#HorizonEU

THE EU RESEARCH & INNOVATION PROGRAMME

2021 – 2027

Horizon Europe – Cluster 4

Destination 2

RESILIENCE - Increased autonomy in key strategic value chains for resilient industry

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Research and Innovation

Cluster 4 – Six Destinations

Destination 1: Climate neutral, circular, and digitised production

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

Destination 3: World leading data and computing technologies

Destination 4: Digital and emerging technologies for competitiveness and fit for the green deal

Destination 5: Strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data

Destination 6: A human-centred and ethical development and industrial technologies

WORK PROGRAMME 2023-2024 – DESTINATION 2
"Increased Autonomy in Key Strategic Value Chains for Resilient Industry"

Call HORIZON-CL4-2024-RESILIENCE-01

Opening: 19 Sep 2023
Deadline(s): 07 Feb 2024

Call HORIZON-CL4-2024-RESILIENCE-01-TWO-STAGE

Opening: 19 Sep 2023
Deadline(s): 07 Feb 2024 (First Stage), 24 Sep 2024 (Second Stage)

European Commission

Strategic innovation markets driven by advanced materials

Call - RESILIENT VALUE CHAINS 2024 TWO STAGE

- HORIZON-CL4-2024-RESILIENCE-01-35: Biodegradable polymers for sustainable packaging materials (IA)
- HORIZON-CL4-2024-RESILIENCE-01-36: Advanced biomaterials for the Health Care (IA)

Call - RESILIENT VALUE CHAINS 2024

HORIZON-CL4-2024-RESILIENCE-01-35: Biodegradable polymers for sustainable packaging materials (IA)

Expected outcome:

- The packaging industry will have access to the next generation of biodegradable polymer materials, which will also be recyclable materials. Plastic materials producers will switch from PP, PE, and PET to bio-degradable materials with reduced GHG emissions along the value chain.
- The packaging industry will apply business model of circularity-by-design and sustainable end-of-life (EoL) solutions for plastic packaging materials. This has the potential to lead to a reduction in landfill waste volume of packaging materials; and to a reduction of littering of plastics, coherent with the ambition of the Horizon Europe Ocean and Waters mission, to reduce the plastic pollution of the oceans. Projects are expected to contribute to the Plastics strategy, the Single-use Plastics Directive and the EU Circular Economy Action plan (CEAP).
- Standards and labels for specific applications will be further defined based on the development of testing of biodegradability of plastics in open environments

Indicative budget of the call: EUR 31 million
EU contribution per project: EUR 6-8 million
Type of Action: Innovation Action
TRL: start at TRL 4 and achieve TRL 6-7

HORIZON-CL4-2024-RESILIENCE-01-36: Advanced biomaterials for the Health Care (IA)

Expected outcomes:

- Develop the swiftly growing innovation market of medical applications, which is dependent on advanced biocompatible materials that can be printed or injected, including 4D materials that change their 3D structures following external impact (e.g., thermic, electric, mechanical or radiation treatment).
- Medical and/or surgical procedures will benefit from injectable materials for non-invasive surgical procedures.
- Some of their advantages include easy deliverability into the body, increased implantation precision, controllable release of therapeutic agents, antimicrobial properties and the possibility of monitoring or stimulating biological events.

Indicative budget of the call: EUR 31 million
EU contribution per project: EUR 6-8 million
Type of Action: Innovation Action
TRL: start at TRL 3-4 achieve TRL 5-6

European Commission

Call – RESILIENT VALUE CHAINS 2024

Safe and Sustainable by Design (SSbD) chemicals and materials

- HORIZON-CL4-2024-RESILIENCE-01-24: Development of safe and sustainable by design alternatives (IA)

HORIZON-CL4-2024-RESILIENCE-01-24: Development of safe and sustainable by design alternatives (IA)

Expected outcomes:

- European industry will have access to safer and more sustainable innovative alternatives of chemicals and materials with reduced substitution barriers (e.g., performance, cost and supply demand);
- Industry will be able to test and demonstrate the applicability of the Safe and Sustainable by Design framework to develop innovative chemicals or materials to substitute substances of concern;
- The EU climate ambitions will be supported by contributing to a decrease of greenhouse gas emissions through a more sustainable production and use of Safe and Sustainable by Design chemicals and materials;
- The EU strategies/policies and regulation, such as the proposal for the Ecodesign for Sustainable Products Regulation, the EU Ecolabel, REACH or CLP will be supported with safe and sustainable alternatives of chemicals and materials;
- The proof of concept of developing new Safe and Sustainable by Design chemicals or materials will bring evidence for new skills needed to apply the Safe and Sustainable by Design framework;
- Market uptake of the Safe and Sustainable by Design chemicals and materials will be encouraged by citizens better understanding their benefits.

Indicative budget of the call: EUR 59 million
EU contribution per project: EUR 12-15 million
Type of Action: Innovation Action
TRL: start at TRL 4-5 achieveTRL 6-7

European Commission

Thank you for your questions

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