



Mreža NKT

Obzorje Evropa

HORIZON
EUROPE



THE EU RESEARCH & INNOVATION
PROGRAMME 2021 - 2027

#HorizonEU



SKLOP 4 „DIGITALNO PODROČJE, INDUSTRIJA IN VESOLJE“ INDUSTRIJA – DESTINACIJI 1 IN 2

DOROTEJA ZLOBEC

LJUBLJANA, 1. 2. 2023



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Cilji programa **Obzorje Evropa**

Ustvariti in izboljšati razširjanje visokokakovostnega novega znanja, tehnologij in trajnostnih rešitev...

- **reševanje podnebnih sprememb**
- **doseganje ciljev ZN glede trajnostnega razvoja (SDG)**
- **krepitev evropske industrijsko konkurenčnost**

povečati učinek raziskav in inovacij

uvajanje **inovativnih** rešitev v **industriji** (MPS in zagonska podjetja) **in družbi** za reševanje **globalnih izzivov**

interdisciplinarno, medsektorsko, čezmejno in mednarodno sodelovanje
najrazličnejše ravni tehnološke pripravljenosti (TRL)



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„INDUSTRIJA“

- vzpostavitev konkurenčne, **digitalne, nizkoogljične in krožne industrije**
- krepitev zmogljivosti in zagotavljanje **suverenosti Evrope** vzdolž celotne vrednostne verige
- zagotavljanje **trajnostne oskrbe s surovinami**
- razvoj **naprednih materialov** in zagotovitev podlage za napredek in inovacije v zvezi z globalnimi družbenimi izzivi.

Področja:

- proizvodne tehnologije
- nastajajoče omogočitvene tehnologije
- napredni materiali
- krožna industrija
- nizkoogljična in čista industrija

DESTINATION I:
CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION
CALL HORIZON-CL4-2023-TWIN-TRANSITION-01...

Enofazni:

- 20 Apr 2023

Manufacturing Industry

Made in Europe and Photonics Partnerships

Energy Intensive Process Industries

Circularity and Zero Pollution in process industries

Processes4Planet

Clean Steel

Dvofazni:

07 Mar 2023 (First Stage)

05 Oct 2023 (Second Stage)

A New Way to Build, accelerating disruptive change in construction

DESTINATION I:
CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION
CALL HORIZON-CL4-2023-TWIN-TRANSITION-01...

Manufacturing Industry

- 02: High-precision OR complex product manufacturing – potentially including the use of photonics (IA) (LS)
- 04: Factory-level and value chain approaches for remanufacturing (IA)
- 07: Achieving resiliency in value networks through modelling and Manufacturing as a Service (RIA)
- 08: Foresight and technology transfer for Manufacturing As A Service (CSA) (LS)

DESTINATION I:
CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION
CALL HORIZON-CL4-2023-TWIN-TRANSITION-01...

Clean Steel

- 43: Low carbon-dioxide emission technologies for melting iron-bearing feed materials OR smart carbon usage and improved energy & resource efficiency via process integration (IA)
- 45: 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 (RIA)

DESTINATION I: CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION CALL HORIZON-CL4-2023-TWIN-TRANSITION-01...

Energy Intensive Process Industries

- 31: Energy efficiency breakthroughs in the process industries (RIA) (LS)
- 33: Electrification of high temperature heating systems (IA)
- 36: Modelling process industry transition to climate neutrality, sustainability and circularity (RIA) (LS)

Circularity and Zero Pollution in process industries

- 37: Hubs for circularity for near zero emissions regions applying industrial symbiosis and cooperative approach to heavy industrialized clusters and surrounding ecosystems (IA)
- 40: Sustainable and efficient industrial water consumption: through energy and solute recovery (RIA)
- 42: Circular economy in process industries: Upcycling large volumes of secondary resources (RIA) (LS)

DESTINATION I:
CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION
CALL HORIZON-CL4-2023-TWIN-TRANSITION-01...

A new way to build, accelerating disruptive change in construction

- II: Intelligent data acquisition and analysis of materials and products in existing built works (RIA) (LS)

DESTINATION 2: A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY

CALL HORIZON-CL4-2023-RESILIENCE-01...

Dvofazni:

07 Mar 2023 (First Stage)

05 Oct 2023 (Second Stage)

Enofazni:

- 20 Apr 2023

Strategic innovation markets driven by advanced materials

Improving the resilience and preparedness of EU businesses, especially SMEs and Startups

Safe and Sustainable by Design (SSbD) chemicals and materials

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

Participation in these topics is limited to legal entities established in 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.

DESTINATION 2:

A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY

CALL HORIZON-CL4-2023-RESILIENCE-01...

Strategic innovation markets driven by advanced materials

TWO STAGE

- 32: Bioinspired and biomimetic materials for sustainable textiles (IA)
- 33: Smart sensors for the Electronic Appliances market (RIA) (LS)
- 34: Advanced (nano and bio-based) materials for Sustainable Agriculture (RIA)
- 37: Advanced materials for magnets in applications for the New Energies Market (RIA)

ONE STAGE

- 39: Coordination and knowledge sharing across materials development communities (CSA) (LS)

DESTINATION 2:

A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY

CALL HORIZON-CL4-2023-RESILIENCE-01...

Improving the resilience and preparedness of EU businesses, especially SMEs and Startups

- 42: Boosting generation and diffusion of advanced technologies in SMEs based on a supply chain model (CSA) (LS)
- 44: Affordable Housing District Demonstrator (IA)

Safe and Sustainable by Design (SSbD) chemicals and materials

- 21: Innovative methods for safety and sustainability assessments of chemicals and materials (RIA)
- 22: Integrated approach for impact assessment of safe and sustainable chemicals and materials (RIA)
- 23: Computational models for the development of safe and sustainable by design chemicals and materials (RIA) (LS)

DESTINATION 2:

A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY

CALL HORIZON-CL4-2023-RESILIENCE-01...

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

- 02: Innovative technologies for sustainable and decarbonised extraction (RIA) (LS)
- 03: Technologies for processing and refining of critical raw materials (IA)
- 05: Recycling technologies for critical raw materials from EoL products (IA)
- 06: Earth Observation platform, products and services for raw materials (IA) (LS)
- 07: Expert network on Critical raw materials (CSA) (LS)
- 09: Recyclability and resource efficiency of Rare Earth based magnets (IA)



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AMi2030
ADVANCED MATERIALS INITIATIVE

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Advanced Materials 2030 Initiative



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KORISTNE POVEZAVE

- Made in Europe: [EFFRA](#)
- Processes4Planet [SPIRE](#)
- Advanced Materials Initiative (AMI2030):
<https://www.ami2030.eu/>
NCP4Industry: [link](#)

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RAZVOJ IN TEHNOLOGIJO



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MINISTRSTVO ZA INFRASTRUKTURO



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