





## Horizonte Europa

## Pilar 2. Retos Globales y Competitividad Industrial Europea

Filal 2. Netos Giobales y Competitividad ilidustrial Ediopea								
	Cluster 5 Climate, Energy and Mobility							
DES	TINATION 1 – Climate sciences and responses for the transformation towards climate neutrality	Acción	Fecha cierre	Presupuesto por propuesta ( M€)	Número de proyectos a financiar*			
	HORIZON-CL5-2021-D1-01-01: Improved understanding of greenhouse gas fluxes and radiative forcers, including carbon dioxide removal technologies	RIA	14/09/2021	8	3			
	HORIZON-CL5-2021-D1-01-02: Modelling the role of the circular economy for climate change mitigation	RIA	14/09/2021	5	3			
	HORIZON-CL5-2021-D1-01-03: Maximising the impact and synergy of European climate change research and innovation	CSA	14/09/2021	4 to 5	2			
Call - Climate	HORIZON-CL5-2021-D1-01-04: Enhanced integrated assessment in pursuit of global climate goals	RIA	14/09/2021	5	3			
sciences and responses (2021)	HORIZON-CL5-2021-D1-01-05: Better understanding of the interactions between climate change impacts and risks, mitigation and adaptation option	RIA	14/09/2021	6 to 7	3			
103001303 (2021)	HORIZON-CL5-2021-D1-01-06: Supporting and standardising climate services	CSA	14/09/2021	9	1			
	HORIZON-CL5-2021-D1-01-07: Improved economic methods for decision-making on climate and environmental policies	RIA	14/09/2021	3	2			
	HORIZON-CL5-2021-D1-01-08: Restoration of natural wetlands, peatlands and floodplains as a strategy for fast mitigation benefits; pathways, trade-offs and co <sub>\begin{subarray}{c}\) benefits</sub>	RIA	14/09/2021	6 to 7	3			
	HORIZON-CL5-2021-D1-01-09: The contribution of forest management to climate action: pathways, trade-offs and co-benefits	RIA	14/09/2021	6	3			
Call - Climate sciences and	HORIZON-CL5-2022-D1-01-01-two-stage: Carbon Dioxide Removal (CDR) approaches	RIA	10/02/2022 27/09/2022	7	3			
responses (two stage 2022)	HORIZON-CL5-2022-D1-01-02-two-stage: Socio-economic risks of climate change in Europe	RIA	10/02/2022 27/09/2022	5	2			
	HORIZON-CL5-2022-D1-01-03-two-stage: Social science for land-use strategies in the context of climate change and biodiversity challenges	RIA	10/02/2022 27/09/2022	6 to 7	3			

<sup>\*</sup> El número de proyectos concedidos es orientativo.

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Call - Climate sciences and	HORIZON-CL5-2022-D1-02-01: Verification and reconciliation of estimates of climate forcers	RIA	10/02/2022	5	3
responses (2022)	HORIZON-CL5-2022-D1-02-02: Development of high-resolution Earth system models for global and regional climate change projections	RIA	10/02/2022	10	2
	HORIZON-CL5-2022-D1-02-03: Improvement of Integrated Assessment Models in support of climate policies	RIA	10/02/2022	5	3
	HORIZON-CL5-2022-D1-02-04: Supporting the formulation of adaptation strategies through improved climate predictions in Europe and beyond	RIA	10/02/2022	10	2
	HORIZON-CL5-2022-D1-02-05: Let nature help do the job: Rewilding landscapes for carbon sequestration, climate adaptation and biodiversity support	RIA	10/02/2022	8 to 9	2
<u>D</u>	ESTINATION 2 – Cross-sectorial solutions for the climate transition	Acción	Fecha cierre	Presupuesto por propuesta ( M€)	Número de proyectos a financiar*
	HORIZON-CL5-2021-D2-01-01: Sustainable processing, refining and recycling of raw materials (Batteries Partnership)	RIA	19/10/2021	6 to 7	3
	HORIZON-CL5-2021-D2-01-02: Advanced high-performance Generation 3b (high capacity / high voltage) Li-ion batteries supporting electro mobility and other applications (Batteries Partnership)	RIA	19/10/2021	6 to 8	3
	HORIZON-CL5-2021-D2-01-03: Advanced high-performance Generation 4a, 4b (solid state) Li-ion batteries supporting electro mobility and other applications (Batteries Partnership)	RIA	19/10/2021	8 to 9	4
	HORIZON-CL5-2021-D2-01-04: Environmentally sustainable processing techniques applied to large scale electrode and cell component manufacturing for Li ion batteries (Batteries Partnership)	RIA	19/10/2021	5	4
	HORIZON-CL5-2021-D2-01-05: Manufacturing technology development for solid- state batteries (SSB, Generations 4a - 4b batteries) (Batteries Partnership)	RIA	19/10/2021	6 to 7	3
	HORIZON-CL5-2021-D2-01-06: Sustainable, safe and efficient recycling processes (Batteries Partnership)	RIA	19/10/2021	9 to 10	3
Call - Cross-sectoral solutions for the climate transition	HORIZON-CL5-2021-D2-01-07: Support for establishment of R&I ecosystem, developing strategic forward-looking orientations to ensure future skills development, knowledge and technological leadership for accelerated disruptive technology exploration and uptake (Batteries Partnership)	CSA	19/10/2021	3	1

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(2021)					
, ,	HORIZON-CL5-2021-D2-01-08: Emerging technologies for a climate neutral Europe	RIA	19/10/2021	2.50	8
	HORIZON-CL5-2021-D2-01-09: Methane cracking to usable hydrogen and carbon	RIA	19/10/2021	2 to 3	2
	HORIZON-CL5-2021-D2-01-10: Technologies for non- CO2 greenhouse gases removal	RIA	19/10/2021	2 to 3	2
	HORIZON-CL5-2021-D2-01-11: Direct atmospheric carbon capture and conversion	RIA	19/10/2021	2 to 3	2
	HORIZON-CL5-2021-D2-01-12: Fostering a just transition in Europe	RIA	19/10/2021	3 to 4	3
	HORIZON-CL5-2021-D2-01-13: Strengthening Social Sciences and Humanities (SSH) research communities in climate, energy and mobility disciplines	CSA	19/10/2021	2 to 3	1
	HORIZON-CL5-2021-D2-01-14: Accelerating the climate transition in difficult contexts: transition super-labs (pilot)	CSA	19/10/2021	2 to 3	1
	HORIZON-CL5-2021-D2-01-15: Fostering cooperation between Horizon Europe cluster 5 National Contact Points (NCPs)	CSA	19/10/2021	3.50	1
	HORIZON-CL5-2021-D2-01-16: Co-Funded Partnership: Driving Urban Transitions to a sustainable future (DUT)	COFUND	19/10/2021	37	1
	HORIZON-CL5-2022-D2-01-01: Sustainable processing and refining of battery grade graphite (Batteries Partnership)	IA	06/09/2022	5	2
	HORIZON-CL5-2022-D2-01-02: Interface and electron monitoring for the engineering of new and emerging battery technologies (Batteries Partnership)	RIA	06/09/2022	5	2
	HORIZON-CL5-2022-D2-01-03: Furthering the development of a materials acceleration platform for sustainable batteries (combining AI, big data, autonomous synthesis robotics, high throughput testing) (Batteries Partnership)	RIA	06/09/2022	20	1
	HORIZON-CL5-2022-D2-01-04: Towards creating an integrated manufacturing value chain in Europe: from machinery development to plant and site integrated design (Batteries Partnership)	IA	06/09/2022	7 to 8	2
Call - Cross-sectoral solutions for the	HORIZON-CL5-2022-D2-01-05: Next generation technologies for High-performance and safe-by-design battery systems for transport and mobile applications (Batteries Partnership)	RIA	06/09/2022	5	2

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(2022)	HORIZON-CL5-2022-D2-01-06: Embedding smart functionalities into battery cells (embedding sensing and self-healing functionalities to monitor and self-repair battery cells) (Batteries Partnership)	RIA	06/09/2022	5	3
	HORIZON-CL5-2022-D2-01-07: Digitalisation of battery testing, from cell to system level, including lifetime assessment (Batteries Partnership)	RIA	06/09/2022	5	3
	HORIZON-CL5-2022-D2-01-08: Coordination of large-scale initiative on future battery technologies (Batteries Partnership	CSA	06/09/2022	3	1
	HORIZON-CL5-2022-D2-01-09: Physics and data-based battery management for optimised battery utilisation (Batteries Partnership)	RIA	06/09/2022	5	3
	HORIZON-CL5-2022-D2-01-10: Streamlined collection and reversed logistics, fully automated, safe and cost-efficient sorting, dismantling and second use before recycling (Batteries Partnership)	RIA	06/09/2022	5	3
	HORIZON-CL5-2022-D2-01-11: CIVITAS 2030 – Coordination and support for EU funded urban mobility innovation	CSA	06/09/2022	4 to 5	1
<u>DE</u>	STINATION 3 - Sustainable, secure and competitive energy supply	Acción	Fecha cierre	Presupuesto por propuesta ( M€)	Número de proyectos a financiar*
	HORIZON-CL5-2021-D3-01-01: Establish the grounds for a common European energy data space	<b>Acción</b> IA	Fecha cierre 19/10/2021		
Call - Sustainable, secure and competitive energy	HORIZON-CL5-2021-D3-01-01: Establish the grounds for a common European energy				
Call - Sustainable, secure and	HORIZON-CL5-2021-D3-01-01: Establish the grounds for a common European energy data space  HORIZON-CL5-2021-D3-01-02: Laying down the basis for the demonstration of a Real Time Demonstrator of Multi-Vendor Multi-Terminal HVDC with Grid Forming Capability: Coordinated action  HORIZON-CL5-2021-D3-01-03: Interoperability community	IA CSA CSA	19/10/2021 19/10/2021 19/10/2021	propuesta ( M€)  8  1	financiar*  4  1
Call - Sustainable, secure and competitive energy	HORIZON-CL5-2021-D3-01-01: Establish the grounds for a common European energy data space  HORIZON-CL5-2021-D3-01-02: Laying down the basis for the demonstration of a Real Time Demonstrator of Multi-Vendor Multi-Terminal HVDC with Grid Forming Capability: Coordinated action	IA CSA	19/10/2021 19/10/2021	propuesta ( M€)  8	financiar*  4  1
Call - Sustainable, secure and competitive energy	HORIZON-CL5-2021-D3-01-01: Establish the grounds for a common European energy data space  HORIZON-CL5-2021-D3-01-02: Laying down the basis for the demonstration of a Real Time Demonstrator of Multi-Vendor Multi-Terminal HVDC with Grid Forming Capability: Coordinated action  HORIZON-CL5-2021-D3-01-03: Interoperability community	IA CSA CSA	19/10/2021 19/10/2021 19/10/2021	propuesta ( M€)  8  1	financiar*  4  1
Call - Sustainable, secure and competitive energy	HORIZON-CL5-2021-D3-01-01: Establish the grounds for a common European energy data space  HORIZON-CL5-2021-D3-01-02: Laying down the basis for the demonstration of a Real Time Demonstrator of Multi-Vendor Multi-Terminal HVDC with Grid Forming Capability: Coordinated action  HORIZON-CL5-2021-D3-01-03: Interoperability community  HORIZON-CL5-2021-D3-01-04: Clean Energy Transition	IA  CSA  CSA  COFUND	19/10/2021 19/10/2021 19/10/2021 19/10/2021	propuesta ( M€)  8  1  5  70  15	1 1 1 1

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	HORIZON-CL5-2021-D3-02-04: Novel tandem, high efficiency Photovoltaic technologies targeting low cost production with earth abundant materials	RIA	05/01/2022	5	4
	HORIZON-CL5-2021-D3-02-05: Energy Sector Integration: Integrating and combining energy systems to a cost-optimised and flexible energy system of systems	IA	05/01/2022	9 to 10	3
	HORIZON-CL5-2021-D3-02-06: Increasing energy system flexibility based on sector integration services to consumers (that benefits system management by DSOs and TSOs)	IA	05/01/2022	8	3
Call - Sustainable, secure and competitive energy	HORIZON-CL5-2021-D3-02-07: Reliability and resilience of the grid: Measures for vulnerabilities, failures, risks and privacy	IA	05/01/2022	7 to 8	2
supply (2021)	HORIZON-CL5-2021-D3-02-08: Electricity system reliability and resilience by design: High-Voltage, Direct Current (HVDC)-based systems and solutions	RIA	05/01/2022	7 to 8	2
	HORIZON-CL5-2021-D3-02-09: Demonstration of superconducting systems and elpipes	IA	05/01/2022	15	1
	HORIZON-CL5-2021-D3-02-10: Demonstration of advanced Power Electronics for application in the energy sector	IA	05/01/2022	5	2
	HORIZON-CL5-2021-D3-02-11: Reinforcing digitalisation related know how of local energy ecosystems	CSA	05/01/2022	4	1
	HORIZON-CL5-2021-D3-02-12: Integration of CCUS in hubs and clusters, including knowledge sharing activities	CSA	05/01/2022	2	1
	HORIZON-CL5-2021-D3-02-13: Cost reduction of CO2 capture (new or improved technologies)	RIA	05/01/2022	10 to 15	2
	HORIZON-CL5-2021-D3-02-14: Support to the activities of the European Geological Services	CSA	05/01/2022	20	1
	HORIZON-CL5-2021-D3-02-15: Support to the activities of the ETIPs and technology areas of the SET Plan	CSA	05/01/2022	1	10
	HORIZON-CL5-2021-D3-03-01: AU-EU Water Energy Food Nexus	RIA	23/02/2022	2.50	2
	HORIZON-CL5-2021-D3-03-02: Next generation of renewable energy technologies	RIA	23/02/2022	3	11
	HORIZON-CL5-2021-D3-03-03: Hybrid catalytic conversion of renewable energy to carbon-neutral fuels	RIA	23/02/2022	3.30	3
	HORIZON-CL5-2021-D3-03-04: Physics and aerodynamics of atmospheric flow of wind for power production	RIA	23/02/2022	6	3

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	HORIZON-CL5-2021-D3-03-05: Wind energy in the natural and social environment	RIA	23/02/2022	3	3
	HORIZON-CL5-2021-D3-03-06: Novel approaches to concentrated solar power (CSP)	RIA	23/02/2022	3	3
	HORIZON-CL5-2021-D3-03-07: Stable high-performance Perovskite Photovoltaics	RIA	23/02/2022	5	3
Call - Sustainable,	HORIZON-CL5-2021-D3-03-08: Cost-effective micro-CHP and hybrid heating systems	RIA	23/02/2022	3 to 5	2
secure and	HORIZON-CL5-2021-D3-03-09: Carbon-negative sustainable biofuel production	RIA	23/02/2022	5	3
competitive energy supply (2021)	HORIZON-CL5-2021-D3-03-10: Innovative foundations, floating substructures and connection systems for floating PV and ocean energy devices	RIA	23/02/2022	3.50	3
	HORIZON-CL5-2021-D3-03-11: Development of hydropower equipment for hidden hydropower	RIA	23/02/2022	3 to 5	2
	HORIZON-CL5-2021-D3-03-12: Innovation on floating wind energy deployment optimized for deep waters and different sea basins (Mediterranean Sea, Black Sea, Baltic Sea, North-east Atlantic Ocean)	IA	23/02/2022	16	3
	HORIZON-CL5-2021-D3-03-13: Demonstration pilot lines for alternative and innovative PV technologies (Novel c-Si tandem, thin film tandem, bifacial, CPV, etc.)	IA	23/02/2022	15	3
	HORIZON-CL5-2021-D3-03-14: Demonstration of large-scale CHP technologies for a shift to the use of biogenic residues and wastes	IA	23/02/2022	10	1
	HORIZON-CL5-2021-D3-03-15: Solutions for more sustainable geothermal energy	RIA	23/02/2022	5	2
	HORIZON-CL5-2021-D3-03-16: Innovative biomethane production as an energy carrier and a fuel	IA	23/02/2022	10	2
	HORIZON-CL5-2022-D3-01-01: Demonstration of cost-effective advanced biofuel technologies utilizing existing industrial plants	IA	26/04/2022	10	2
	HORIZON-CL5-2022-D3-01-02: Demonstration of innovative materials, supply cycles, recycling technologies to increase the overall circularity of wind energy technology and to reduce the primary use of critical raw materials	IA	26/04/2022	13	3
	HORIZON-CL5-2022-D3-01-03: Advanced manufacturing of Integrated PV	IA	26/04/2022	16	2
	HORIZON-CL5-2022-D3-01-04: Demonstrate the use of high temperature geothermal reservoirs to provide energy storage for the energy system	IA	26/04/2022	20	1

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	HORIZON-CL5-2022-D3-01-05: Demonstration of innovative plug-and play solutions for system management and renewables storage in off-grid applications	IA	26/04/2022	10	1
	HORIZON-CL5-2022-D3-01-06: Novel Agro-Photovoltaic systems	IA	26/04/2022	5	2
	HORIZON-CL5-2022-D3-01-07: Demonstration of innovative rotor, blades and control systems for tidal energy devices	IA	26/04/2022	10	1
	HORIZON-CL5-2022-D3-01-08: Supporting the action of consumers in the energy				
secure and	market and guide them to act as prosumers, communities and other active forms of	IA	26/04/2022	5 to 6	3
competitive energy	active participation in the energy activities				
supply (2022)	HORIZON-CL5-2022-D3-01-09: Real Time Demonstrator of Multi-Vendor				
	Multi  ¬ Terminal VSC-HVDC with Grid Forming Capability (in support of the offshore strategy)	IA	26/04/2022	55	1
	HORIZON-CL5-2022-D3-01-10: Interoperable solutions for flexibility services using distributed energy storage	IA	26/04/2022	2 to 3	3
	HORIZON-CL5-2022-D3-01-11: Demonstration of innovative forms of storage and their successful operation and integration into innovative energy systems and grid architectures	IA	26/04/2022	7 to 8	4
	HORIZON-CL5-2022-D3-01-12: Replicable solutions for a cross sector compliant energy ecosystem	IA	26/04/2022	8 to 9	4
	HORIZON-CL5-2022-D3-01-13: Energy system modelling, optimisation and planning tools	RIA	26/04/2022	6	1
	HORIZON-CL5-2022-D3-01-14: Thermal energy storage solutions	IA	26/04/2022	7 to 8	4
	HORIZON-CL5-2022-D3-01-15: Decarbonising industry with CCUS	IA	26/04/2022	29	2
	HORIZON-CL5-2022-D3-02-01: Digital solutions for defining synergies in international				
	renewable energy value chains	RIA	27/10/2022	3	3
	HORIZON-CL5-2022-D3-02-02: AU-EU Energy System Modelling	RIA	27/10/2022	2.50	2
	HORIZON-CL5-2022-D3-02-03: Innovative renewable energy carrier production for				
	heating from renewable energies	IA	27/10/2022	10	1
	HORIZON-CL5-2022-D3-02-04: Technological interfaces between solar fuel technologies and other renewables	RIA	27/10/2022	3 to 5	2

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	HORIZON-CL5-2022-D3-02-05: Renewable energy carriers from variable renewable				
	electricity surplus and carbon emissions from energy consuming sectors	IA	27/10/2022	10	2
	HORIZON-CL5-2022-D3-02-06: Direct renewable energy integration into process				
	energy demands of the chemical industry	RIA	27/10/2022	3 to 5	2
	HORIZON-CL5-2022-D3-02-07: Renewable energy incorporation in agriculture and				
	forestry	IA	27/10/2022	7.50	2
Call - Sustainable,	HORIZON-CL5-2022-D3-02-08: Demonstration of complete value chains for advanced				
	biofuel and non-biological renewable fuel production	IA	27/10/2022	10	2
competitive energy	HORIZON-CL5-2022-D3-03-01: Innovative components and/or sub-systems for CSP				
supply (2022)	plants and/or concentrating solar thermal installations	IA	10/01/2023	5.50	3
	HORIZON-CL5-2022-D3-03-02: Best international practice for scaling up sustainable		/ /		
	biofuels	RIA	10/01/2023		3
	HORIZON-CL5-2022-D3-03-03: Efficient and circular artificial photosynthesis	RIA	10/01/2023	3 to 5	2
	HORIZON-CL5-2022-D3-03-04: Integrated wind farm control	RIA	10/01/2023	6	3
	HORIZON-CL5-2022-D3-03-05: Novel Thin Film (TF) technologies targeting high		10/01/0000	_	
	efficiencies	RIA	10/01/2023	5	4
	HORIZON-CL5-2022-D3-03-06: Efficient and low-emission technologies for industrial				
	use of combustion and gasification systems from low-value biogenic residues and				
	wastes	RIA	10/01/2023	3 to 5	2
	HORIZON-CL5-2022-D3-03-07: Development of algal and renewable fuels of				
	non₁ biological origin	RIA	10/01/2023	5	3
	HORIZON-CL5-2022-D3-03-08: Development of digital solutions for existing				
	hydropower operation and maintenance	RIA	10/01/2023		3
	HORIZON-CL5-2022-D3-03-09: Recycling end of life PV modules	IA	10/01/2023	6 to7	3
	DESTINATION 4 – Efficient, sustainable and inclusive energy use	Acción	Fecha cierre	Presupuesto por propuesta ( M€)	Número de proyectos a financiar*
	HORIZON-CL5-2021-D4-01-01: Advanced energy performance assessment and			propuesta ( we)	IIIIaiiCiai
	certification	IA	19/10/2021	3 to 5	2
	HORIZON-CL5-2021-D4-01-02: Industrialisation of deep renovation workflows for	1.4	10/10/2021	Г+- 0	2
	energy-efficient buildings	IA	19/10/2021	5 to 8	
sustainable and	HORIZON-CL5-2021-D4-01-03: Advanced data-driven monitoring of building stock	IA	19/10/2021	3 to 5	2
inclusive energy use	energy performance	iA.	19/10/2021	3 10 3	2

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(2021)	HORIZON-CL5-2021-D4-01-04: Full-scale demonstration of heat upgrade	IA	19/10/2021	8	2
	technologies with supply temperature in the range 90 - 160°C HORIZON-CL5-2021-D4-01-05: Industrial excess (waste) Heat-to-Power conversion				
	based on organic Rankine cycles	IA	19/10/2021	10 to 14	1
	HORIZON-CL5-2021-D4-02-01: Demonstrating integrated technology solutions for buildings with performance guarantees (Built4People)	IA		5 to 7.50	2
Call - Efficient, sustainable and inclusive energy use	HORIZON-CL5-2021-D4-02-02: Cost-effective, sustainable multi-functional and/or prefabricated holistic renovation packages, integrating RES and including re-used and recycled materials (Built4People)	IA	25/02/2022	9 to 11	2
(2021)	HORIZON-CL5-2021-D4-02-03: Strengthening European coordination and exchange for innovation uptake towards sustainability, quality, circularity and social inclusion in the built environment as a contribution to the new European Bauhaus (Built4People)	CSA	25/02/2022	11	1
	HORIZON-CL5-2022-D4-01-01: Demand response in energy-efficient residential buildings	IA	06/09/2022	4 to 6	2
Call - Efficient,	HORIZON-CL5-2022-D4-01-02: Renewable-intensive, energy positive homes	IA	06/09/2022	4 to 6	2
sustainable and inclusive energy use	HORIZON-CL5-2022-D4-01-03: Smarter buildings for better energy performance	IA	06/09/2022	4 to 6	2
(2022)	HORIZON-CL5-2022-D4-01-04: Development and pilot demonstration of heat upgrade technologies with supply temperature in the range 150-250°C	RIA	06/09/2002	3 to 5	2
	HORIZON-CL5-2022-D4-01-05: Development of high temperature thermal storage for industrial applications	RIA	06/09/2022	3 to 4	2
	HORIZON-CL5-2022-D4-02-01: Designs, materials and solutions to improve resilience, preparedness & responsiveness of the built environment for climate adaptation (Built4People)	IA	21/01/2023	5 to 7.50	2
	HORIZON-CL5-2022-D4-02-02: Solutions for the sustainable, resilient, inclusive and accessible regeneration of neighbourhoods enabling low carbon footprint lifestyles and businesses (Built4People)	IA	21/01/2023	5 to 7.50	2
Call - Efficient, sustainable and inclusive energy use (2022)	HORIZON-CL5-2022-D4-02-03: Sustainable and resource-efficient solutions for an open, accessible, inclusive, resilient and low-emission cultural heritage: prevention, monitoring, management, maintenance, and renovation (Built4People)	RIA	21/01/2023	4 to 5	4

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	HORIZON-CL5-2022-D4-02-04: Smart-grid ready and smart-network ready buildings, acting as active utility nodes (Built4People)	IA	21/01/2023	6 to 9	2
	HORIZON-CL5-2022-D4-02-05: More sustainable buildings with reduced embodied energy / carbon, high life-cycle performance and reduced life-cycle costs (Built4People)	IA	21/01/2023	6 to 9.50	2
DES	TINATION 5 – Clean and competitive solutions for all transport modes	Acción	Fecha cierre	Presupuesto por propuesta ( M€)	Número de proyectos a financiar*
	HORIZON-CL5-2021-D5-01-01: Nextgen vehicles: Innovative zero emission BEV architectures for regional medium freight haulage (2ZERO)	IA	14/09/2021	10 to 15	3
	HORIZON-CL5-2021-D5-01-02: Nextgen EV components: Integration of advanced power electronics and associated controls (2ZERO)	RIA	14/09/2021	4 to 6	4
	HORIZON-CL5-2021-D5-01-03: System approach to achieve optimised Smart EV Charging and V2G flexibility in mass-deployment conditions (2ZERO)	RIA	14/09/2021	7 to 10	3
	HORIZON-CL5-2021-D5-01-04: LCA and design for sustainable circularity - holistic approach for zero-emission mobility solutions and related battery value chain (2ZERO & Batteries Partnership)	CSA	14/09/2021	4	1
	HORIZON-CL5-2021-D5-01-05: Greenhouse gas aviation emissions reduction technologies towards climate neutrality by 2050	RIA	14/09/2021	2 to 6	6
	HORIZON-CL5-2021-D5-01-06: Next generation digital aircraft transformation in design, manufacturing, integration and maintenance	RIA	14/09/2021	3 to 6	5
	HORIZON-CL5-2021-D5-01-07: Enabling the safe and efficient on-board storage and integration within ships of large quantities of ammonia and hydrogen fuels (ZEWT Partnership)	IA	14/09/2021	10	2
Call - Clean and competitive	HORIZON-CL5-2021-D5-01-08: Enabling the full integration of very high power fuel cells in ship design using co-generation and combined cycle solutions for increased efficiency with multiple fuels (ZEWT Partnership)	RIA	14/09/2021	15	1
solutions for all transport modes	HORIZON-CL5-2021-D5-01-09: CSA identifying waterborne sustainable fuel deployment scenarios (ZEWT Partnership)	CSA	14/09/2021	0.50	1
(2021)	HORIZON-CL5-2021-D5-01-10: Innovative on-board energy saving solutions (ZEWT Partnership)	RIA	14/09/2021	5	4
	HORIZON-CL5-2021-D5-01-11: Hyper powered vessel battery charging system (ZEWT Partnership)	IA	14/09/2021	7	2

<sup>\*</sup> El número de proyectos concedidos es orientativo.

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	HORIZON-CL5-2021-D5-01-12: Assessing and preventing methane slip from LNG engines in all conditions within both existing and new vessels (ZEWT Partnership)	IA	14/09/2021	7	1
	HORIZON-CL5-2021-D5-01-13: Digital Twin models to enable green ship operations (ZEWT Partnership)	RIA	14/09/2021	7	1
	HORIZON-CL5-2021-D5-01-14: Proving the feasibility of a large clean ammonia marine engine (ZEWT Partnership)	IA	14/09/2021	10	1
	HORIZON-CL5-2021-D5-01-15: Development and demonstration of cost affordable and adaptable retrofit solutions for tailpipe and brake polluting emissions	IA	14/09/2021	4 to 5	2
	HORIZON-CL5-2021-D5-01-16: Assessment of noise and particle emissions of L category vehicles from real driving conditions	RIA	14/09/2021	4 to 5	1
	HORIZON-CL5-2021-D5-01-17: Support for dissemination events in the field of Transport Research	CSA	14/09/2021	1.50	1
	HORIZON-CL5-2022-D5-01-01: Exploiting electrical energy storage systems and better optimising large battery electric power within fully battery electric and hybrid ships (ZEWT Partnership)	IA	26/04/2022	8	2
	HORIZON-CL5-2022-D5-01-02: Innovative energy storage systems on-board vessels (ZEWT Partnership)	RIA	26/04/2022	5	3
	HORIZON-CL5-2022-D5-01-03: Exploiting renewable energy for shipping, in particular focusing on the potential of wind energy (ZEWT Partnership)	RIA	26/04/2022	9	2
	HORIZON-CL5-2022-D5-01-04: Transformation of the existing fleet towards greener operations through retrofitting (ZEWT Partnership)	IA	26/04/2022	5	5
	HORIZON-CL5-2022-D5-01-05: Seamless safe logistics through an autonomous waterborne freight feeder loop service	RIA	26/04/2022	15	1
	HORIZON-CL5-2022-D5-01-06: Computational tools for shipbuilding	IA	26/04/2022	7	1
Call - Clean and	HORIZON-CL5-2022-D5-01-07: Prevent smog episodes in Europe: Air quality impact of engine-emitted volatile, semi volatile and secondary particles	RIA	26/04/2022	2.5 to 3	3
competitive solutions for all	HORIZON-CL5-2022-D5-01-08: Modular multi-powertrain zero-emission systems for HDV (BEV and FCEV) for efficient and economic operation (2ZERO)	IA	26/04/2022	15 to 20	3
transport modes (2022)	HORIZON-CL5-2022-D5-01-09: Nextgen EV components: High efficiency and low cost electric motors for circularity and low use of rare resources (2ZERO)	RIA	26/04/2022	3 to 6	4

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	HORIZON-CL5-2022-D5-01-10: New generation of full electric urban and peri-urban Bus Rapid Transit systems to strengthen climate-friendly mass transport (2ZERO)	IA	26/04/2022	20 to 25	1
	HORIZON-CL5-2022-D5-01-11: Stimulating Road Transport research and innovation dissemination and implementation in Europe and around the World	CSA	26/04/2022	2	1
	HORIZON-CL5-2022-D5-01-12: Towards a silent and ultra-low local air pollution aircraft	RIA	26/04/2022	2 to 5	5
	HORIZON-CL5-2022-D5-01-13: Digital aviation technologies for new aviation business models, services, emerging global threats and industrial competitiveness	RIA	26/04/2022	2 to 5	5
	HORIZON-CL5-2022-D5-01-14: European Aviation Research Policy in support to EU policies and initiatives	RIA	26/04/2022	0.50 to 2.5	3
DEST	NATION 6 - Safe, Resilient Transport and Smart Mobility services for passengers and goods	Acción	Fecha cierre	Presupuesto por propuesta ( M€)	Número de proyectos a financiar*
	HORIZON-CL5-2021-D6-01-01: More powerful and reliable on-board perception and decision-making technologies addressing complex environmental conditions (CCAM Partnership)	IA	19/10/2021	6 to 8	2
	HORIZON-CL5-2021-D6-01-02: Common approaches for the safety validation of CCAM systems (CCAM Partnership)	RIA	19/10/2021	12 to 15	1
	HORIZON-CL5-2021-D6-01-03: Physical and Digital Infrastructure (PDI), connectivity and cooperation enabling and supporting CCAM (CCAM Partnership)	IA	19/10/2021	7 to 9	2
	HORIZON-CL5-2021-D6-01-04: Cyber secure and resilient CCAM (CCAM Partnership)	RIA	19/10/2021	5 to 6	2
Call - Safe, Resilient	HORIZON-CL5-2021-D6-01-05: Analysis of socio-economic and environmental impacts and assessment of societal, citizen and user aspects for needs based CCAM solutions (CCAM Partnership)	RIA	19/10/2021	3 to 4	2
Transport and Smart Mobility services for	HORIZON-CL5-2021-D6-01-06: Framework for better coordination of large-scale demonstration pilots in Europe and EU-wide knowledge base (CCAM Partnership)	RIA	19/10/2021	5 to 6	1

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<sup>\*</sup> El número de proyectos concedidos es orientativo.





passengers and goods (2021)	HORIZON-CL5-2021-D6-01-07: More efficient and effective multimodal freight transport nodes to increase flexibility, service visibility and reduce the average cost of freight transport	IA	19/10/2021	7 to 8	2
	HORIZON-CL5-2021-D6-01-08: New delivery methods and business/operating models to green the last mile and optimise road transport	IA	19/10/2021	7 to 8	2
	HORIZON-CL5-2021-D6-01-09: Climate resilient and environmentally sustainable transport infrastructure, with a focus on inland waterways	IA	19/10/2021	7.50	3
	HORIZON-CL5-2021-D6-01-10: Testing safe lightweight vehicles and improved safe human-technology interaction in the future traffic system	RIA	19/10/2021	3.50 to 4	3
	HORIZON-CL5-2021-D6-01-11: Radical improvement of road safety in low and medium income countries in Africa	RIA	19/10/2021	4	2
	HORIZON-CL5-2021-D6-01-12: Controlling infection on large passenger ships	RIA	19/10/2021	3 to 5	2
	HORIZON-CL5-2021-D6-01-13: Safe automation and human factors in aviation — intelligent integration and assistance	IA	19/10/2021	4 to 8	2
Call - Safe, Resilient Transport and Smart Mobility services for passengers and goods (2022)	HORIZON-CL5-2022-D6-01-01: European demonstrators for integrated shared automated mobility solutions for people and goods (CCAM Partnership)	IA	12/01/2022	20 to 25	2
	HORIZON-CL5-2022-D6-01-02: Reliable occupant protection technologies and HMI solutions to ensure the safety of highly automated vehicles (CCAM Partnership)	RIA	12/01/2022	6 to 8	1
	HORIZON-CL5-2022-D6-01-03: Human behavioural model to assess the performance of CCAM solutions compared to human driven vehicles (CCAM Partnership)	RIA	12/01/2022	7 to 8	1
	HORIZON-CL5-2022-D6-01-04: Integrate CCAM services in fleet and traffic management systems (CCAM Partnership)	IA	12/01/2022	4 to 5	2
	HORIZON-CL5-2022-D6-01-05: Artificial Intelligence (AI): Explainable and trustworthy concepts, techniques and models for CCAM (CCAM Partnership)	RIA	12/01/2022	5 to 6	2
	HORIZON-CL5-2022-D6-01-06: Predictive safety assessment framework and safer urban environment for vulnerable road users	RIA	12/01/2022	4 to 4.33	3
	HORIZON-CL5-2022-D6-01-07: More resilient aircraft and increased survivability	IA	12/01/2022	4 to 8	1
	HORIZON-CL5-2022-D6-01-08: Safer navigation and tackling containership fires	IA	12/01/2022	3.50 to 6	2

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Call - Safe, Resilient Transport and Smart Mobility services for passengers and goods (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	06/09/2022	7 to 8	2
	HORIZON-CL5-2022-D6-02-02: Urban logistics and planning: anticipating urban freight generation and demand including digitalisation of urban freight	IA	06/09/2022	7 to 8	2
	HORIZON-CL5-2022-D6-02-03: Smart enforcement for resilient, sustainable and more efficient transport operations	RIA	06/09/2022	4	2
	HORIZON-CL5-2022-D6-02-04: Accelerating the deployment of new and shared mobility services for the next decade	IA	06/09/2022	8 to 10	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	06/09/2022	4 to 5	3
	HORIZON-CL5-2022-D6-02-06: Smart and efficient ways to construct, maintain and decommission with zero emissions from transport infrastructure	IA	06/09/2022	5	2
	HORIZON-CL5-2022-D6-02-07: New concepts and approaches for resilient and green freight transport and logistics networks against disruptive events (including pandemics)	RIA	06/09/2022	4	2

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