 5.07

DRAFT

HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-62:

Strategic Partnerships for Raw Materials: Innovative Approaches for sustainable production of Critical Raw Materials (IA)

EU contribution €7 – 8 m per project. Indicative topic budget €30m

Expected outcomes include:

- Increase supply security and access to primary raw materials and secondary raw materials
- Improve sourcing diversification from third countries
- Projects must focus on one single group from four groups of countries:
(Group 1 (Argentina, Chile), Group 2 (Democratic Republic of the Congo , Namibia, Rwanda, Zambia,), Group 3 (Kazakhstan, Uzbekistan), Group 4 (Australia, Greenland).

Horizon Europe Cluster 5 (1)

Horizon Europe: Cluster 5 – Climate, Energy and Mobility (2025 Work Programme) Draft version 29/04/2024
(No budgets indicated) **DRAFT**

Batteries:

HORIZON-CL5-2025-D2-01: Development of Sustainable and Design-to-Cost Batteries with (Energy) Efficient Manufacturing Processes and Based on Advanced and Safer Materials (Batt4EU Partnership)

Expected outcomes include:

- Reducing battery cost while lowering the share of CRMs through better cell design and active material selection

HORIZON-CL5-2025-D2-02:

Cost-effective next-generation batteries for long-duration stationary storage (Batt4EU Partnership)

Expected outcomes include:

- Minimise the use of CRMs to enhance the economic base, reduce dependencies and ensure competitiveness in green and digital transitions

HORIZON-CL5-2025-D2-03-SRP:

Sustainable processing and refining of raw materials to produce battery grade Li-ion battery materials (Batt4EU Partnership)

Horizon Europe Cluster 5 (2)

Horizon Europe: Cluster 5 – Climate, Energy and Mobility (2025 Work Programme) Draft version 29/04/2024
(No budgets indicated) **DRAFT**

Global leadership in renewable energy

HORIZON-CL5-2025-D3-09:

Alternative Silicon Growth Technologies (from both liquid and gaseous phase) for PV Applications

Expected outcomes include:

- Reduction of strategic dependencies for CRMs.

HORIZON-CL5-2025-D3-10:

Towards commercialisation of Perovskite PV and development of dedicated manufacturing equipment

Expected outcomes include:

- Reduction of strategic dependencies for CRMs.

Horizon Europe Cluster 5 (3)

Horizon Europe: Cluster 5 – Climate, Energy and Mobility (2025 Work Programme)
Draft orientation for 2026-2027 Work Programme **DRAFT**

The draft orientation document provides preliminary ideas for priorities for the 2026 – 2027 Work Programme (WP)

Points to note:

- WP will be simpler: less prescriptive , more open and bottom-up topics.
- WP will include pilot calls in support of the Clean Industrial Deal

Area 2. Cross-sectoral solutions for the climate transition

Focus on batteries.

- Reducing dependency on raw materials
- Creating an integrated European battery sector for next generation batteries
- Improving energy storage technologies

Expected outcomes include:

- Development and upscaling of manufacturing technology
- Development of battery systems based on solid-state or chemistries other than Li-ion
- Increased flexibility and efficiency of recycling and materials processing
- Better understanding of battery chemistry and processes to accelerate break-through technologies

EIT Raw Materials

ERMA Booster Call

Applications Open: Cut off dates: 24/03/25; 26/05/2025;
08/09/2025

<https://eitrawmaterials.eu/erma-booster-call>

For innovations, mining and recycling projects

Project sizes up to €2.5m

3 broad groups:

Start-Ups

Scale ups and SMEs

Mining / Recycling projects

Impacts include:

- Savings of costs in raw materials value chain
- Improved industrial competitiveness
- Carbon savings in the raw materials sector
- Enhanced sustainability
- Increased recycling rates

RIS Projects

Proposal registration cut off dates: 30/05/25; 29/08/2025;
28/11/2025

<https://eitrawmaterials.eu/call-ris-projects-capacity-building-and-innovation>

Supports the objectives of the CRM Act to:

- Increase domestic mining
- Expand processing capacity
- Accelerate recycling
- Diversify supply sources

For projects supporting the raw materials supply chain to achieve:

- Responsible sourcing
- Sustainable Materials
- Circular Societies

Open to all organisations eligible under Horizon Europe.
UK eligibility yet to be confirmed.

EIC

European Innovation Council (EIC) Work Programme 2025

https://eic.ec.europa.eu/eic-funding-opportunities/eic-pathfinder_en

EIC Pathfinder is a funding programme under Horizon Europe that offers support to research teams.

Pathfinder Open: Open to support projects in any field of science and technology or application.

Grants of up to €3-4 million to support early stage (TRL 1-3)

Closing date: 21/05/2025.

Pathfinder Challenges: Projects that match a predefined thematic area.

Project sizes upto €2.5m

Closing date: 29/10/2025

II.2.4 Waste-to-value devices: Circular production of renewable fuels, chemicals and materials

Strategic Raw Materials projects

European Commission Strategic Projects

https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/strategic-projects-under-crma_en

EC had a call in 2024 for Strategic Projects under the CRM Act.

Call opened 23/04/2024 and closed 22/08/2024. 170 applications received. Results due March 2025.

CRM Act defines strategic projects as those that “will increase the EU capacity to extract, process and recycle strategic raw materials and diversify EU supplies from third countries.”

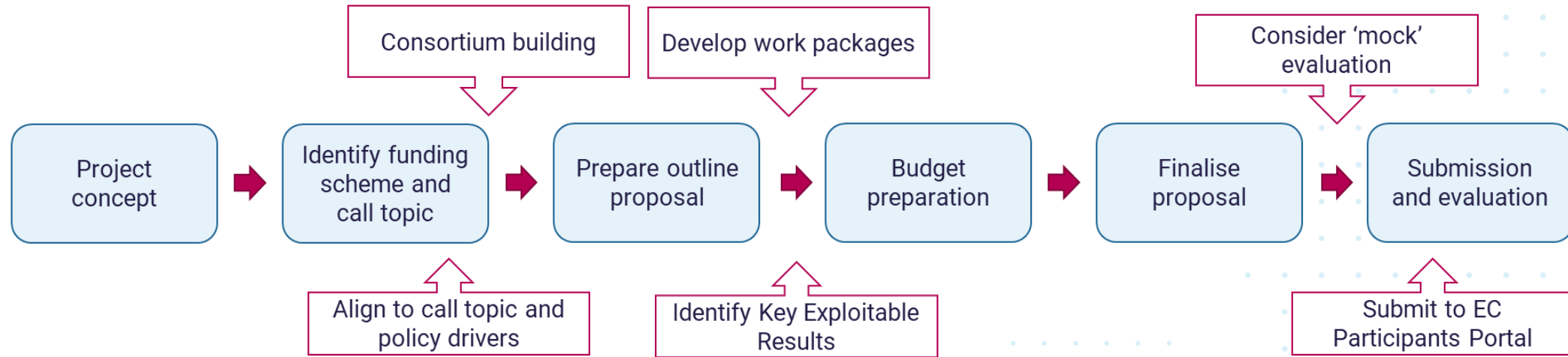
Next cut-off date is provisionally Q1 2025 – expect the dates to be announced when the results of the first call are released.

Next steps and how to be successful

Jayne Evans



Submission Process



Top Tips

1

Have a strategy and a plan when aligning your project to funding sources.

2

If you are leading a proposal – communication is key. Keep everyone involved through regular meetings.

3

Don't underestimate the time needed to coordinate with partners.



Discover the funding & tenders opportunities

Find out how to participate by following these key steps.

Find calls for proposals

Explore the available EU funding opportunities by searching for calls for proposals within your topics of interest, find partners and submit a proposal.

Find calls for tenders

Find business opportunities in the calls for tenders managed by EU institutions, bodies and agencies.

View projects and results

Browse through EU funded projects and learn about the results. Invest in opportunities and get inspired by the highlights and success stories.

Work as an expert

Proposals and projects need evaluations, monitoring and domain-specific knowledge advice from experts.

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

Understand the Call Topic!



Read and breakdown the content in the call documents, address each item line by line. **How does my project meet.....**

- Objectives of the call topic
- Expected impacts, including aligning and contributing to relevant EU policies, innovation, economic growth and societal challenges
- Eligibility criteria

Pay attention to the funding mechanism and intervention rates, e.g. new lump sum funding mechanism, expected financial contribution by partners

Consortium Building



Targeted approach: Align roles with your project objectives. Partners must have a clear role and add value. Do they have previous experience?



Multi-disciplinary approach: Range of roles and types of organisations to meet the objectives – academia, SMEs, end users, economists and social scientists. Leverage your existing networks and attend info days and brokerage events



Administration: PIC numbers (Participant Identification Code) and use questionnaires to gather key information

Consortium Building – Useful Tools

CORDIS:

<https://cordis.europa.eu/>

EU Funding & Tenders Portal
lists partners looking to
collaborate on the topic



Recovery of critical raw materials in a circular economy



Europe will soon increase its supply of the critical raw materials tungsten, niobium and tantalum via processing technologies that recover them from European waste.

Project: [TARANTULA](#) (ID: 821159)

Available languages: [DE](#) [EN](#) [ES](#) [FR](#) [IT](#) [PL](#)

Last update: 10 October 2023

Add to my booklet



Discovering Europe's high-tech raw material deposits, removing a bottleneck on production



If just the United Kingdom were to replace all its cars with electric ones, it would need a whole year's global supply of neodymium to do so. New geophysical models will help boost extraction of neodymium and other commodities to support advanced and green technologies.

Project: [HiTech AlkCarb](#) (ID: 689909)

Available languages: [DE](#) [EN](#) [ES](#) [FR](#) [IT](#) [PL](#)

Last update: 20 February 2020

Add to my booklet



Revolutionising the recovery process of valuable raw materials from industrial byproducts



By combining existing methods and new technological innovations, an EU-funded project has unlocked the potential of critical metals in industrial waste.

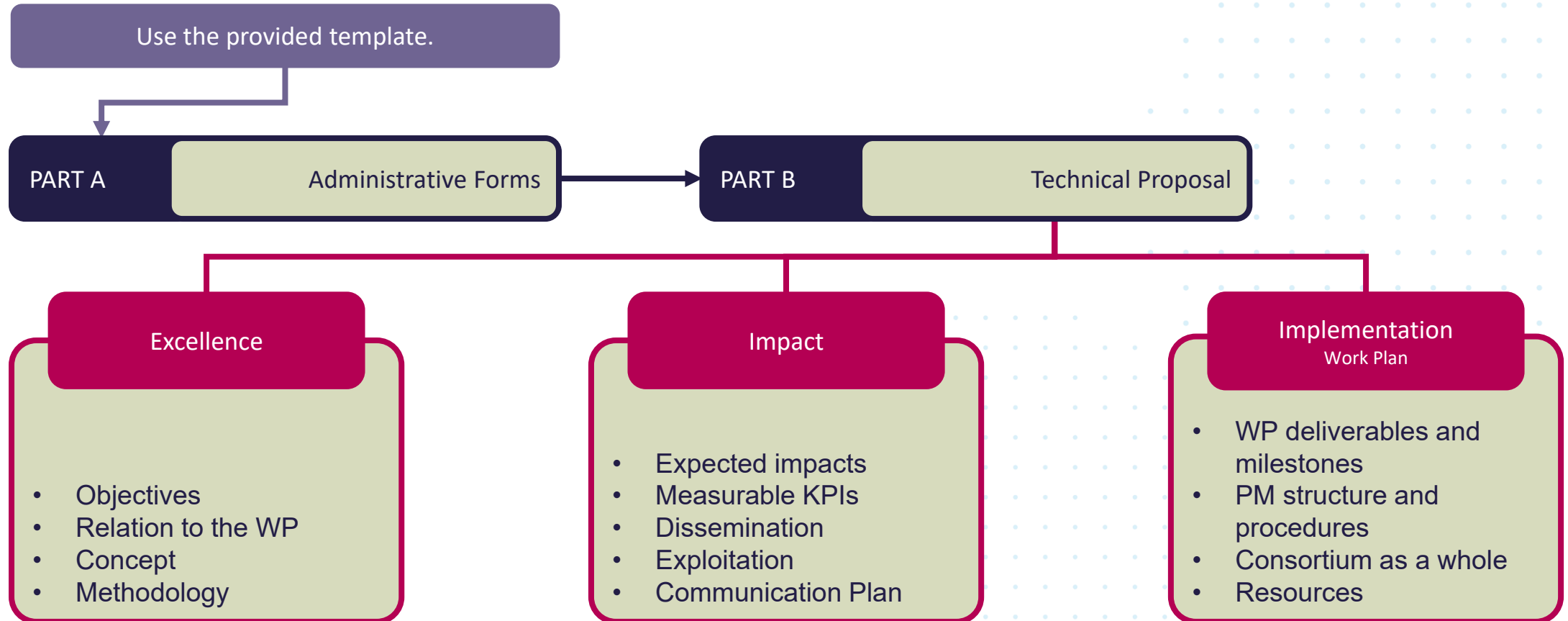
Project: [CHROMIC](#) (ID: 730471)

Available languages: [DE](#) [EN](#) [ES](#) [FR](#) [IT](#) [PL](#)

Last update: 27 April 2022

Add to my booklet

The Submission



Impact Section



Align with EU priorities and policies e.g. CRM Act, Clean Industrial Deal – show you are working towards bigger goals



Define **measurable** impacts: Short – medium – long-term



Exploitation and Dissemination Plan: Show how you will exploit (use) your results e.g. patents, licensing agreements, policy tools. Dissemination strategies (quantified) such as Conferences and webinars, open access publications



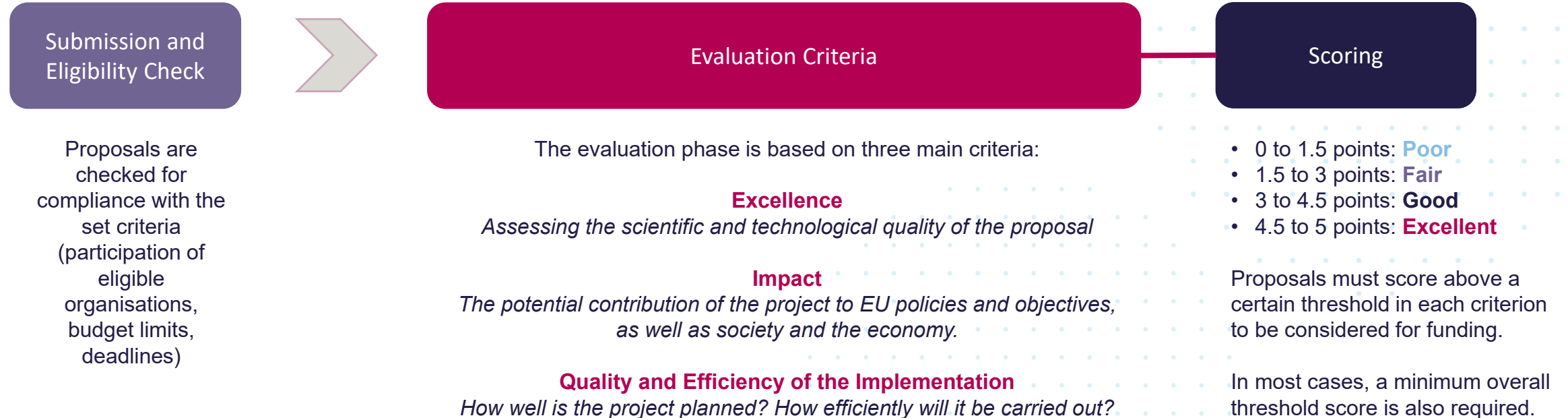
Understand your stakeholders (be specific) and show how you will engage them during the project



Clearly present **pathways to impact** – link activities, outputs, outcomes and impacts

Evaluation Criteria

- Horizon Europe proposals are evaluated based on specific criteria to assess the impact, quality and implementation of the proposed project.



Evaluation Process

- Proposals are reviewed by independent experts who assess them on the evaluation criteria.
- They will be a mix of researchers, professionals, and industry representatives with appropriate expertise.
- Final decision rests with the European Commission, based on the evaluation results, the available budget and strategic priorities.
- Applicants will get feedback after a submission (even if unsuccessful).
- The applicant will then be invited to negotiate their grant agreement.



Q&A

*Open pit quarry Mina de Lousas
(Northern Portugal) exposing a
feldspar vein.*

Any questions on...

- Features of Horizon Europe?
- Funding opportunities?
- Application process?
- Beta Technology and our projects?
- Europe and critical raw materials?
- Funding clusters?
- How to manage a submission?



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INNOVARE
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Providing work winning
and project management
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We connect people,
knowledge and funding to
promote innovation

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