



TECHNOLOGICKÉ
CENTRUM AV ČR

MOBILITA V PROGRAMU HORIZONT EVROPA

—
Martin Škarka



Pillar 1

Excellent Science

European Research Council

Marie Skłodowska-Curie
Actions

Research Infrastructures

Pillar 2

Global Challenges and European Industrial Competitiveness

Clusters

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre

Pillar 3

Innovative Europe

European Innovation Council

European innovation
ecosystems

European Institute of
Innovation
and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

ROZPOČET PROGRAMU HORIZONT EVROPA

- Rozpočet programu Horizont Evropa: 95.5 miliard € (2021-2027) – navýšení o 30 % oproti H2020

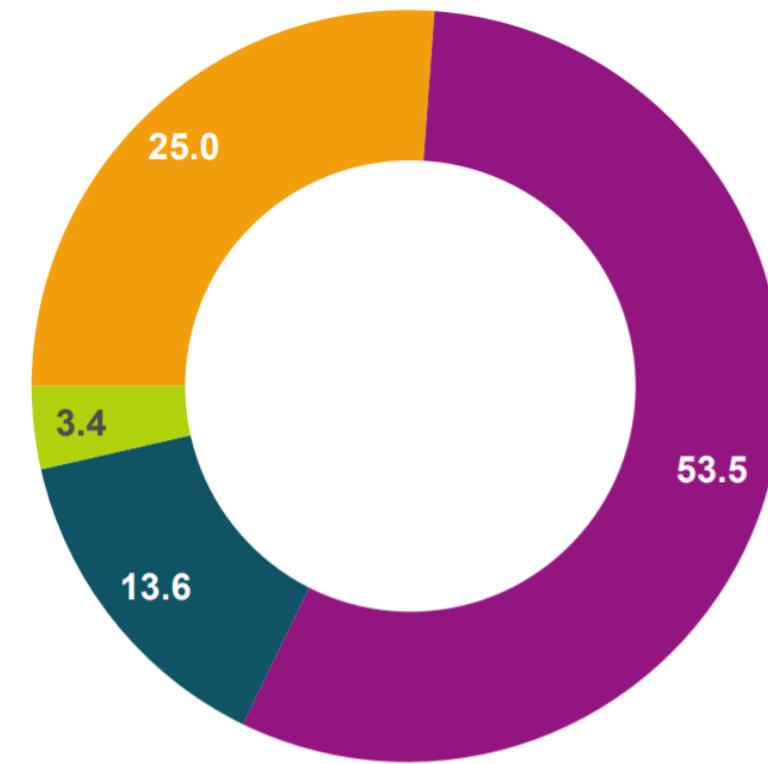
(včetně 5.4 miliard € z NGEU – Next Generation Europe – programme of EU for Recovery from COVID-19 crisis)

- ❖ Vynikající věda – 25 mld. €
- ❖ Globální výzvy a konkurenceschopnost průmyslu - 53,5 mld. €
- ❖ Inovativní Evropa – 13,6 mld. €
- ❖ Rozšiřování účasti a ERA – 3,4 mld. €



- Rozpočet programu Euratom:

1,38 mld. € (2021 – 2025)



PRACOVNÍ PROGRAM KLASTRU 5 – PŘEHLED (ZDROJ: EK)

Destination 1 – Climate science

Climate science

Destination 2 – Cross-cutting solutions

Batteries

Cities

Breakthrough technologies

Citizen and stakeholder engagement

Destination 3 – Energy supply

Renewable energy

Energy system, grids and storage

CCUS

Cross-cutting activities

Destination 4 – Energy demand

Buildings

Industry

Destination 5 - Clean and competitive solutions for all transport modes

Zero-emission road transport

Aviation

Waterborne transport

Transport-related health and environmental issues

Destination 6 - Transport and Smart Mobility services

Connected, Cooperative and Automated Mobility

Multimodal and sustainable transport systems for passengers and goods

Safety and resilience



TYPY PROJEKTŮ

Výzkumné a inovační akce (Research and Innovation action, RIA) se zaměřují primárně na výzkum.

Inovační akce (Innovation action, IA) jsou zaměřeny především na demonstrační aktivity a pilotní ověřování a směřují tak více k tržnímu uplatnění výsledků výzkumu.

Koordinační a podpůrné akce (Coordination and Support action, CSA). Typicky se jedná o projekty mapující určité vědeckovýzkumné oblasti nebo o projekty zaměřené na pořádání informačních a networkingových akcí.

Projekty **RIA a CSA** standardně nabízejí **100%** míru financování,

U projektů **IA** platí snížená sazba financování ve výši 70% z celkových způsobilých nákladů. Neziskovým subjektům je však ponecháno 100% financování,



KLASTR 5 – D5: ČISTÁ A KONKURENCESCHOPNÁ ŘEŠENÍ PRO VŠECHNY DRUHY DOPRAVY

4 základní zaměření:

- Zero-emission road transport
- Aviation
- Waterborne Transport
- Impact of transport on environment and human health
- Platí pro léta 2022, 2023, 2024



KLASTR 5 – D6 :BEZPEČNÉ A ODOLNÉ SLUŽBY V DOPRAVĚ A CHYTRÉ MOBILITĚ PRO CESTUJÍCÍ A ZBOŽÍ;

3 základní zaměření:

- Connected, cooperative and automated mobility (CCAM)
- Multimodal and sustainable transport systems for passengers and goods
- Safety and resilience – per mode and across all transport modes
- Platí pro léta 2022, 2023, 2024



KLASTR 5 – UZÁVĚRKY 2022

Destination 5 - Clean and competitive solutions for all transport modes

Výzva HORIZON-CL5-2022-D5-01 pro rok 2022 s uzávěrkou 26.4.2022; 14 témat; 253 mil. €

Destination 6 - Safe, Resilient Transport and Smart Mobility services for passengers and goods

Výzva HORIZON-CL5-2022-D6-02 pro rok 2022, uzávěrka 6.9.2022 (ot. 28.4.2022); 7 témat; 91 mil. €



DESTINATION 6 – SLUŽBY 2022

Výzva HORIZON-CL5-2022-D6-02 pro rok 2022, uzávěrka 6.9.2022

| HORIZON-CL5-2022-D6-02-01 | Logistics networks integration and harmonisation through operational connectivity to optimise freight flows and drive logistics to climate neutrality | IA | 7.00 to 8.00 | 15 | 2 |
|---------------------------|--|-----|---------------|----|---|
| HORIZON-CL5-2022-D6-02-02 | Urban logistics and planning: anticipating urban freight generation and demand including digitalisation of urban freight | IA | 7.00 to 8.00 | 15 | 2 |
| HORIZON-CL5-2022-D6-02-03 | Smart enforcement for resilient, sustainable and more efficient transport operations | RIA | Around 4.00 | 8 | 2 |
| HORIZON-CL5-2022-D6-02-04 | Accelerating the deployment of new and shared mobility services for the next decade | IA | 8.00 to 10.00 | 20 | 2 |
| HORIZON-CL5-2022-D6-02-05 | Advanced multimodal network and traffic management for seamless door-to-door mobility of passengers and freight transport | RIA | 4.00 to 5.00 | 15 | 3 |
| HORIZON-CL5-2022-D6-02-06 | Smart and efficient ways to construct , maintain and decommission with zero emissions from transport infrastructure | IA | Around 5.00 | 10 | 2 |
| HORIZON-CL5-2022-D6-02-07 | New concepts and approaches for resilient freight transport and logistics networks against disruptive events (including pandemics) | RIA | Around 4.00 | 8 | 2 |

S

Adaptation to climate change, including societal transformation



**Healthy
oceans,
seas,
coastal
and inland
waters**



Mission areas



Cancer

**Climate-neutral
and smart cities**



**Soil health
and food**

MISE MĚSTA - VÝZVY

- Call - Research and Innovation actions to support the implementation of the Climate neutral and Smart Cities Mission HORIZON-MISS-2021-CIT-02
 - Opening: 11 Jan 2022 Deadline(s): 26 Apr 2022
 - HORIZON-MISS-2021-CIT-02-01: Urban planning and design for just, sustainable, resilient and climate-neutral cities by 2030
 - HORIZON-MISS-2021-CIT-02-02: Unleashing the innovation potential of public transport as backbone of urban mobility
 - HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform
 - HORIZON-MISS-2021-CIT-02-04: Positive Clean Energy Districts
 - HORIZON-MISS-2021-CIT-02-05: Global cooperation and exchange on urban climate neutrality



MISE MĚSTA - VÝZVY

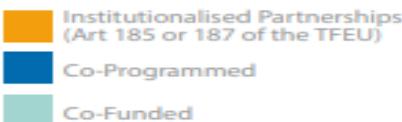
- Call - Research and Innovation actions for support the implementation of the Climate neutral and Smart Cities Mission HORIZON-MISS-2022-CIT-01
- Opening: 28 Apr 2022 Deadline(s): 06 Sep 2022
- HORIZON-MISS-2022-CIT-01-01: Designing inclusive, safe, affordable and sustainable urban mobility



OVERVIEW OF 49 CANDIDATE EUROPEAN PARTNERSHIPS

PILLAR II - Global challenges & European industrial competitiveness

| CLUSTER 1: Health | CLUSTER 4: Digital, Industry & Space | CLUSTER 5: Climate, Energy & Mobility | CLUSTER 6: Food, Bioeconomy, Agriculture,... |
|---|---|--|--|
| Innovative Health Initiative | Key Digital Technologies | Clean Hydrogen | Circular Bio-based Europe |
| Global Health Partnership | Smart Networks & Services | Clean Aviation | Rescuing Biodiversity to Safeguard Life on Earth |
| Transforming Health Care Systems | High Performance Computing | Single European Sky ATM Research 3 | Climate Neutral, Sustainable and Productive Blue Economy |
| Risk Assessment of Chemicals | European Metrology (Art. 185 of the TFEU) | Europe's Rail | Water4All "Water security for the planet" |
| ERA for Health | Artificial Intelligence, Data and Robotics | Cooperative, Connected and Automated Mobility (CCAM) | Animal Health and Welfare* |
| Rare Diseases* | Photonics | Batteries "Towards a competitive European industrial battery value chain" | Agroecology "Accelerating Farming Systems Transition"** |
| One Health / Antimicrobial Resistance* | Made in Europe | Zero-emission Waterborne Transport | Agriculture of Data* |
| Personalised Medicine* | Clean Steel - Low Carbon Steelmaking | Zero-emission Road Transport (2ZERO) | Safe and Sustainable Food Systems* |
| Pandemic Preparedness* <i>Co-funded or co-programmed</i> | Processes4Planet | People-centric Sustainable Built Environment (Built4People) | |
| | Globally Competitive Space Systems** | Clean Energy Transition | |
| | | Driving Urban Transitions to a Sustainable Future | |



 * Calls with opening dates in 2023-24

 ** Calls with opening dates not before 2022



11 EVROPSKÝCH PARTNERSTVÍ V KLASTRU 5

Institucionalizovaná partnerství:

- European Partnership for Transforming Europe's rail
- European Partnership for Integrated Air Traffic Management (ATM)
- European Partnership for Clean Aviation
- European Partnership on Clean Hydrogen

Společně programovaná partnerství:

- European Partnership for People-centric sustainable built environment (**Built4People**)
- European Partnership – Towards zero-emission **road** transport (2ZERO)
- European Partnership on Connected and **Automated Driving** (CCAM)
- European Partnership on zero-emission waterborne transport (ZEWWT)
- European Partnership for an Industrial Battery Value Chain

Společně financovaná partnerství:

- European Partnership – driving **urban** transitions to a sustainable future (**DUT**)
- European Partnership for Clean Energy Transition (CET)



HORIZON EUROPE WORK PROGRAMME 2023-2024

- Neoficiální a neschválený návrh pro klastr 5 Climate, Energy and Mobility a další klastry
- Version 28 January 2022
- Neobsahuje termíny a rozpočty
- Obsahuje návrh témat na roky 2023 a 2024
- Členění shodné jako u WP na 2022 :
- Doprava v destinacích 5 (řešení) a 6 (služby)
- Destinace 5 – **silniční, letecká a lodní doprava a vliv na zdraví**
- Destinace 6 – **autonomní doprava,**
 - multimodální doprava, infrastruktura a logistika
 - **bezpečnost a odolnost**
- https://sciencebusiness.net/sites/default/files/inline-files/Cluster%205%20WP%202023-2024_1st%20draft_2022-01-28_PC.pdf



VÝZVA DESTINATION 5 – 2023

Zero-emission road transport

D5-1-3 User-centric design and operation of **ZEV** for optimized energy efficiency (2023)

D5-1-4 B - Innovative **battery** management systems for next generation vehicles (2Zero & Batteries Partnership) (2023)

D5-1-5 User-centred and co-designed shared, automated and zero-emission **mobility systems** and services for people and goods (2Zero, CCAM and Cities' Mission) (2023)

D5-1-6. Frugal zero-emissions vehicles concepts for the **urban** transport challenge (2023)

D5-1-7. **Circular economy** approaches for zero emission vehicles (2023)

D5-1-11. Measuring road transport results towards 2Zero KPIs

D5-1-12. EU Member States research policy cooperation network to accelerate zeroemission road mobility (2023)

VÝZVA DESTINATION 6 – 2023

Connected, Cooperative and Automated mobility

D6-1-2. User-centric development of vehicle technologies & services to optimise the **onboard experience** and ensure inclusiveness (2023, RIA, TRL 5)

D6-1-3. Generation of scenarios for development, training, virtual testing and validation of **CCAM systems** (2023, RIA, TRL 5)

D6-1-5. Infrastructure-enabled solutions (e.g. Digital Twins) for improving the continuity or extension of **Operational Design Domains** (ODDs) (2023, IA, TRL 6-7)

D6-1-8. Integrating European diversity in the design, development and implementation of CCAM solutions to support mobility equity (2023, RIA)

D6-1-9. **CCAM effects on jobs** and education, plans for skills that match the CCAM development, and prerequisites for employment growth (2023, RIA)

VÝZVA DESTINATION 6 – 2023

Safety and resilience : Safety in Urban Areas/ Road Transport Safety

D6-3-1. Effects of disruptive changes on transport safety issues (2023)

D6-3-2. Establishing a framework to improve traffic safety culture in the EU (2023)

D6-3-3. Better infrastructure safety on urban and secondary rural roads throughout a combination of adaptable monitoring and maintenance solutions (2023)

PORTÁL EK: FUNDING & TENDER OPPORTUNITIES

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

The screenshot shows the European Commission's Funding & tender opportunities portal. At the top, there is a navigation bar with links for SEARCH FUNDING & TENDERS, HOW TO PARTICIPATE, PROJECTS & RESULTS, WORK AS AN EXPERT, and SUPPORT. The main content area displays a list of funding and tender opportunities under the heading "Funding and tenders (8)". Three specific grants are listed:

- ERC STARTING GRANTS**
Open for submission
Programme: Horizon Europe (HORIZON)
ID: ERC-2021-STG
Types of action: HORIZON ERC Grants
Deadline model: single-stage
Opening date: 25 February 2021
Deadline date: 08 April 2021 17:00:00 Brussels time
- EU Prize for Women Innovators**
Open for submission
Programme: Horizon Europe (HORIZON)
ID: HORIZON-EIC-2021-WomenInnovatorsPrize
Types of action: HORIZON Recognition Prize
Deadline model: single-stage
Opening date: 18 March 2021
Deadline date: 30 June 2021 17:00:00 Brussels time
- The European Capital of Innovation Awards**
Open for submission
Programme: Horizon Europe (HORIZON)
ID: HORIZON-EIC-2021-CapitalOfInnovationAwards
Types of action: HORIZON Recognition Prize
Deadline model: single-stage
Opening date: 18 March 2021
Deadline date: 30 June 2021 17:00:00 Brussels time

On the left side, there is a sidebar with a search bar, checkboxes for "Match whole words only", "GRANTS", and "TENDERS", and dropdown menus for "Submission status" (Forthcoming, Open for submission, Closed) and "Programming period". The "Programme" dropdown is set to "Horizon Europe (HORIZON)".

▪ Registrace

- ✓ jedince, organizace
- ✓ management projektu

▪ Search Funding and Tenders

- ✓ hledání podle klíčových slov či struktury programu

▪ How to Participate

Reference Documents

- ✓ pracovní programy
- ✓ šablony
- ✓ modelová grantová dohoda

WWW.HORIZONTEVROPA.CZ

Portál Horizont Evropa x + horizontevropa.cz/cs

Aplikace mail tc istec Chicago Mafia & Al... TV program – prog... The Lost Capone 19... Blood In Blood Out... Thriller Chrimie Mov... Ostatní záložky Seznam četby

HORIZONT EVROPA

Naše služby Projekt od A do Z Právní a finanční aspekty

Hodnocení rámcových programů Malé a střední podniky

Program Horizont Evropa a ERA

Excelentní věda Globální výzvy a konkurenčeschopnost Inovativní Evropa

Rozšiřování účasti a posilování ERA Euratom Mise

Sem zadejte hledaný výraz

5°C 14:02 05.02.2022



[HTTPS://WWW.HORIZONTEVROPA.CZ/CS/PUBLIKACE/YIIFPUBLICATIONS/2/HORIZONT-EVROPA---STRUCNE-O-PROGRAMU](https://www.horizontevropa.cz/cs/publikace/yiifpublications/2/horizont-evropa---strucne-o-programu)

HORIZONT EVROPA **Stručně o programu**

Kolektiv autorů Národního informačního centra
pro evropský výzkum TC AV ČR

Vydalo Technologické centrum AV ČR s podporou projektu
CZERA 3 – Česká republika v Evropském výzkumném prostoru 3
financovaného MŠMT z programu INTER-EXCELLENCE

Grafický návrh obálky MgA. Martin Procházka, Creature.cz
Tisk Art-D – Grafický ateliér Černý s. r. o.





DĚKUJI ZA POZORNOST!

Martin Škarka

NCP European Innovation Council

NCP Mobility

+420 234 006 113; 724 353 608

skarka@tc.cz