





INSTITUTE OF SOLID STATE PHYSICS UNIVERSITY OF LATVIA

WP2026 TOPICAL AREAS



Sustainability and Collaboration

- Strengthen long-term sustainability of research infrastructures and human capital
- Foster synergies with other EU and national funding sources
- Encourage cooperation with industry and SMEs for innovation and reduced environmental footprint



Transnational Access

- Support both curiosity-driven and challenge-driven research
- Ensure integrated and sustainable access to state-ofthe-art facilities
- Balance user access with training and education



Open Science and FAIR Data

- Expand the EOSC Federation and promote FAIR principles
- Advance trusted, secure data sharing across disciplines
- Enable **EOSC uptake** by research communities and infrastructures



WORK **PROGRAMME** 2025



Innovation Ecosystmes

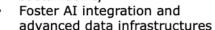




 Advance next-generation scientific instrumentation and digital tools

Strategic Initiatives





Promote risk management, mitigation, and research security

ERA Alignment

- Align with ESFRI, ERIC, and **ERA** policies
- Strengthen global partnerships and cooperation with Ukraine
- Enhance integration of widening and candidate countries











CLUSTER 4: ADVANCING DIGITAL, INDUSTRY AND SPACE

Areas of intervention

- Manufacturing technologies
- Key digital technologies including quantum technologies
- Emerging enabling technologies
- · Advanced materials
- · Artificial intelligence and robotics
- Next generation internet
- Advanced computing and Big Data
- · Circular industries
- Low carbon and clean industries
- · Space including earth observation

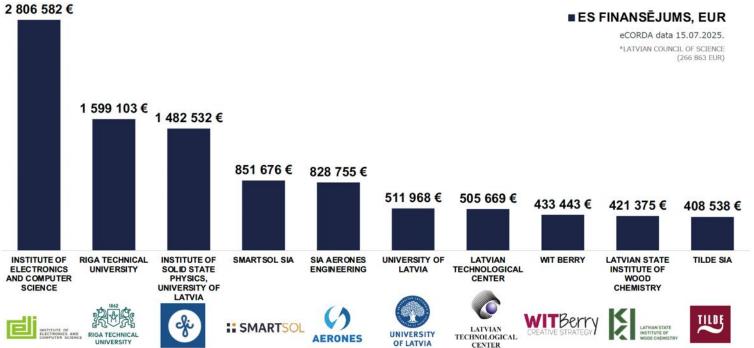


Cluster 4 Overview



CLUSTER 4 TOP 10 PARTICIPANTS







Destination: Leadership in materials and production for Europe

Innovative Advanced Materials-based Technologies

Opening date: 6 January 2026 Deadline: 21 April 2026

| Торіс | Title | | Type of action | TRL | EU contribution per project (EUR million) | Number of projects to be funded |
|--------------------------------------|-------|---|----------------|-----------------------------|---|---|
| HORIZON-CL4- 2026-05-MAT- PROD | 01 | New or enhanced Innovative Advanced Materials (IAM) enabled sensing functionality | RIA | from 3 to 5-6 | 8.00 | 3 |



Destination: Leadership in materials and production for Europe

Sustainable Advanced Materials, Raw Materials and Chemicals

Opening date: 16 December 2025

Deadlines: 17 March 2026 (1st stage), 13 October 2026 (2nd stage)

| Topic | Title | | Type of action | TRL | EU contribution per project (EUR million) | Number of projects to be funded |
|--------------------------------------|-------|---|----------------|-----|---|---|
| HORIZON-CL4- 2026-02-MAT- PROD | 21 | Development of safe and sustainable alternatives to substances of concern | IA | 5-7 | 6.00 to 7.50 | 6 |



Destination: Leadership in materials and production for Europe

Sustainable Advanced Materials, Raw Materials and Chemicals

Opening date: 6 January 2026 Deadline: 21 April 2026

| Topic | Title | | Type of action | TRL | EU contribution per project (EUR million) | Number of projects to be funded |
|--------------------------------------|-------|---|----------------|-----|---|---|
| HORIZON-CL4- 2026-02-MAT- PROD | 23 | Accelerating the discovery and development of chemicals and innovative advanced materials through digitalisation and artificial intelligence (Innovative Advanced Materials for the EU partnership) | IA | 5-7 | 13.00 | 4 |



Destination: Leadership in materials and production for Europe

Fast-tracking Circularity

Opening date: 6 January 2026 Deadline: 21 April 2026

| Торіс | IITIE | | Type of action | TRL | EU contribution per project (EUR million) | Number of projects to be funded |
|--------------------------------------|-------|---|-------------------|--------------------------------|---|---|
| | 01 | Advanced manufacturing for key products (Made in Europe partnership) | IA | 5-7 | 6.00 to 8.00 | 6 |
| HORIZON-CL4- 2026-01-MAT- PROD | 04 | Optimise the usage of resources in a circular economy (Processes4Planet and Clean Steel partnerships) | RIA | from 4-5 to 6 | 5.00 to 7.00 | 10 |
| | 05 | Circular innovative advanced materials: facilitating the transition from design to markets (Innovative Advanced Materials for the EU and Made in Europe partnerships) | RIA | from 4-5 to 6 | 5.00 to 6.50 | 7 |



Destination: Leadership in materials and production for Europe

Sustainable Advanced Materials, Raw Materials and Chemicals

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Destination: Leadership in materials and production for Europe

Disruptive technologies for carbon capture and clean energy use

Opening date: 6 January 2026 Deadline: 21 April 2026

| Topic | | | Type of action | TRL | EU contribution per project (EUR million) | Number of projects to be funded |
|--------------------------------------|----|---|----------------|--------------------------------|---|---|
| HORIZON-CL4- 2026-01-MAT- PROD | 31 | Efficient capture / purification / utilisation of CO2 for the production of competitive products (Processes4Planet partnership) | RIA | from 4-5 to 6 | 5.00 to 7.00 | 9 |



Destination: Achieving open strategic autonomy in digital and emerging enabling technologies

AI for manufacturing and energy-intensive industries

Opening date: 16 December 2025

Deadlines: 17 March 2026 (1st stage), 13 October 2026 (2nd stage)

| Topic | | | Type of action | TRL | EU contribution per project (EUR million) | Number of projects to be funded |
|--------------------------|----|--|----------------|-----------------------------|--|--|
| HORIZON-CL4- 2026-02- | 51 | AI improved advanced manufacturing and production processes in factories | RIA | from 4-5 to 6 | 4.00 to 6.00 | 5 |
| DIGITAL- EMERGING | 53 | Innovative AI methods and technologies for the process industries | RIA | from 4-5 to 6 | 4.00 to 6.00 | 5 |



Destination 3: Sustainable, secure and competitive energy supply

Opening: 18 December 2026

Deadline(s): 31 March 2026 (First Stage), 20 October 2026 (Second Stage)

| Topic | Title | Type of action | EU contribution per project (EUR million) | Number of projects to be funded |
|---|--|----------------|--|---------------------------------------|
| HORIZON-CL5- 2026-04-Two- Stage-D3-02 | Next generation of renewable energy technologies | RIA | 4.00 | 6 |



EIC WP2026 Pathfinder

Opening date: 5 February 2026 Deadline: 12 May 2026

| Торіс | Type of action, TRL | EU contribution per project (EUR million) | Indicative Budget (EUR million) |
|---------------------|--------------------------------|--|---------------------------------------|
| EIC Pathfinder OPEN | HORIZON EIC Grants, TRL 1-4 | up to 4M | 166 |

Opening date: 5 February 2026 Deadline: 28 October 2026

| Торіс | Type of action, TRL | EU contribution per project (EUR million) | Indicative Budget (EUR million) |
|---------------------------|--------------------------------|--|---------------------------------------|
| EIC Pathfinder CHALLENGES | HORIZON EIC Grants, TRL 1-4 | up to 4M | 96 |

2026 Challenge themes: Advanced Materials for Miniaturised Energy Harvesting Systems; Biotechnology for Healthy Ageing; DeepRAP: Deep Reasoning, Abstraction & Planning towards Trustworthy Cognitive AI Systems.



EIC WP2026 Transition

Opening date: 5 February 2026 Deadline: 16 September 2026

| Торіс | Type of action, TRL | EU contribution per project (EUR million) | Indicative Budget (EUR million) |
|----------------|----------------------------------|---|---------------------------------------|
| EIC Transition | HORIZON EIC Grants, TRL 3-5/6 | 0.5M to 2M | 100 |



EIC WP2026 Accelerator

Cut-offs (batches):

7 Jan, 4 Mar, 6 May, 8 Jul, 2 Sep, 4 Nov 2026 **Opening date: Continuous submission**

| Торіс | Type of action, TRL | EU contribution per project (EUR million) | Indicative Budget (EUR million) |
|----------------------|---|---|------------------------------------|
| EIC Accelerator OPEN | HORIZON EIC Accelerator Blended Finance, TRL 6-9 | Grant \leq 2.5 M + Investment 1–10 M | 414 |

| Topic | Type of action, TRL | EU contribution per project (EUR million) | Indicative Budget (EUR million) |
|----------------------------|---|---|------------------------------------|
| EIC Accelerator CHALLENGES | HORIZON EIC Accelerator Blended Finance, TRL 6-9 | Grant \leq 2.5 M + Investment 1-10 M | 220 |

2026 Challenge themes: Advanced Materials for Renewable Energy and Energy Storage; Alternative Concepts and Key Enabling Technologies for Fusion Power Plants; Biotech for Regenerating Agricultural Soils; Boosting the European Critical Raw Materials Value Chain; Deep Tech for Climate Adaptation.



Excellence Hubs



Opening date: 2 September 2026 Deadline: 4 March 2027

| Торіс | Type of action, TRL | EU contribution per project (EUR million) | Number of projects to be funded |
|---|------------------------|---|---------------------------------------|
| HORIZON-WIDERA-2026-03: Excellence Hubs | CSA | 1.5-4.5 EUR | 30 |

Mērķis: pārvarēt inovāciju plaisu ES valstu starpā, veidojot reģionālo inovāciju ekosistēmu tīklus, balstoties uz quadruple helix sadarbību

Galvenās darbības:

- attīstīt kopējus R&D stratēģiskos plānus;
- īstenot pilotprojektus, kas stiprina akadēmijas un uzņēmumu sadarbību;
- veicināt talantu piesaisti, u.c.

NACIONĀLAIS LĪMENIS PRAKTISKAS IEVIRZES PĒTĪJUMI



Atvērs: 2026.gada janvāris

Finansējuma apmērs: vienam projektam publiskā finansējuma maksimālais no 30 000~600 000 EUR + līdzfinansējums no pētniecības organizācijas un industrijas

Mērķis: atbalstīt praktiskas ievirzes un sadarbības pētījumu, tai skaitā starpdisciplināru pētījumu, īstenošanu, kuri virza RIS3 stratēģijas specializācijas jomu attīstību

Atbalstāmās darbības:

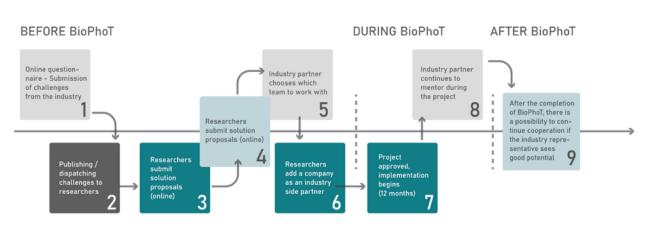
- tehniski ekonomiskā priekšizpēte;
- pētniecība (fundamentālie pētījumi, rūpnieciskie pētījumi, eksperimentālā izstrāde);
- tehnoloģiju tiesību aizsardzība;
- projekta ietvaros radīto zināšanu izplatīšana

BIOPHOT INDUSTRIJAS IZAICINĀJUMI



Joint process

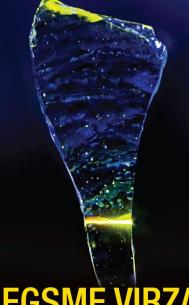




Industry







THANK YOU!

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