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Research Advisory Council

WG2 - Collaboration

15. January 2025

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WG2 Tasks

Teams	Tasks	Status and timeline
Collaboration structures	Towards FP10	Ongoing
Horizon Europe	<ul style="list-style-type: none">• Projects / programs• WP 2025-2027	Ongoing
IPR governance Vacant	Scope tbd	TBC
TRA2026	PC	Ongoing



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Towards FP10

The Draghi Report



- guide research and innovation policy
- too much on innovation – no research?
- excellence only?
- better coordination of public research and innovation expenditure across EU member states
- new funding instrument modelled based on US principles
- dual use (civil and military) innovation

The Heitor report



Specific recommendations for partnerships:

- co-programmed and Institutionalised Partnerships should have a stronger focus on EU industrial competitiveness, for a more focused and stronger impact of joint public & private RD&I investments.
- increase flexibility in implementation, transnational cooperation and reinforce the instrument's strategic role for policy implementation, capitalising on their critical mass.
- better align EU and national funding to allow EU-wide transnational collaboration within the co-funded partnerships.



The European Parliament - ITRE Commission draft position

Key recommendations

- **Stand-alone program** with a **higher budget** to fund 75% of excellent proposals structured in 3 parts: i) advance ERA reducing regional disparities; ii) create an EU competition of ideas; iii) support large-scale collaborative research initiatives.
- **User-oriented, science-led, effective and efficient programme in line with Heitor and Draghi findings**, with setting up the 4 councils proposed by Heitor.
- More space for **bottom-up research and innovation** (expanded ERC and EIC with **half of the budget of FP10**) as well small projects.
- **Strategic deployment** that require CBC collaboration through societal mission-oriented and technology mission-oriented programmes and JUs with 2.5 - 5 B€/each, managed the way EIC does.
- Part of the budget of FP10 should remain **available for higher TRL collaborative calls** to support strategic collaboration not covered in the other initiatives
- **Maintain civil nature** of Horizon Europe, with specific defence applications under the European Defence Fund.



The European Parliament - ITRE Commission draft position

Administrative Simplification:

- **Trust-first approach** and minimal information requirements for applications
- **Reduce lump sum** funding until proven beneficial
- Attention to **size of consortia**
- Recommends that **the application of the Do Not (Significant) Harm principle** is limited to projects which directly relate to environmental objectives



Towards FP10



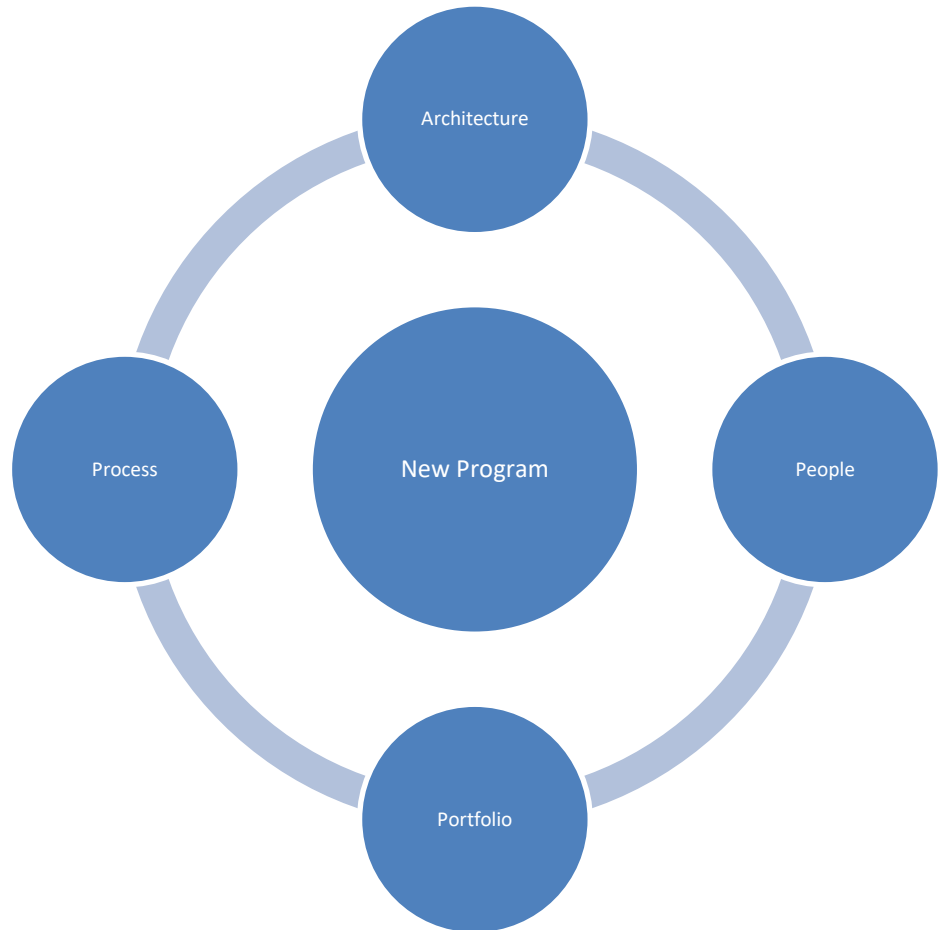
Key takeaways

- Principle of excellence
- Green and digital knowledge and technology
- Align EU and Member state investments
- Seamless interface: ERC-EIC-EIF
- Keep pillar structure
- Keep missions – split view
- Lump sum – split view
- Fair and transparent process
- Reduced number and simplification of instruments
- Partnerships – fewer with more focus; simpler procedures
- Exploit synergies in FP10
- Explore dual-use potential
- Widening measures to narrow innovation gaps
- Co-design and co-creation to deliver FP10 strategic plans



Towards FP10 - timeline

- Jan/Feb 2025: Analysis
- March 2025: Draft report
- April/May 2025: ERRAC WG2 report review
- June 2025: Report to ERRAC SC





ERJU Roadmap on the next JU

“Mission(s) for the future of the JU” working document handed over to the EC by Mr. Travaini in December 2024

- Highlights **strategic relevance of rail** ensured by the development of products and solutions within Europe, with both public and private investments, as well as the increased competition posed by **China** in the sector
- **JU is essential to harmonize efforts, reduce fragmentation, and foster innovation** and help achieve the Single European Rail Area (SERA) with a simplified, connected, and modernized rail system
- The primary objective is to **make rail systems more agile, resilient, and competitive**, with increased and new collaborative R&I focused efforts, as well as new pre-deployment European actions
- The **JU reduces fragmentation and ensures EU-wide standardization**, shared risk and coordinated investments, and **leverages public and private funding** for scalability
- Planned investment include
 - €3B in R&I: Modular, standardized innovations.
 - €15B in Pre-Deployment: Large-scale implementation and testing.



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Preparation TRA 2026

- latest PC 18th November
- content discussion
 - focus on road, air and water
 - where is rail?
- sessions yet to come ...
- next MC, late November
 - oppose content and revert to PC
- next PC Q1 2025



TRA2026_PC2_meeting.pdf



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Preparation TRA 2026

Conference topics

1. User-Centered Mobility

- Transport Policy
- Transport Safety
- Inclusive Mobility
- Active Travel Modes
- Shared Mobility Solutions

3. Green Mobility and Decarbonization

- Zero Emission Vehicles
- Electrification and Alternative Fuels
- Greening Freight Transport
- Circular Economy
- Climate Neutral Smart Cities

2. Planning and Operation

- Resilient Infrastructure
- Urban Management
- Logistics Solutions
- Decision Support Analysis
- Transportation Economics

3. Transport Digitalization

- Automated Mobility
- Connected Transport Systems
- Big Data Analysis
- Mobility as a Service
- Predictive Transport Solutions



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Preparation TRA 2026

Deadlines

- **full paper submission deadline: 2025. September (October)**
- full paper review notification of acceptance: 2026. January
- **final paper submission: 2026. March**
- early bird registration: 2026. March
- **conference: 2026. May**
- journal submission: 2026. September





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Scouting EU funding opportunities for R&I



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QI 2025 (WP 2024)



Horizon Europe, Cluster 5 – Climate, Energy and Mobility

Infrastructure

[HORIZON-CL5-2024-D4-02-03](#) BIM-based processes and digital twins for facilitating and optimising circular energy renovation (Built4People Partnership).
04/02/2025 , budget per grant: **4 M€**

Space-based

[HORIZON-CL5-2024-D4-02-04](#) Design for adaptability, re-use and deconstruction of buildings, in line with the principles of circular economy (Built4People Partnership)
04/02/2025, budget per grant: **4 M€**

Energy

[HORIZON-CL5-2024-D3-02-06](#) Innovative, Community-Integrated PV systems
04/02/2025, budget per grant: **5 M€**

Energy

[HORIZON-CL5-2024-D3-02-05](#) PV-integrated electric mobility applications.
04/02/2025 , budget per grant: **7 M€**



BIM-based processes and digital twins for facilitating and optimising circular energy renovation (Built4People Partnership).



BIM, Digital Twins, Energy



Submission deadline: **04/02/2025**



[HORIZON-CL5-2024-D4-02-03](#)



Budget per grant: **4 M€**

TRL 6-8

IA – Innovation Action

Plus: **Lump sum**



Expected Outcomes: (all)

- Reduced buildings construction and renovation time and costs.
- Increased buildings material reuse and recycling.
- Improvement of buildings performance (energy, sustainability including whole life-cycle carbon and the potential to store carbon in built works, comfort, health and well-being, and accessibility).
- Enhanced, interoperable and accessible buildings information across the lifecycle.
- Improvement of interoperability with existing Building Information Modelling (BIM) and Digital Twin solutions.
- Broader application of BIM and Digital Twin solutions, in particular within SMEs.





Design for adaptability, re-use and deconstruction of buildings, in line with the principles of circular economy (Built4People Partnership)



Circular, buildings



Submission deadline: **04/02/2025**



[HORIZON-CL5-2024-D4-02-04](#)



Budget per grant: **4 M€**



TRL 6

RIA – Research and Innovation Action



Expected Outcome: (ALL)

- Improved **adaptability of buildings and building units to new uses.**
- Increased **reuse and recycling** of building elements and products.
- Extended service **life** of buildings.
- Increased awareness on best practices for **design for adaptability**, reuse and deconstruction.



Innovative, Community-Integrated PV systems



Civil engineering infrastructure



Submission deadline: **21/01/2025**



[HORIZON-CL5-2024-D3-07-06](#)

04/02/2025



Budget per grant: **5 M€**



TRL 6-7

IA –Innovation Action



Expected Outcome:

PV is growing fast, from domestic and commercial, up to utility scale systems. In the years ahead PV systems and solutions will be an integral contributor of distributed generation, pivotal in building functional energy communities, aggregated and operated through advance distributed controls in hierarchical set up with the integrated grid.

Project results are expected to contribute to all of the following expected outcomes:

- Increase the profitability and penetration of PV systems in renewable energy communities.
- Engage actively citizens and communities in the clean energy transition in particular through the uptake of energy cooperatives and the development of decentralized platforms.



PV-integrated electric mobility applications.



Energy



Submission deadline: **04/02/2025**



[HORIZON-CL5-2024-D3-02-05](#)



Budget per grant: **7 M€**

TRL 6-7



IA –Innovation Action



Expected Outcome:

Photovoltaic power generation is pivotal to a clean energy system and the achievement of the net zero-emissions target. To this end, it is important to enhance affordability, sustainability and exploit the modularity and synergies of application of PV technologies.

Consequently, project results are expected to contribute to all of the following expected outcomes:

- Open new market opportunities for Vehicle-Integrated Photovoltaics (VIPV) in road transport.
- Reduce usage of the electricity grid and increase the range of electric vehicles.
- Cost and energy efficient climate-neutral road transport.



Horizon Europe, Missions

Net zero cities



[HORIZON-MISS-2024-CIT-01-04](#) Integrated peri-urban areas
in the transition towards climate neutrality
11/02/2025, budget per grant: **9 M€**

Net zero cities



[HORIZON-MISS-2024-CIT-01-01](#) Rethinking urban spaces
towards climate neutrality
11/02/2025, budget per grant: **15 M€**



Net zero cities



Submission deadline: **11/02/2025**



HORIZON-MISS-2024-CIT-01-04



Total budget: **28 M€**



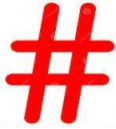
Type of Action: **IA**

TRL 7



Expected Outcome:

- Increase accessibility and connectivity of peri-urban areas by providing inclusive, suitable and affordable sustainable transport modes, reduction of GHG emissions, improvement of air quality and noise reduction
- Improved transport peri-urban network performance (demand and supply) and transport connectivity through enhanced interoperability and multimodality;
- Inclusive mobility solutions that respond to the needs of all peri-urban inhabitants
- Optimize and improve the use of the existent infrastructure
- Integrated land-use and transport planning models and policies.



Net zero cities



Submission deadline: **11/02/2025**



HORIZON-MISS-2024-CIT-01-01



Total budget: **45 M€**



Type of Action: **IA**

TRL 7



Expected Outcome:

- Mobility and/or energy solutions that respond to people's and cities' needs co-designed with local authorities, citizens, and stakeholders, tested and implemented in cities to achieve climate neutrality by 2030.
- Improve overall urban public space connectivity and the accessibility of different urban districts/neighbourhoods/industrial districts by integrating/embedding multimodality and shared services within the street/urban public space layout and infrastructure.
- Creation of smart energy and/or transport services management in cities thanks to digitalisation and consumer awareness related to smart charging and energy demand response



Updates on next HE WP

Draft Work Programme 2025

Cluster 5 - Climate, Energy and Mobility

Version 29 October 2024

Apr 2024

May
2024

Jun
2024

Oct
2024

Orientation

- Expected impacts and outcomes

1st draft

- Topic texts

2nd draft

- Complete info

3rd draft

- New COM's priorities

DISCLAIMER

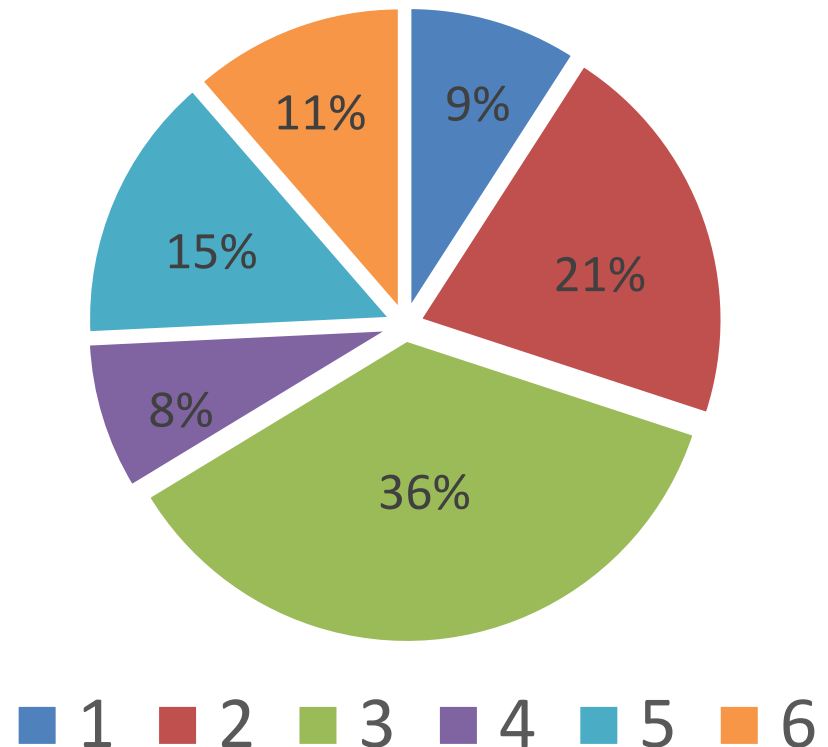
This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

Updates on next HE WP – draft CL5

Destinations

1. Climate sciences and responses for the transformation towards climate neutrality
2. Cross-sectoral solutions for the climate transition
3. Sustainable, secure and competitive energy supply
4. Efficient, sustainable and inclusive energy use
5. Clean and competitive solutions for all transport modes
6. Safe Resilient Transport and Smart Mobility services for passengers and goods

CL5 destination budget
1060,1M€





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First selection of calls from the draft WP 2025

Cluster 5 – Climate, Energy and Mobility



Horizon Europe, Cluster 5 – Climate, Energy and Mobility

Cluster	Call opening	Call closing	Infoday
Cluster 5	<ul style="list-style-type: none">▪ HORIZON-CL5-2025-01: 14/04/2025▪ HORIZON-CL5-2025-02: 15/04/2025▪ HORIZON-CL5-2025-03: 14/04/2025▪ HORIZON-CL5-2025-04: 14/04/2025▪ HORIZON-CL5-2025-05: 15/04/2025	<ul style="list-style-type: none">▪ HORIZON-CL5-2025-01: 04/09/2025▪ HORIZON-CL5-2025-02: 16/09/2025▪ HORIZON-CL5-2025-03: 24/09/2025▪ HORIZON-CL5-2025-04: 13/01/2026▪ HORIZON-CL5-2025-05: 17/02/2026	6/05/2025 (TBC)



Horizon Europe, Cluster 5 – Climate, Energy and Mobility

Net zero Industry

[HORIZON-CL5-2025-02-D2-12](#): Net Zero Industry Act regulatory sandbox exchange forum support
Deadline **TBD** – budget per grant: **0,5 M€**

TRA

[HORIZON-CL5-2025-01-D5-18](#): Support to the organisation and dissemination of the Transport Research Arena (TRA) conference
Deadline **TBD** – budget per grant: **1,6 M€**

Resilient Infrastructure

[HORIZON-CL5-2026-01-D6-07](#): Innovative construction and maintenance, with the use of new materials and techniques, for resilient and sustainable transport infrastructure
Deadline **TBD** – budget per grant: **22 M€**

Freight digital innovation

[HORIZON-CL5-2026-01-D6-08](#): Accelerating freight transport and logistics digital innovation
Deadline **TBD** – budget per grant: **15 M€**

Transport emissions

[HORIZON-CL5-2026-01-D6-09](#): Reliable data and practices to measure and calculate transport emissions in multimodal transport chains
Deadline **TBD** – budget per grant: **3,5 M€**

Multimodality, Freight

[HORIZON-CL5-2026-01-D6-10](#): Integrating inland waterway transport in smart shipping and multimodal logistics chains



Calls to be proposed in WP 2026-27

1. How to define the relevant list topics to be proposed?
 - RRIA Strategic Priorities (01-Resilience, net zero and competitiveness; 02-Understanding system interdependencies; 03-People-centric railways)
 - EU-RAIL 2° wave topic selection process
 - Other method
2. Shall topics that are not covered by EU RAIL/not exclusively rail-related (i.e. transversal topics such as environmental and social topics, technologies that are equally relevant for transport modes, intermodality, as in WP2025) be considered?
3. How to perform the selection process of topics (methodology and deadlines)?
4. How to submit the topics to the EC?



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Next WG meeting

proposed date (online):

- End of February 2025



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Finally ...

**Whoever you are, whatever you
do, you have a role to play.**

WG2 needs your brilliance!

Contact: johan.jonsson@trafikverket.se



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Thank you for listening!

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