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Cluster 4: Industry

Infoday Nacional convocatorias 2024



nieves.gonzalez@cdti.es



carlos.toledo@cdti.es

*NCP Cluster 4 Industry
Horizon Europe. Industrial Leadership
Directorate of European Programmes and Regional
Cooperation*



DISCLAIMER



The contents of this presentation are for informal guidance and discussion purposes only.

In **no circumstance** the content of these slides can substitute the information provided in the official documents and guidelines.



Agenda del día

AGENDA

10:00-10:10 Bienvenida

Javier García Serrano, Jefe del Departamento Liderazgo Industrial, Dirección de Programas de la UE y Cooperación Territorial, CDTI

10:15-10:30 Introducción y aspectos generales Clúster 4 Industria

Equipo Cluster 4-Industria, CDTI

10:30-11:00 Introducción a la convocatoria Twin Transition: Process For Planet, Energy intensive process industries, Hubs for Circularity.

Garbiñe Guiu, Policy Officer Comisión Europea (on line)

11:00-11:20 Introducción a la convocatoria Twin Transition: Manufacturing industry, Clean Steel, New way to Build.

Equipo Cluster 4-Industria, CDTI

11:20-11:45 Consideraciones sobre Inteligencia Artificial en Horizonte Europa.

Cristina Contero, Abogada en APHAIA. Experta en Ética de la Inteligencia Artificial.

12:15-12:45 Introducción a la convocatoria Resilient Value chains: Safe and Sustainable by Design (SSbD), Strategic markets by Advanced materials

Evangelos Daskalopoulos, Policy Officer Comisión Europea (on line, inglés)

12:45-13:05 Introducción a la convocatoria Resilient Value chains: Raw materials, improving EU business

Equipo Cluster 4-Industria, CDTI

13:05-13:30 Recordando el proceso de evaluación. Algunos consejos para acertar en el blanco.

Elena Calvo, Subdirectora General Circe Centro Tecnológico. Experta Evaluadora HE

13:30- 13:40 Próximos eventos y apoyo al participante.

Nota. Al final de cada bloque se dispondrá de un turno de preguntas.

Cluster4 Industry Destination 1:

Climate neutral, circular and digitised production.

Call **TWIN GREEN AND DIGITAL TRANSITION**

Call 2024

- Fase única:
 - ✓ Apertura: 19 de septiembre de 2023
 - ✓ Cierre: 7 de febrero de 2024
 - ✓ 9 topics
 - ✓ **M€ 251**
- 2 fases:
 - ❖ Apertura: 19 de septiembre de 2023
 - ❖ Cierre:
 - ❖ 7 de febrero de 2024 (1)
 - ❖ 24 de septiembre 2024 (2)
 - ❖ 2 topics
 - ❖ **M€ 37**



96 M€	2 topics + 1 (2s)
150 M€	5 topics
30 M€	2 topics
12 M€	1 topic (2S)

TWIN TRANSITION.



	Topics	Temática	Ppto (M€)
MiE	HORIZON-CL4-2024-TWIN-TRANSITION-01-03	<p>Manufacturing as a Service MaaS</p> <ul style="list-style-type: none"> <i>MaaS, manufacture on demand, customized products, ...advanced technologies such as digital twins, real-time AI-based decision support systems, and next-generation Manufacturing Execution Systems....</i> <i>At least two realistic use cases on different supply chains or industry sectors</i> 	<p>RIA TRL6</p> <p>35</p> <p>Lump sum/+3 pages</p>
MiE	HORIZON-CL4-2024-TWIN-TRANSITION-01-05	<p>Circularity for Manufacturing</p> <ul style="list-style-type: none"> <i>Sustainable Product Framework (SPI), Digital Product Passport</i> <i>Support the human aspect through upskilling manufacture workforce.</i> <i>Environmental and additional ecological impacts</i> 	<p>RIA TRL6</p> <p>36</p> <p>+3 pages AI / INCO</p>

TWIN TRANSITION. Bloques temáticos (convocatoria en 2 FASES)



	Topics	Temática		Ppto (M€)	
MiE	HORIZON-CL4-2024-TWIN-TRANSITION-01-01	Bio-intelligent manufacturing industries	RIA TRL6	25	Blind ev. Lump sum/ +3 pages
	<ul style="list-style-type: none">▪ <i>Bio-inspired manufacturing processes (biomimicry, biomimetics);</i>▪ <i>Development of bio-intelligent manufacturing systems or tools;</i>	<ul style="list-style-type: none">▪ <i>Expanding opportunities of bio-intelligent and bio-based materials by substituting fossil-based raw materials and limiting the release of microplastics, e.g. in the textile industry;</i>▪ <i>The focus of this topic is on manufacturing. The development of materials beyond the manufacturing context is excluded.</i>			

TWIN TRANSITION Bloques temáticos (convocatoria en FASE UNICA)

Topics	Temática	Ppto (M€)
CSP	<p>HORIZON-CL4-2024-TWIN-TRANSITION-01-44</p> <ul style="list-style-type: none"> ▪ (CSP) (SRIA)-> <i>digitalisation and social aspects are both addressed</i> ▪ <i>Novel sensors, soft sensors and related models to reduce the carbon footprint by merging the use of sensors and data processing capabilities</i> 	<p>Digital transformation to optimise steel supply chains</p> <p>IA TRL6-7 10 Lump sum AI</p>
CSP	<p>HORIZON-CL4-2024-TWIN-TRANSITION-01-46</p> <ul style="list-style-type: none"> ▪ <i>2 Technology areas in the scope</i> ▪ <i>1. Enhance CO2-neutral steel production with hydrogen, secondary carbon carriers and electricity</i> 	<p>CO2-neutral steel production with hydrogen OR innovative steel applications for low CO2 emissions</p> <p>RIA TRL6 20 AI</p> <ul style="list-style-type: none"> ▪ <i>2. Contribute to innovative steel applications for low CO2 emissions.</i>



TWIN TRANSITION. A NEW WAY TO BUILD (Construcción). Convocatoria en 2FASES

Topics	Temática	Ppto (M€)	
A New way to Build <ul style="list-style-type: none">▪ <i>Identification of maintenance and repair issues in existing civil engineering infrastructure.</i>▪ <i>Structural weaknesses, deformation and fatigue, corrosion, weathering..</i>▪ <i>Develop new solutions to monitor...for example via digital twin and simulation technology</i>	HORIZON-CL4-2024-TWIN-TRANSITION-01-12 Enhanced repair of civil engineering infrastructure	RIA TRL 6 12	Blind ev. Lump sum

Cluster4 Industry Destination 2:

Increased autonomy in key strategic value chains
for resilient industry.

Call RESILIENT VALUE CHAINS

Call 2024

- Fase única:
 - ✓ Apertura: 19 de septiembre de 2023
 - ✓ Cierre: 7 de febrero de 2024
 - ✓ 7 topics
 - ✓ M€ 190,20
- 2 fases:
 - ❖ Apertura: 19 de septiembre de 2023
 - ❖ Cierre:
 - ✓ 7 de febrero de 2024 (1)
 - ✓ 24 de septiembre 2024 (2)
 - ❖ 2 topics
 - ❖ M€ 62

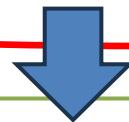
<input type="checkbox"/> Raw Materials	5 topics	91,2 M€
<input type="checkbox"/> <i>Safe and Sustainable by Design (SSbD)</i> <i>Chemicals and materials</i>	1 topic	59 M€
<input type="checkbox"/> Strategic Innovation Markets driven by Advanced Materials	2 topics (2 stages)	62 m€
<input type="checkbox"/> <i>Improving the resilience of EU businesses, especially SMEs and Startups</i>	1 topics	10 M€

Cluster 4 - INDUSTRY



D1 – Climate neutral, circular and digitised *production* TWIN-TRANSITION

D2 – Increased Autonomy in Key Strategic Value Chains for Resilient Industry



- Industrial leadership and increased autonomy in key strategic value chains with security of supply in raw materials
- achieved through breakthrough technologies in areas of industrial alliances, dynamic industrial innovation ecosystems and advanced solutions
- for substitution, resource and energy efficiency, effective reuse and recycling and clean primary production of raw materials including critical raw materials,
- and leadership in the circular economy.

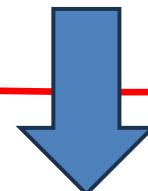
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Cluster 4 - INDUSTRY



D1 – Climate neutral, circular and digitised *production* TWIN-TRANSITION

D2 – Increased Autonomy in Key Strategic Value Chains for Resilient Industry



EUROPEAN CRITICAL
RAW MATERIALS ACT

March 2023

[European Critical Raw Materials Act](#)
europa.eu

European Critical Raw Materials Act



EUROPEAN CRITICAL RAW MATERIALS ACT

[European Critical Raw Materials Act
\(europa.eu\)](https://europa.eu)

SETTING PRIORITIES

List of Critical Raw Materials

- It identifies raw materials which are important for the whole European economy and face a high risk of supply disruption

List of Strategic Raw Materials

- It identifies a list of raw materials characterised by high strategic importance and projected global supply/demand imbalances

SETTING 2030 BENCHMARKS FOR STRATEGIC RAW MATERIALS



EU EXTRACTION

At least **10%** of the EU's annual consumption for extraction



EU PROCESSING

At least **40%** of the EU's annual consumption for processing



EU RECYCLING

At least **15%** of the EU's annual consumption for recycling



EXTERNAL SOURCES

Not more than **65%** of the EU's annual consumption of **each strategic raw material at any relevant stage of processing** from a single third country

Destination 2: Increased Autonomy in Key Strategic Value Chains for Resilient Industry



Raw materials for EU open strategic autonomy and successful **transition to a climate-neutral and circular economy**

Pay attention to:

- Business cases and exploitation strategies for industrialisation**
- Elegibility conditions: participation ... is limited to ...Member States, associated countries, OECD countries, African Union Member States*, MERCOSUR, CARIFORUM, Andean Community and countries with which the EU has concluded strategic partnerships on raw materials.**
- “.. beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).”**

RESILIENT INDUSTRY Bloques temáticos (convocatoria en FASE UNICA)

Topics	Temática	Ppto (M€)
Raw Materials	HORIZON-CL4-2024-RESILIENCE-01-01 Exploration in deep land deposits	RIA TRL5 20 AI/ Eligibility conditions. (todo el bloque)
	<ul style="list-style-type: none"> ▪ <i>Develop innovative technologies for exploration of critical raw materials in deep land deposits in the EU and non-EU countries</i> ▪ <i>Actions should map Europe's primary raw materials potential and raw materials production, using geoscientific approaches and refining capacities in a harmonised form</i> ▪ <i>Develop and deploy new or improved highly efficient, sustainable exploration technologies</i> ▪ <i>UAV, IA, geophysics, 3D modelling, ...</i> 	
Raw Materials	HORIZON-CL4-2024-RESILIENCE-01-04 Technologies for processing and refining of CRM	IA TRL6-7 22 +3 pages

RESILIENT INDUSTRY Bloques temáticos (convocatoria en FASE UNICA)

Topics	Temática	Ppto (M€)
Raw Materials	HORIZON-CL4-2024-RESILIENCE-01-08	Rare Earth and magnets innovation hubs IA TRL6-7 32 +3 pages
		<ul style="list-style-type: none"> ▪ <i>The action should create an innovation hub that enables the development, demonstration and testing of new processes for production of rare earths and related products, particularly neodymium permanent magnets.</i> ▪ <i>Demonstrations could cover novel, cost-effective and environmentally sound rare earths extraction, processing and separation routes</i>
Raw Materials	HORIZON-CL4-2024-RESILIENCE-01-010	Due diligence requirements in raw materials supply chains. CSA 2,2 Lump sum +3 pages
Raw Materials	HORIZON-CL4-2024-RESILIENCE-01-11	Technologies for extraction and processing of CRM IA TRL6-7 15 INCO Canada, Ukraine Lump sum/ + 3 pages
		<ul style="list-style-type: none"> ▪ <i>Actions have to collaborate with Canada or Ukraine, following the strategic partnership on raw materials established in 2021</i> ▪ <i>also to at least one project per each partner country</i> ▪ <i>Technology should be demonstrated on the resources of the partner country.</i> ▪ <i>Actions are expected to develop and demonstrate extraction and processing technologies to facilitate exploitation of the primary critical raw materials (minerals and metals only)</i>

RESILIENT INDUSTRY Bloques temáticos (convocatoria en FASE UNICA)

Topics	Temática	Ppto (M€)
Resilience EU bus., SMEs, Start-ups <ul style="list-style-type: none">▪ <i>Support objectives of the European Green Deal and the EU SME Strategy</i>▪ <i>Increase resilience, competitive sustainability of SMEs</i>	HORIZON-CL4-2024-RESILIENCE-01-41 <p>'Innovate to transform' support for SME's</p>	CSA 10 <p>Lump sum FSTP</p>

Apoyo al participante y eventos destacados

- **CDTI Sesión lanzamiento convocatoria 2024.** Próximo **19 de septiembre** (on line). Registro abierto. (eventos.cdti.es)
- **CDTI Infoday nacional 19 de Octubre** (presencial). (eventos.cdti.es). *Registro abierto*
- *Web Horizonte Europa*
<https://www.horizonteeuropa.es/> . Servicio alertas RSS (suscribirse)



Industria

Reserva de fecha para el próximo Infoday
Nacional Clúster 4 Industria 19 de octubre
2023

05 de Septiembre de 2023

Apoyo al participante y eventos destacados

Participación en infodays regionales

- Castilla y León (Ávila), 26 de Octubre
- Comunidad Valenciana (Castellón), 30 de octubre
- Galicia (Santiago de Compostela), 3 de noviembre.



Industria

Reserva de fecha para el próximo Infoday
Nacional Clúster 4 Industria 19 de octubre
2023

05 de Septiembre de 2023

Apoyo al participante y eventos destacados

Eventos de ámbito europeo

- **11-12 Octubre:** Horizon Europe info days Cluster 4.Digital, Industria y Espacio (grabación disponible)
- **19 de Octubre-7 de febrero.** *Brokerage event Comisión Europea. Jornada de lanzamiento y participación abierta durante el periodo.*
- <https://ncp4industry.eu/events/horizon-europe-industry-2024-brokerage-event/>
- **27 de Octubre:** Brokerage Event KETs NCPs Francia y Alemania (híbrido)
- **Raw Materials Week 2023, 13-17 Noviembre, Bruselas.**
<https://www.rawmaterialsweek2023.eu/>
- Red de NCPs. www.ncp4industry.eu



Equipo Clúster 4 Industria Apoyo al participante



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carlos.toledo@cdti.es



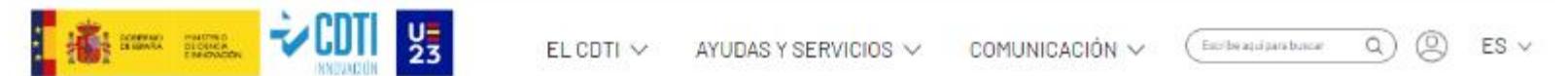
Servicios de apoyo al participante

- *Reuniones presenciales y virtuales*
- *Revisión de ideas de proyectos*
- *Interpretación y adaptación al topics*
- *Apoyo en la búsqueda de consorcios*
- *Revisión de propuestas en fase de escritura*



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Programas de la UE

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Reuniones bilaterales solicitadas

SOLICITANTE	HORARIO	SALA	EQUIPO CDTI
EURECAT	15-15:30	Sala VIP anexa al salón de actos	Carlos Toledo
INCOTEC	15:30-16	Sala VIP anexa al salón de actos	Carlos Toledo