



Horisont Europa

EUROPAS NESTE FORSKNINGS- OG INNOVASJONSPROGRAM (2021 – 2027)

Idun Lyngstad NCP offentlig sektor Forskningsrådet





Horisont Europa, 96 mrd euro Globale utfordringer og **Innovativt** Fremragende forskning konkurransedyktig næringsliv Europa (25 mrd. euro) (54 mrd. euro) (14 mrd. euro) Det europeiske 1. Helse (8,2 mrd. euro) Det europeiske innovasjonsrådet (EIC) 2. Kultur, kreativitet og forskningsrådet (ERC) (10,1 mrd. euro) (16,0 mrd. euro) inkluderende samfunn (2,3 mrd. euro) 3. Samfunnssikkerhet (1,6 mrd. euro) Økosystemer for 4. Digitalisering, næringsliv innovasjon og romvirksomhet (15,3 mrd. euro) (0,5 mrd. euro) Marie Skłodowska-Curie 5. Klima, energi og mobilitet (15,1 mrd. euro) **Actions (MSCA)** Det europeiske (6,6 mrd. euro) Mat, bioøkonomi, naturressurser, landbruk instituttet for og miljø (9,0 mrd. euro) innovasjon og teknologi Forskningsinfrastruktur (EIT) EUs felles forskningssentre (JRC) (2,0 mrd. euro) (2,4 mrd. euro) (3,0 mrd. euro)

Bredere deltakelse og styrking av Det europeiske forskningsområdet (3,4 mrd. euro)

Bredere deltakelse og spredning av fremragende kvalitet (3,0 mrd. euro) Reformere og forbedre det europeiske forsknings- og innovasjonssystemet (0,4 mrd. euro)

Horisont 2020 prosjekttyper:

Koordinerings- og støtteprosjekt (nettverksprosjekt):

• Eksempel: ARCSAR (samfunnssikkerhet)

Kunnskapsutviklingsprosjekt (m/noe pilotering og demonstrasjon):

• Eksempel: ULaaDS (mobilitet/transport))

Piloterings- og demonstrasjonsprosjekt:

Eksempel: MOVE21 (mobilitet/transport)

Førkommersielt anskaffelsesprosjekt (=anskaffelse av forskningsbaserte innovasjoner/løsninger):

• Eksempel: AI4CITIES (KI for å bli mer klimanøytrale)





Urban Logistics as an on-Demand Service:

Innovativ, delt nullutslippslogistikk for å møte virkninger av ondemand-økonomien:

Inspirert av Cargohitching-teorien designes integrerte (mennesker og gods) transportnettverk.

To virkemidler er identifisert,

- delt infrastruktur lokalisert i forskjellige bymiljøer, (utgjør en horisontal plattform som samler transportstrømmer),
- delte kjøretøy for å optimere det urbane transportnettverket og redusere trafikken i sentrum.

Begge deler vil bidra til å redusere miljø- og rombelastningen.

3 pilotbyer: Bremen, Mechelen og Groningen

4 satelitt/følge byer: Rome, Edinburgh, L'Hospitalet og Bergen







Cluster 5 Work programme - overview

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

Transportrelated 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



European Commission

Cluster 5 Climate, energy and mobility

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

<u>The expected impact</u>, in line with the Strategic Plan, is to contribute to "Safe, seamless, smart, inclusive, resilient and sustainable mobility systems for people and goods thanks to user-centric technologies and services including digital technologies and advanced satellite navigation services", notably through:

- a) Accelerating the implementation of innovative connected, cooperative and automated mobility (CCAM) technologies and systems for passengers and goods.
- b) Further developing a multimodal transport system through sustainable and smart longhaul and urban freight transport and logistics, upgraded and resilient physical and digital infrastructures for smarter vehicles and operations, for optimised system-wide network efficiency.
- c) Drastically decreasing the number of transport accidents, incidents and fatalities towards the EU's long-term goal of moving close to zero fatalities and serious injuries by 2050 even in road transportation (Vision Zero) and increase the resilience of transport systems.

Opening: 28 Apr 2022

Deadline: 06 Sep 2022

Topics	Type of Action	(EUR	Expected EU contribution per project (EUR million)	expected to be
HORIZON-CL5-2022-D6-02-04	IA	20.00	8.00 to 10.00	2
HORIZON-CL5-2022-D6-02-06	IA	10.00	Around 5.00	2

HORIZON-CL5-2022-D6-02-02: Urban logistics and planning: anticipating urban freight generation and demand including digitalisation of urban freight

Expected Outcome:

Project results are expected to contribute to <u>all</u> of the following outcomes:

- Take up and upscaling of data driven logistics solutions and planning in the living labs involved in the proposals
- Optimal mix distribution of land uses both in city centres and peripheries
- Improved local authority capacity in the managing and collection of data, estimation and measurements of the impacts
- Optimize shared transport facilities for goods through smart solutions.
- Improved space management and urban planning.
- Demonstrate and deploy economically viable and sustainable solutions driven by relevant technologies
- Demonstrate the convenience of consolidation, consistent with the full planning of loading and unloading spaces, to deliver the services and the goods.
- New or upgraded sustainable urban logistics plan that includes the main stakeholders

HORIZON-CL5-2022-D6-02-02: Urban logistics and planning: anticipating urban freight generation and demand including digitalisation of urban freight

Scope:

There is a gap for purpose-oriented freight data collection in cities to support their decision making towards sustainability targets such as climate neutrality, air quality, road safety reducing congestion and better use of public space.

A more efficient policymaking on urban freight logistics **requires cities to enhance their data collection capabilities**, while private logistics or e-commerce (like food delivery) companies and services should be encouraged to share data.

- Proposals may include preparatory, take up and replication actions, research activities, as well
 as tools to support local planning and policy making.
- Funding for major infrastructure works is <u>not</u> eligible.
- A demonstrated contribution to the implementation of the cities' **Sustainable Urban Mobility Plans** is expected.

HORIZON-CL5-2022-D6-02-04: Accelerating the deployment of new and shared mobility services for the next decade

Expected Outcome: Project results are expected to contribute to <u>all</u> of the following expected outcomes:

<u>Developing and pilot testing at least three different business models scenarios</u> based on collaboration platforms or public-private partnerships/project, each of them contributing to:

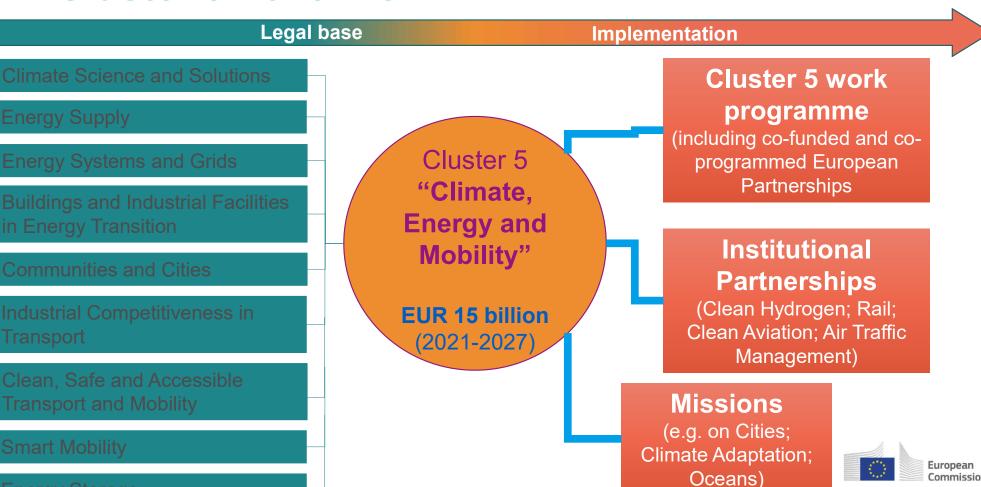
- Congestion and air pollution reduction, reduced road risk, social inclusion, access in each city/living lab
- Increased share of new and shared mobility services (NMS) in the modal distribution, e.g. by 25% compared to a realistic baseline and financial viability of services.
- Integration of new and shared mobility services with public transport, in at least following three collaborative living lab that will facilitate data sharing and connectivity with remote/peri-urban areas.
- (Re-)Designing or upgrading existing transport infrastructure elements to accommodate new mobility modes, patterns and behaviours with highest safety levels while being resilient to various climate conditions.
- **Developing resultsbased policies as well as recommendations** to increase the understanding and take-up of new mobility services by local/regional authorities and public and private mobility service providers.
- Actively communicate the common learning, lesson drawing, evaluation, dissemination and the exchange of knowledge and best practices, within the project/with the wider mobility/transport community.

HORIZON-CL5-2022-D6-02-04: Accelerating the deployment of new and shared mobility services for the next decade

Scope:

- High-quality, user centric, and reliable new mobility solutions need to be offered as a credible alternative to the private car, coupled with safe and integrated infrastructure.
- Projects should test new and shared mobility services in mobility management (such as for companies, schools, attractions).
- Innovative approaches that respond to the needs of a large variety of users (such as families with children, people living in remote locations, commuters, housing developers) are expected.
- The role of marketing and communication, and approaches based on the co-creation of solutions should be considered.
- The proposals should also explore how the adaptation of transport infrastructure (e.g. bikelanes or new street designs, profiles and layouts, etc...), promotes the use of shared, micro and active- mobility, and increases safety while reducing congestion.

Cluster 5 - overview



HORIZON EUROPE GREEN DEAL MISSIONS



Adaptation to climate change, including societal transformation













MAIN ELEMENTS OF THE MISSION

Climate City Contracts

Mission Platform

Tailor-made help with funding and financing

A Mission label to unlock synergies with other programmes

R&I action

Innovative city governance models and citizen engagement

Common framework for monitoring, reporting and verification Opening: 28 Apr 2022

Deadline: 06 Sep 2022

Topics		(EUR	contribution	Number of projects expected to be funded
HORIZON-MISS-2022-				
CIT-01-01	IA	42.00	8.00 to 12.00	4

HORIZON-MISS-2022-CIT-01-01: Designing inclusive, safe, affordable and sustainable urban mobility

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

- Accelerate the transition towards climate neutrality in cities through the promotion of zero-emission, shared, active and human-centred mobility
- Increase the extent and speed of the take-up and upscaling of innovative, best practice and replicable safe, affordable and sustainable urban mobility solutions in the living labs involved in the proposals (at least four cities/project and four follower cities, considering geographic diversity including in terms of regions' level of development) while facilitating the common lesson drawing and learning at European level, in order to contribute to the priority of the Zero Pollution Action Plan's objectives, the Sustainable and Smart Mobility Strategy and the EU road safety policy framework 2021-2030 for a 50% reduction target for deaths and also for serious injuries by 2030;
- Solutions for at least ten unsafe areas/living labs in urban/peri-urban areas using innovative planning, design and implementation approaches,
- Re-assess road and public space quality responding to needs of diverse groups
- Address proactively potential risk raised by expected increases in cycling and e-scooters
- Rebalancing the attribution of public space to different modes of transport
- Public space redesign actions targeted by the awarded projects should consider the circular economy principles, adaptation to climate change (in particular heatwaves), cross-sectoral synergies and not come at the cost of removing or deterioration of parks, trees or green recreational areas.

HORIZON-MISS-2022-CIT-01-01: Designing inclusive, safe, affordable and sustainable urban mobility

Scope:

The European Union is facing a multitude of interconnected demographic, public health and environmental challenges: the climate is changing, road deaths are stagnating, urbanization is increasing, air quality standards are still breached in over 100 cities, obesity is rising and the population is ageing.

But there is an increasing recognition at local, national and EU level that boosting the levels of active mobility, particularly walking and cycling, can play an important role in overcoming many of these challenges. Such a policy will also have economic benefits. Based on conservative estimates, even current levels of cycling in the EU produce benefits valued at around 150 billion euros per year.

- Proposals must plan for an active collaboration amongst the projects selected under this topic for dissemination, evaluation and coordination - facilitated by and within the CIVITAS initiative through the signature of collaboration agreement.
- Proposals should ensure that appropriate provisions for activities and resources aimed at enforcing this
 collaboration are included in the work-plan of the proposal. Detailed description of the specific activities and
 common actions that will be undertaken is not required at proposal stage and can be further defined during
 the grant agreement phase. Collaboration with the Mission Platform is essential and should take place
 through the CIVITAS initiative.
- Proposals may include preparatory, take up and replication actions, research activities, as well as tools to support local planning and policy making.

Overview of 49 candidate European Partnerships

PILLAR II - Global challenges & European industrial competitiveness

Institutionaised partnerships / EIT KICs

Co-Programmed

Co-Funded

PILLAR III - Innovative Europe

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture,	EIT	SUPPORT TO INNOVATION ECOSYSTEMS
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe	InnoEnergy	Innovative SMEs
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth	Climate	
Transformation of health systems	High Performance	Single European Sky ATM Research 3	Climate Neutral,	Digital	
Chemicals risk	Computing European Metrology	Europe's Rail	Sustainable & Productive Blue Economy	Food	
assessment	(Art. 185)	Connected and Automated	Water4All	Health	
ERA for Health	Al-Data-Robotics	Mobility (CCAM)	Animal Health & Welfare*	Raw Materials	
Rare diseases*	Photonics	Batteries	Accelerating Farming	Manufacturing	
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Systems Transitions*	Urban Mobility	
Personalised Medicine*	Clean steel – low-carbon	Zero-emission road	Agriculture of Data*	Cultural and Creative	
Pandemic Preparedness*	steelmaking	transport	Safe & Sustainable Food System*	Industries	
Co-funded or co- programmed	Processes4Planet	Built4People		CROSS-PILLARS II AND III	
	Global competitive space systems**	Clean Energy Transition			
Institutionalised Partnerships (Ar		Driving Urban Transitions		European Open Science Clo	oud —

^{*} Calls with opening dates in 2023-24



^{**} Calls with opening dates not before 2022

Vi er her for å hjelpe deg



Nyhetsbrev



Kurs



Økonomiske støtteordninger



De gode hjelperne



Kontaktperson:

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Horisont Europa

Horisont Europa

EUs niende ran**(fi@f8)grain @sloed et grop)** nnovasjon Horisont Europa, startet opp

1. januar 2021 med et foreslått totalbudsjett på 95,5 milliarder euro. Norske aktører
kan søke om midler på lik linje med bedrifter, offentlige virksomheter og
forskningsinstitusjoner i EU-medlemsland.

Meld deg på nyhetsbrev

> Fakta om Horisont Europa

Horisont Europa er en videreføring av Horisont 2020. En viktig endring er innføring av mission-orientert forskning og mer innovasjon.

Nasjonale kontaktpersoner

Se oversikt over nasjonale kontaktpersoner knyttet opp mot de planlagte områdene i Horisont Europa.

> Økonomiske ordninger

Forskningsrådet vil tilrettelegge for best mulig deltakelse i Horisont Europa og etablerer ulike økonomiske ordninger for norske aktører.

> EU-nettverk

EU-nettverk i hele landet hjelper deg å få bedre kompetanse om Horisont Europa og kan koble deg opp med aktører på tvers av sektorer. Se oversikten over nettverkene her.

> Konsulenthjelp

Trenger du hjelp til strategi og konseptuvikling? Vi tilbyr gratis konsulenthjelp til søkere med stort potensial i Horisont Europa.

> Kurstilbud

Vi har kurstilbud til deg enten du er forsker eller EU-rådgiver på et universitet, institutt eller høyskole, jobber i næringslivet eller offentlig sektor.





THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)





