

# HORIZONT EURÓPA

## Klaster 4

### Digitalizácia, priemysel a vesmír

#### Oblasť Priemysel

Zoznam výziev na roky 2023 – 2024



EURÓPSKA ÚNIA  
Európsky fond regionálneho rozvoja  
OP Integrovaná infraštruktúra 2014 – 2020



MINISTERSTVO  
ŠKOLSTVA, VEDY,  
VÝSKUMU A ŠPORTU  
SLOVENSKEJ REPUBLIKY

Investícia do Vašej budúcnosti



# Destinácia: Klimaticky neutrálna, cirkulárna a digitalizovaná výroba

Call - TWIN GREEN AND DIGITAL TRANSITION 2023

HORIZON-CL4-2023-TWIN-TRANSITION-01

otvorenie výzvy: 08.12.2022 | uzávierka výzvy: 20.04.2023

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
Tematický okruh: Manufacturing Industry			
HORIZON-CL4-2023-TWIN-TRANSITION-01-02 High-precision OR complex product manufacturing – potentially including the use of photonics (Made in Europe and Photonics Partnerships)	IA	48 mil. €	5 – 6 mil. €
HORIZON-CL4-2023-TWIN-TRANSITION-01-04 Factory-level and value chain approaches for remanufacturing (Made in Europe Partnership)	IA	37,6 mil. €	5 – 7 mil. €
HORIZON-CL4-2023-TWIN-TRANSITION-01-07 Achieving resiliency in value networks through modelling and Manufacturing as a Service (Made in Europe Partnership)	RIA	32 mil. €	4 – 6 mil. €
HORIZON-CL4-2023-TWIN-TRANSITION-01-08 Foresight and technology transfer for Manufacturing as a Service (Made in Europe Partnership)	CSA	1 mil. €	1 mil. €
Tematický okruh: Energy Intensive Process Industries			
HORIZON-CL4-2023-TWIN-TRANSITION-01-31 Energy efficiency breakthroughs in the process industries (Processes4Planet partnership)	RIA	32 mil. €	8 – 10 mil. €
HORIZON-CL4-2023-TWIN-TRANSITION-01-33 Electrification of high temperature heating systems (Processes4Planet Partnership)	IA	35,67 mil. €	12 – 15 mil. €
HORIZON-CL4-2023-TWIN-TRANSITION-01-36 Modelling industry transition to climate neutrality, sustainability and circularity (Processes4Planet partnership)	RIA	13 mil. €	6 – 7 mil. €
HORIZON-CL4-2023-TWIN-TRANSITION-01-37 Hubs for circularity for near zero emissions regions applying industrial symbiosis and cooperative approach to heavy industrialized clusters and surrounding ecosystems (Processes4Planet partnership)	IA	40 mil. €	15 – 20 mil. €
HORIZON-CL4-2023-TWIN-TRANSITION-01-40 Sustainable and efficient industrial water consumption: through energy and solute recovery (Processes4Planet partnership)	RIA	30 mil. €	10 – 12 mil. €
HORIZON-CL4-2023-TWIN-TRANSITION-01-42 Circular economy in process industries: Upcycling large volumes of secondary resources (Processes4Planet partnership)	RIA	30 mil. €	10 – 12 mil. €

## Destinácia: Klimaticky neutrálna, cirkulárna a digitalizovaná výroba

Call - TWIN GREEN AND DIGITAL TRANSITION 2023

HORIZON-CL4-2023-TWIN-TRANSITION-01

otvorenie výzvy: 08.12.2022 | uzávierka výzvy: 20.04.2023

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
Tematický okruh: Clean Steel			
<b>HORIZON-CL4-2023-TWIN-TRANSITION-01-43</b> Low carbon-dioxide emission technologies for melting iron-bearing feed materials OR smart carbon usage and improved energy & resource efficiency via process integration (Clean Steel Partnership)	IA	23 mil. €	4 – 6 mil. €
<b>HORIZON-CL4-2023-TWIN-TRANSITION-01-45</b> Circular economy solutions for the valorisation of low-quality scrap streams, materials recirculation with high recycling rate, and residue valorisation for long term goal towards zero waste (Clean Steel Partnership)	RIA	12 mil. €	3 – 6 mil. €

Call - TWIN GREEN AND DIGITAL TRANSITION 2023 TWO STAGE

HORIZON-CL4-2023-TWIN-TRANSITION-01-TWO-STAGE

otvorenie výzvy: 08.12.2022 | uzávierka výzvy 1. fáza: 07.03.2023 | uzávierka výzvy 2. fáza: 05.10.2023

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
Tematický okruh: A New Way to Build, accelerating disruptive change in construction			
<b>HORIZON-CL4-2023-TWIN-TRANSITION-01-11</b> Intelligent data acquisition and analysis of materials and products in existing built works	RIA	12 mil. €	5 – 6 mil. €

# Destinácia: Klimaticky neutrálna, cirkulárna a digitalizovaná výroba

Call - TWIN GREEN AND DIGITAL TRANSITION 2024

HORIZON-CL4-2024-TWIN-TRANSITION-01

otvorenie výzvy: 19.09.2023 | uzávierka výzvy: 07.02.2024

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
<b>Tematický okruh: Manufacturing Industry</b>			
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-03</b> Manufacturing as a Service: Technologies for customised, flexible, and decentralised production on demand (Made in Europe Partnership)	RIA	35 mil. €	5 – 7 mil. €
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-05</b> Technologies/solutions to support circularity for manufacturing (Made in Europe Partnership)	RIA	36 mil. €	4 – 6 mil. €
<b>Tematický okruh: Energy Intensive Process Industries</b>			
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-32</b> Optimisation of thermal energy flows in the process industry (Processes4Planet partnership)	IA	30 mil. €	10 – 15 mil. €
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-34</b> Renewable hydrogen used as feedstock in innovative production routes (Processes4Planet Partnership)	RIA	20 mil. €	8 – 10 mil. €
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-35</b> Turning CO2 emissions from the process industry to feedstock (Processes4Planet partnership)	IA	30 mil. €	10 – 15 mil. €
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-38</b> Hubs for circularity for industrialised urban peripheral areas (Processes4Planet partnership)	IA	40 mil. €	15 – 20 mil. €
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-41</b> Breakthroughs to improve process industry resource efficiency (Processes4Planet partnership)	RIA	30 mil. €	10 – 12 mil. €
<b>Tematický okruh: Clean steel</b>			
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-44</b> Digital transformation and ensuring a better use of industrial data, which can optimise steel supply chains (Clean Steel Partnership)	IA	10 mil. €	3 – 5 mil. €
<b>HORIZON-CL4-2024-TWIN-TRANSITION-01-46</b> CO2-neutral steel production with hydrogen, secondary carbon carriers and electricity OR innovative steel applications for low CO2 emissions (Clean Steel Partnership)	RIA	20 mil. €	3 – 5 mil. €

# Destinácia: Klimaticky neutrálna, cirkulárna a digitalizovaná výroba

Call - TWIN GREEN AND DIGITAL TRANSITION 2024 TWO STAGE

HORIZON-CL4-2024-TWIN-TRANSITION-01-TWO-STAGE

otvorenie výzvy: 19.09.2023 | uzávierka výzvy 1. fáza: 07.02.2024 | uzávierka výzvy 2. fáza: 24.09.2024

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
Tematický okruh: Manufacturing Industry			
HORIZON-CL4-2024-TWIN-TRANSITION-01-01 Bio-intelligent manufacturing industries (Made in Europe Partnership)	RIA	25 mil. €	4 – 5 mil. €
Tematický okruh: A New Way to Build, accelerating disruptive change in construction			
HORIZON-CL4-2024-TWIN-TRANSITION-01-12 Enhanced assessment, intervention and repair of civil engineering infrastructure	RIA	12 mil. €	5 – 6 mil. €

# Destinácia: Zvýšená autonómia v kľúčových strategických hodnotových reťazcoch pre odolný priemysel

Call - RESILIENT VALUE CHAINS 2023

HORIZON-CL4-2023-RESILIENCE-01

otvorenie výzvy: 08.12.2022 | uzávierka výzvy: 20.04.2023

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
<b>Tematické okruhy: Raw Materials for EU open strategic autonomy and successful transition to a climate-neutral and circular economy</b>			
HORIZON-CL4-2023-RESILIENCE-01-02 Innovative technologies for sustainable and decarbonised extraction	RIA	25 mil. €	5 mil. €
HORIZON-CL4-2023-RESILIENCE-01-03 Technologies for processing and refining of critical raw materials	IA	22 mil. €	7,3 mil. €
HORIZON-CL4-2023-RESILIENCE-01-05 Recycling technologies for critical raw materials from EoL products	IA	28 mil. €	7 mil. €
HORIZON-CL4-2023-RESILIENCE-01-06 Earth Observation platform, products and services for raw materials	IA	20 mil. €	6,7 mil. €
HORIZON-CL4-2023-RESILIENCE-01-07 Expert network on Critical raw materials	CSA	3 mil. €	3 mil. €
HORIZON-CL4-2023-RESILIENCE-01-09 Recyclability and resource efficiency of Rare Earth based magnets	IA	20 mil. €	6,7 mil. €
<b>Tematický okruh: Safe and Sustainable by Design (SSbD) Chemicals and Materials</b>			
HORIZON-CL4-2023-RESILIENCE-01-21 Innovative methods for safety and sustainability assessments of chemicals and materials	RIA	29 mil. €	6 – 8 mil. €
HORIZON-CL4-2023-RESILIENCE-01-22 Integrated approach for impact assessment of safe and sustainable chemicals and materials	RIA	15 mil. €	3 – 4 mil. €
HORIZON-CL4-2023-RESILIENCE-01-23 Computational models for the development of safe and sustainable by design chemicals and materials	RIA	29 mil. €	6 – 7 mil. €

## Destinácia: Zvýšená autonómia v kľúčových strategických hodnotových reťazcoch pre odolný priemysel

### Call - RESILIENT VALUE CHAINS 2023

HORIZON-CL4-2023-RESILIENCE-01

otvorenie výzvy: 08.12.2022 | uzávierka výzvy: 20.04.2023

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
------------------	--------------	---------------------------	--------------------------------

Tematický okruh: Strategic innovation markets driven by advanced materials

HORIZON-CL4-2023-RESILIENCE-01-39  
Coordination and knowledge sharing across materials development communities

CSA

2 mil. €

2 mil. €

Tematické okruhy: Improving the resilience of EU businesses, especially SMEs and Startups

HORIZON-CL4-2023-RESILIENCE-01-42  
Boosting generation and diffusion of advanced technologies in SMEs based on a supply chain model

CSA

10 mil. €

2 – 3 mil. €

HORIZON-CL4-2023-RESILIENCE-01-44  
Affordable Housing District Demonstrator

IA

10 mil. €

5 mil. €

### Call - RESILIENT VALUE CHAINS 2023 TWO STAGE

HORIZON-CL4-2023-RESILIENCE-01-TWO-STAGE

otvorenie výzvy: 08.12.2022 | uzávierka výzvy 1. fáza: 07.03.2023 | uzávierka výzvy 2. fáza: 05.10.2023

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
------------------	--------------	---------------------------	--------------------------------

Tematický okruh: Strategic innovation markets driven by advanced materials

HORIZON-CL4-2023-RESILIENCE-01-32  
Bioinspired and biomimetic materials for sustainable textiles

IA

31 mil. €

6 – 8 mil. €

HORIZON-CL4-2023-RESILIENCE-01-33  
Smart sensors for the Electronic Appliances market

RIA

31 mil. €

6 – 8 mil. €

HORIZON-CL4-2023-RESILIENCE-01-34  
Advanced (nano and bio-based) materials for sustainable agriculture

RIA

31 mil. €

6 – 8 mil. €

HORIZON-CL4-2023-RESILIENCE-01-37  
Advanced materials for magnets in applications for the New Energies Market

RIA

31 mil. €

6 – 8 mil. €

# Destinácia: Zvýšená autonómia v kľúčových strategických hodnotových reťazcoch pre odolný priemysel

Call - RESILIENT VALUE CHAINS 2024

HORIZON-CL4-2024-RESILIENCE-01

otvorenie výzvy: 19.09.2023 | uzávierka výzvy: 07.02.2024

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
<p>Tematické okruhy: Raw Materials for EU open strategic autonomy and successful transition to a climate-neutral and circular economy</p>			
HORIZON-CL4-2024-RESILIENCE-01-01 Exploration of critical raw materials in deep land deposits	RIA	20 mil. €	5 mil. €
HORIZON-CL4-2024-RESILIENCE-01-04 Technologies for processing and refining of critical raw materials	IA	22 mil. €	7,3 mil. €
HORIZON-CL4-2024-RESILIENCE-01-08 Rare Earth and magnets innovation hubs	IA	32 mil. €	16 mil. €
HORIZON-CL4-2024-RESILIENCE-01-10 Addressing due diligence requirements in raw materials supply chains	CSA	2,2 mil. €	2,2 mil. €
HORIZON-CL4-2024-RESILIENCE-01-11 Technologies for extraction and processing of critical raw materials	IA	15 mil. €	7,5 mil. €
<p>Tematický okruh: Safe and Sustainable by Design (SSbD) Chemicals and Materials</p>			
HORIZON-CL4-2024-RESILIENCE-01-24 Development of safe and sustainable by design alternatives	IA	59 mil. €	12 – 15 mil. €
<p>Tematický okruh: Improving the resilience of EU businesses, especially SMEs and Startups</p>			
HORIZON-CL4-2024-RESILIENCE-01-41 'Innovate to transform' support for SME's sustainability transition	CSA	10 mil. €	5 mil. €



# Destinácia: Zvýšená autonómia v kľúčových strategických hodnotových reťazcoch pre odolný priemysel

Call - RESILIENT VALUE CHAINS 2024 TWO STAGE  
HORIZON-CL4-2024-RESILIENCE-01-TWO-STAGE

otvorenie výzvy: 19.09.2023 | uzávierka výzvy 1. fáza: 07.02.2024 | uzávierka výzvy 2. fáza: 24.09.2024

Kód a téma výzvy	Typ projektu	Celkový rozpočet/ téma	Očakávaný príspevok EÚ/projekt
Tematický okruh: Strategic innovation markets driven by advanced materials			
HORIZON-CL4-2024-RESILIENCE-01-35 Biodegradable polymers for sustainable packaging materials	IA	31 mil. €	6 – 8 mil. €
HORIZON-CL4-2024-RESILIENCE-01-36 Advanced biomaterials for the Health Care	IA	31 mil. €	6 – 8 mil. €

Oficiálne znenia a podmienky jednotlivých tém nájdete v Pracovnom programe Horizont Európa na roky 2023 – 2024. Vyššie uvedený pracovný program môže byť priebežne aktualizovaný, aktuálne znenie nájdete na stránke Funding & Tender Opportunities Portal.