

HORIZON EUROPE - Overview of the Topics 2025

Work Programme Cluster 4 "Digital, Industry and Space"



According to the Work Programme: 2025-05-14

Destination 1: Achieving global leadership in climate-neutral, circular and digitised industrial and digital value chains			
CALL: HORIZON-CL4-2025	Opening	Deadline	Type of Action
Manufacturing			
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-01: Integrated approaches for remanufacturing (Made in Europe Partnership)</u>	22 May 2025	23 September 2025	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-02: Physical and cognitive augmentation in advanced manufacturing (Made in Europe Partnership)</u>	22 May 2025	23 September 2025	RIA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-05: Advanced manufacturing technologies for leadership of EU manufacturers in products for the net-zero industry (Made in Europe Partnership)</u>	22 May 2025	23 September 2025	IA
Construction			
<u>HORIZON-CL4-2025-05-TWIN-TRANSITION-11-two-stage: Enhanced lo-gistics and operations of construction sites</u>	22 May 2025	23.09.2025 (first stage), 14.04.2026 (second stage)	IA
Energy-Intensive Industries - Decarbonisation and Energy Efficiency			
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-31: From heat-driven processes to the use of mechanical and electric forces (Pro-cesses4Planet partnership)</u>	22 May 2025	23 September 2025	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-32: Green and resilient flexible production processes (Processes4Planet partnership)</u>	22 May 2025	23 September 2025	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-33: Integrated use of renewable energy carriers in industrial sites (Processes4Planet partnership)</u>	22 May 2025	23 September 2025	RIA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-34: Smart inte-gration of net zero technologies into Energy Intensive industries (Pro-cesses4Planet and Made in Europe partnerships)</u>	22 May 2025	23 September 2025	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-37: Solving issues in carbon-neutral iron and steel making processes with diverse input materials of varying quality (Clean Steel Partnership)</u>	22 May 2025	23 September 2025	RIA
Energy-intensive Industries - Circularity and Zero Pollution			
<u>HORIZON-CL4-2025-05-TWIN-TRANSITION-35-two-stage: Developing and embedding upcycling technologies into viable business (Pro-cesses4Planet partnership)</u>	22 May 2025	23.09.2025 (first stage), 14.04.2026 (second stage)	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-36: Safe and clean processing technologies and products (Processes4Planet partner-ship)</u>	22 May 2025	23 September 2025	RIA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-38: Synergies and mutual learning with national and regional initiatives in Europe on In-dustrial decarbonisation</u>	22 May 2025	23 September 2025	CSA
<u>HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-39: Towards human-centric, sustainable and resilient energy-intensive industries (Pro-cesses4Planet and Clean Steel partnerships)</u>	22 May 2025	23 September 2025	CSA

HORIZON EUROPE - Overview of the Topics 2025

Work Programme Cluster 4 "Digital, Industry and Space"



Social Circular Enterprises			
<u>HORIZON-CL4-2025-05-TWIN-TRANSITION-21-two-stage: Demonstrators for clusters of social circular enterprises</u>	22 May 2025	23.09.2025 (first stage), 14.04.2026 (second stage)	IA
Destination 2: Achieving technological leadership for Europe's open strategic autonomy in raw materials, chemicals and innovative materials			
CALL: HORIZON-CL4-2025	Opening	Deadline	Type of Action
Raw Materials			
<u>HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-61: Technologies for critical raw materials and strategic raw materials from end-of-life products</u>	22 May 2025	23 September 2025	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-62: Strategic Partnerships for Raw Materials: Innovative Approaches for sustainable production of Critical Raw Materials</u>	22 May 2025	23 September 2025	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-63: Innovative solutions for the sustainable production for Semiconductor raw materials</u>	22 May 2025	23 September 2025	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-64: EU Co-funded Partnership on raw materials for the green and digital transition (Co-funded partnership Raw Materials for the Green and Digital Transition)</u>	22 May 2025	23 September 2025	Cofund
Innovative Advanced Materials			
<u>HORIZON-CL4-2025-05-MATERIALS-42-two-stage: Innovative Advanced Materials (IAMs) for product monitoring, smart maintenance and repair strategies in the construction sector (Innovative Advanced Materials for Europe partnership)</u>	22 May 2025	23.09.2025 (first stage), 14.04.2026 (second stage)	RIA
<u>HORIZON-CL4-2025-05-MATERIALS-43-two-stage: Innovative Advanced Materials (IAMs) for robust, fast curing sealants and coatings for manufacturing and final assembly (Innovative Advanced Materials for Europe partnership)</u>	22 May 2025	23.09.2025 (first stage), 14.04.2026 (second stage)	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-44: Innovative Advanced Materials Innovation Procurement</u>	22 May 2025	23 September 2025	CSA
<u>HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-45: Materials Commons for Europe</u>	22 May 2025	23 September 2025	IA
<u>HORIZON-CL4-2025-03-MATERIALS-46: Innovative Advanced Materials (IAMs) for photonics, enabling low-power and ultra-broadband performance for telecommunication (Innovative Advanced Materials for Europe partnership)</u>	10 June 2025	02 October 2025	RIA
<u>HORIZON-CL4-2025-03-MATERIALS-47: Innovative Advanced Materials (IAMs) for conformable, flexible or stretchable electronics (RIA) (Innovative Advanced Materials for Europe partnership)</u>	10 June 2025	02 October 2025	RIA
Safe and Sustainable by Design			
<u>HORIZON-CL4-2025-05-MATERIALS-51-two-stage: Development of safe and sustainable by design alternatives to Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)</u>	22 May 2025	23.09.2025 (first stage), 14.04.2026 (second stage)	IA
<u>HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-52: Accelerate the up-take of life-cycle assessment (LCA) for Safe and Sustainable by Design (SSbD) chemicals and materials and resulting products</u>	22 May 2025	23 September 2025	RIA

HORIZON EUROPE - Overview of the Topics 2025

Work Programme Cluster 4 "Digital, Industry and Space"



Textiles			
HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-31: Digitally enabled lo-cal-for-local textile and apparel production (Textiles for the Future Partner-ship)	22 May 2025	23 September 2025	IA
Destination 3: Developing an agile and secure single market and infrastructure for data-services and trustworthy artificial intelligence services			
CALL: HORIZON-CL4-2025	Opening	Deadline	Type of Action
Connected Collaborative Computing Networks (3C networks)			
HORIZON-CL4-2025-03-DATA-08: Large-scale pilots for supply end-to-end infrastructures integrating device, network computing and communication capabilities for Telco Edge Cloud deployments, as a basis for Connected Collaborative	10 June 2025	02 October 2025	RIA
HORIZON-CL4-2025-03-DATA-09: Alignment of stakeholders towards the supply-side large-scale pilot of end-to-end infrastructures integrating de-vice, network computing and communication capabilities	10 June 2025	02 October 2025	CSA
HORIZON-CL4-2025-03-DATA-10: Roadmap for next generation compu-ting technologies from IoT device level to edge to cloud to HPC	10 June 2025	02 October 2025	CSA
HORIZON-CL4-2025-03-DATA-11: Open Internet Stack: development of technological commons/open-source 3C building blocks	10 June 2025	02 October 2025	RIA
HORIZON-CL4-2025-03-DATA-12: Preparing the Advancement of the state of the art of submarine cable infrastructures	10 June 2025	02 October 2025	CSA
AI-GenAI / Data / Robotics			
HORIZON-CL4-2025-03-DATA-13: Fostering Innovative and Compliant Data Ecosystems (AI, Data and Robotics Partnership)	10 June 2025	02 October 2025	IA
HORIZON-CL4-2025-04-DATA-02: Empowering AI/generative AI along the Cognitive Computing continuum (AI/Data/Robotics Partnership)	10 June 2025	02 October 2025	RIA
HORIZON-CL4-2025-04-DATA-03: Software Engineering for AI and generative AI (AI/Data/Robotics Partnership)	10 June 2025	02 October 2025	RIA
Destination 4: Achieving open strategic autonomy in digital and emerging enabling technologies			
CALL: HORIZON-CL4-2025	Opening	Deadline	Type of Action
Quantum and High Performance Computing			
HORIZON-CL4-2025-03-DIGITAL-EMERGING-01: Continuation of the Quantum Technologies Flagship	10 June 2025	02 October 2025	CSA
HORIZON-CL4-2025-03-DIGITAL-EMERGING-02: Quantum Computing – complementing the quantum computing FPs with the development of a technology agnostic software stack	10 June 2025	02 October 2025	RIA

HORIZON EUROPE - Overview of the Topics 2025

Work Programme Cluster 4 "Digital, Industry and Space"



<u>HORIZON-CL4-2025-03-DIGITAL-EMERGING-03: Supporting Digital Partnerships in Quantum technologies</u>	10 June 2025	02 October 2025	RIA
<u>HORIZON-CL4-2025-03-DIGITAL-EMERGING-04: Post-exascale HPC</u>	10 June 2025	02 October 2025	CSA
Photonics			
<u>HORIZON-CL4-2025-04-DIGITAL-EMERGING-01: Advanced sensor technologies and multimodal sensor integration for multiple application domains (Photonics Partnership)</u>	10 June 2025	02 October 2025	IA
Semiconductors			
<u>HORIZON-CL4-2025-03-DIGITAL-EMERGING-08: Strengthening the fabless Start-up and SME ecosystem in Europe (CSA)</u>	10 June 2025	02 October 2025	CSA
AI-GenAI / Data / Robotics			
<u>HORIZON-CL4-2025-03-DIGITAL-EMERGING-07: Robust and trustworthy GenerativeAI for Robotics and industrial automation (AI/Data/Robot-ics & Made in Europe Partnerships)</u>	10 June 2025	02 October 2025	RIA
<u>HORIZON-CL4-2025-03-DIGITAL-EMERGING-09: Challenge-Driven GenAI4EU Booster (AI/Data/Robotics Partnership)</u>	10 June 2025	02 October 2025	RIA
<u>HORIZON-CL4-2025-04-DIGITAL-EMERGING-04: Assessment methodologies for General Purpose AI capabilities and risks (AI/Data/Robot-ics Partnership)</u>	10 June 2025	02 October 2025	RIA
<u>HORIZON-CL4-2025-04-DIGITAL-EMERGING-05: Soft Robotics for Advanced physical capabilities (AI/Data/Robotics Partnership)</u>	10 June 2025	02 October 2025	IA
<u>HORIZON-CL4-2025-04-DIGITAL-EMERGING-07: Enhanced Learning Strategies for General Purpose AI: Advancing GenAI4EU (AI/Data/Robotics Partnership)</u>	10 June 2025	02 October 2025	RIA
Artificial Intelligence in Science			
<u>HORIZON-CL4-INDUSTRY-2025-01-DIGITAL-61: AI Foundation models in science (GenAI4EU)</u>	22 May 2025	23 September 2025	RIA
<u>HORIZON-CL4-INDUSTRY-2025-01-DIGITAL-62: Facilitated cooperation for AI in Science</u>	22 May 2025	23 September 2025	CSA
Destination 5: Open Strategic Autonomy in Developing, Deploying and Using Global Space-Based Infrastructure, Services, Applications and Data			
CALL: HORIZON-CL4-2025-01	Opening	Deadline	Type of Action
Accessing Space			
<u>HORIZON-CL4-2025-02-SPACE-11: CSA on access to European spaceports</u>	22 May 2025	25 September 2025	CSA
<u>HORIZON-CL4-2025-02-SPACE-12: Digital solutions for autonomy for space transportation systems, design and simulation tools - Digital enablers and building blocks</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-13: Digital solutions for autonomy for space transportation systems, design and simulation tools – targeting demonstration</u>	22 May 2025	25 September 2025	IA

HORIZON EUROPE - Overview of the Topics 2025

Work Programme Cluster 4 "Digital, Industry and Space"



Acting in Space			
<u>HORIZON-CL4-2025-02-SPACE-21: ISOS Pilot Mission Detailed Design – Servicing component</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-22: ISOS Pilot Mission Detailed Design – HOST component</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-23: ISOS Pilot Mission Detailed Design – Logistics component</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-24: ISOS Pilot Mission Detailed Design – satAPPs component</u>	22 May 2025	25 September 2025	RIA
Using Space on Earth – Telecommunications and Earth Observation			
<u>HORIZON-CL4-2025-02-SPACE-31: Digital enablers and building blocks for Earth Observation and Satellite telecommunication for Space solutions</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-32: Preparing demonstration missions for collaborative Earth Observation and Satellite telecommunication for Space solutions</u>	22 May 2025	25 September 2025	IA
Using Space on Earth – Earth Observation			
<u>HORIZON-CL4-2025-02-SPACE-41: Copernicus Climate Change Service (C3S) evolution: new and innovative processing and methods for future Sentinels and other satellites for reanalyses</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-42: Copernicus Atmosphere Monitoring Service (CAMS) evolution: improved soil-vegetation-atmosphere modelling and data assimilation of atmospheric constituents</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-43: Copernicus Anthropogenic CO₂ Emissions Monitoring & Verification Support (CO2MVS) capacity: new and innovative methods to estimate the impact of fires on vegetation and related carbon fluxes</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-44: Copernicus Marine Environment Monitoring Service (CMEMS) evolution: new and innovative ocean data assimilation techniques</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-45: Supporting the AI/ML digital transition of Copernicus Services</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-46: Innovative Earth observation services in support of maritime litter detection and ship source pollution policies</u>	22 May 2025	25 September 2025	IA
Boosting Space through non-dependence of the EU for key critical space technologies			
<u>HORIZON-CL4-2025-02-SPACE-71: Space Critical EEE Components for EU non-dependence – RISC-V Microprocessor on 7nm</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-72: Space Critical Equipment and Related Technologies for EU non-dependence – Chip Scale Atomic Clocks and Solar Cells</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-73: Space Critical EEE Components for EU non-dependence - Connectors</u>	22 May 2025	25 September 2025	RIA
<u>HORIZON-CL4-2025-02-SPACE-74: Space Critical EEE Components for EU non-dependence – Advanced Packages and Memories</u>	22 May 2025	25 September 2025	RIA

HORIZON EUROPE - Overview of the Topics 2025

Work Programme Cluster 4 "Digital, Industry and Space"



Boosting Space through international cooperation			
HORIZON-CL4-2025-02-SPACE-81: EU-Japan cooperation on the exploitation of Quantum Space Gravimetry data	22 May 2025	25 September 2025	RIA
Destination 6: Digital and industrial technologies driving human-centric innovation			
CALL: HORIZON-CL4-2025	Opening	Deadline	Type of Action
Virtual Worlds			
HORIZON-CL4-2025-03-HUMAN-14: Core technologies for virtual worlds (RIA) (Virtual Worlds and Photonics Partnerships)	10 June 2025	02 October 2025	RIA
HORIZON-CL4-2025-03-HUMAN-15: GenAI4EU: Generative AI for Virtual Worlds: Advanced technologies for better performance and hyper person-alised and immersive experience (IA) (AI/Data/Robotics & Virtual Worlds Partnerships)	10 June 2025	02 October 2025	IA
HORIZON-CL4-2025-03-HUMAN-16: Drive the evolution of the internet to-wards open and interoperable Web 4,0 and Virtual Worlds: building blocks in priority areas (RIA) (Virtual Worlds Partnership)	10 June 2025	02 October 2025	RIA
HORIZON-CL4-2025-03-HUMAN-17: Specific support for the Virtual Worlds Partnership and the Web 4,0 initiative (CSA) (Virtual Worlds Partnership)	10 June 2025	02 October 2025	CSA
AI-GenAI / Data / Robotics			
HORIZON-CL4-2025-03-HUMAN-18: GenAI4EU central Hub (CSA) (AI/Data/Robotics Partnership)	10 June 2025	02 October 2025	CSA
Standardisation and Knowledge Valorisation			
HORIZON-CL4-INDUSTRY-2025-01-HUMAN-60: Horizon Standardisation Booster	22 May 2025	23 September 2025	CSA
HORIZON-CL4-INDUSTRY-2025-01-HUMAN-61: Standardisation landscape analyses tool	22 May 2025	23 September 2025	CSA
HORIZON-CL4-INDUSTRY-2025-01-HUMAN-62: Artificial Intelligence for knowledge valorisation	22 May 2025	23 September 2025	CSA
HORIZON-CL4-INDUSTRY-2025-01-HUMAN-63: Value creation pilots for scaling up innovative solutions	22 May 2025	23 September 2025	CSA
HORIZON-CL4-INDUSTRY-2025-01-HUMAN-64: Pilot initiatives on Technology Infrastructures	22 May 2025	23 September 2025	CSA
HORIZON-CL4-INDUSTRY-2025-01-HUMAN-65: System innovation experimentation for Industry 5.0	22 May 2025	23 September 2025	IA
HORIZON-CL4-INDUSTRY-2025-01-HUMAN-66: Assessment of Technology Infrastructure needs in Ukraine	22 May 2025	23 September 2025	CSA

HORIZON EUROPE - Overview of the Topics 2025

Work Programme Cluster 4 "Digital, Industry and Space"



International Cooperation			
<u>HORIZON-CL4-2025-03-HUMAN-19: International cooperation in semiconductors</u>	10 June 2025	02 October 2025	CSA
<u>HORIZON-CL4-2025-04-HUMAN-08: GenAI for Africa</u>	10 June 2025	02 October 2025	RIA

Key:
RIA: Research and Innovation Action
IA: Innovation Action
CSA: Coordination and Support Action