

Horizon Europe

Cluster 5 - Climate, Energy and Mobility

No.	Calls	Deadline	Duration	Fund	QR Code
1	Reliability and resilience of the grid: Measures for vulnerabilities, failures, risks and privacy	5 Jan 22	N/A	8,000,000	
2	Electricity system reliability and resilience by design: High-Voltage, Direct Current (HVDC)-based systems and solutions	5 Jan 22	N/A	8,000,000	
3	Novel tandem, high efficiency Photovoltaic technologies targeting low cost production with earth abundant materials	5 Jan 22	N/A	5,000,000	
4	Increasing energy system flexibility based on sector-integration services to consumers (that benefits system management by DSOs and TSOs)	5 Jan 22	N/A	8,000,000	
5	Demonstration of superconducting systems and elpipes	5 Jan 22	N/A	15,000,000	
6	Demonstration of advanced Power Electronics for application in the energy sector	5 Jan 22	N/A	5,000,000	
7	Cost reduction of CO2 capture (new or improved technologies)	5 Jan 22	N/A	15,000,000	

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8	Demonstration of wave energy devices to increase experience in real sea condition	5 Jan 22	N/A	15,000,000	
9	Energy Sector Integration: Integrating and combining energy systems to a cost-optimised and flexible energy system of systems	5 Jan 22	N/A	10,000,000	
10	European demonstrators for integrated shared automated mobility solutions for people and goods (CCAM Partnership)	12 Jan 22	N/A	25,000,000	
11	Reliable occupant protection technologies and HMI solutions to ensure the safety of highly automated vehicles (CCAM Partnership)	12 Jan 22	N/A	8,000,000	
12	Human behavioural model to assess the performance of CCAM solutions compared to human driven vehicles (CCAM Partnership)	12 Jan 22	N/A	8,000,000	
13	Integrate CCAM services in fleet and traffic management systems (CCAM Partnership)	12 Jan 22	N/A	5,000,000	
14	Artificial Intelligence (AI): Explainable and trustworthy concepts, techniques and models for CCAM (CCAM Partnership)	12 Jan 22	N/A	6,000,000	

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15	Predictive safety assessment framework and safer urban environment for vulnerable road users	12 Jan 22	36 - 48 months	4,330,000	
16	More resilient aircraft and increased survivability	12 Jan 22	N/A	8,000,000	
17	Safer navigation and tackling containership fires	12 Jan 22	N/A	6,000,000	
18	Demonstrating integrated technology solutions for buildings with performance guarantees (Built4People)	25 Jan 22	N/A	7,500,000	
19	Cost-effective, sustainable multi-functional and/or prefabricated holistic renovation packages, integrating RES and including re-used and recycled materials (Built4People)	25 Jan 22	N/A	11,000,000	
20	Wind energy in the natural and social environment	23 Feb 22	N/A	3,000,000	
21	Novel approaches to concentrated solar power (CSP)	23 Feb 22	N/A	3,000,000	

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22	Stable high-performance Perovskite Photovoltaics	23 Feb 22	N/A	5,000,000	
23	Cost-effective micro-CHP and hybrid heating systems	23 Feb 22	N/A	5,000,000	
24	Carbon-negative sustainable biofuel production	23 Feb 22	N/A	5,000,000	
25	Innovative foundations, floating substructures and connection systems for floating PV and ocean energy devices	23 Feb 22	N/A	3,500,000	
26	Development of hydropower equipment for hidden hydropower	23 Feb 22	N/A	5,000,000	
27	Innovation on floating wind energy deployment optimized for deep waters and different sea basins (Mediterranean Sea, Black Sea, Baltic Sea, North-east Atlantic Ocean)	23 Feb 22	N/A	16,000,000	
28	Demonstration of large-scale CHP technologies for a shift to the use of biogenic residues and wastes	23 Feb 22	N/A	10,000,000	

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29	Solutions for more sustainable geothermal energy	23 Feb 22	N/A	5,000,000	
30	Innovative biomethane production as an energy carrier and a fuel	23 Feb 22	N/A	10,000,000	
31	Next generation of renewable energy technologies	23 Feb 22	N/A	3,000,000	
32	Hybrid catalytic conversion of renewable energy to carbon-neutral fuels	23 Feb 22	N/A	3,300,000	
33	Physics and aerodynamics of atmospheric flow of wind for power production	23 Feb 22	N/A	6,000,000	
34	Social science for land-use strategies in the context of climate change and biodiversity challenges	10 Feb 22	N/A	7,000,000	
35	Carbon Dioxide Removal (CDR) approaches	10 Feb 22	N/A	7,000,000	

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36	Socio-economic risks of climate change in Europe	10 Feb 22	N/A	5,000,000	
37	Let nature help do the job: Rewilding landscapes for carbon sequestration, climate adaptation and biodiversity support	10 Feb 22	N/A	9,000,000	
38	Supporting the formulation of adaptation strategies through improved climate predictions in Europe and beyond	10 Feb 22	N/A	10,000,000	
39	Improvement of Integrated Assessment Models in support of climate policies	10 Feb 22	N/A	5,000,000	
40	Verification and reconciliation of estimates of climate forcers	10 Feb 22	N/A	5,000,000	
41	Development of high-resolution Earth system models for global and regional climate change projections	10 Feb 22	N/A	5,000,000	
42	Replicable solutions for a cross sector compliant energy ecosystem	10 Feb 22	N/A	5,000,000	

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43	Energy system modelling, optimisation and planning tools	26 Apr 22	N/A	6,000,000	
44	Thermal energy storage solutions	26 Apr 22	N/A	8,000,000	
45	Demonstration of innovative rotor, blades and control systems for tidal energy devices	26 Apr 22	N/A	10,000,000	
46	Supporting the action of consumers in the energy market and guide them to act as prosumers, communities and other active forms of active participation in the energy activities	26 Apr 22	N/A	6,000,000	
47	Real Time Demonstrator of Multi-Vendor Multi-Terminal VSC-HVDC with Grid Forming Capability (in support of the offshore strategy)	26 Apr 22	N/A	55,000,000	
48	Interoperable solutions for flexibility services using distributed energy storage	26 Apr 22	N/A	3,000,000	
49	Demonstration of innovative forms of storage and their successful operation and integration into innovative energy systems and grid architectures	26 Apr 22	N/A	8,000,000	

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50	Decarbonising industry with CCUS	26 Apr 22	N/A	29,000,000	
51	Demonstration of innovative plug-and play solutions for system management and renewables storage in off-grid applications	26 Apr 22	N/A	10,000,000	
52	Demonstration of cost-effective advanced biofuel technologies utilizing existing industrial plants	26 Apr 22	N/A	10,000,000	
53	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	26 Apr 22	N/A	13,000,000	
54	Demonstrate the use of high temperature geothermal reservoirs to provide energy storage for the energy system	26 Apr 22	N/A	20,000,000	

Source: [EC's Funding & Tenders Portal](#)

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by the Division of Global Research and Innovation Promotion, the Office of International Affairs and Global Network, Chulalongkorn University