

Horizon 2020 – Environment Topics Call 2019 (August and September)

BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY

2019	Objective	Scheme	Per project	Total
Energy efficiency	LC-SC3-EE-1-2018-2019-2020: Decarbonisation of the EU building stock: innovative approaches and affordable solutions changing the market for buildings renovation (TRL=8-9) Submission: 3.9.2019 Link			
	Demonstrating solutions addressing building fabric and/or technical systems that ensure faster and more cost-effective deep renovations that result in high energy performance	IA	3-4M	12M
	LC-SC3-EE-2-2018-2019: Integrated home renovation services Submission: 3.9.2019 Link			
	Creating or replicating innovative local or regional "integrated home renovation services"	CSA	0.5-1.5M	25M
	LC-SC3-EE-3-2019-2020: Stimulating demand for sustainable energy skills in the construction sector Submission: 3.9.2019 Link			
	Demand for energy skills in construction	CSA	0.5-1M	2M
	LC-SC3-EE-4-2019-2020: Upgrading smartness of existing buildings through innovations for legacy equipment (TRL=6-8) Submission: 3.9.2019 Link			
	Developing and demonstrating cost-effective technological solutions to manage energy within existing buildings.	IA	3-4M	10M
	LC-SC3-EE-5-2018-2019-2020: Next-generation of Energy Performance Assessment and Certification / Submission: 3.9.2019 Link			
	.Definition and demonstration of innovative approaches for the assessment of building energy performance (TRL=6-7)	IA	2-2.5M	10M
	LC-SC3-EE-6-2018-2019-2020: Business case for industrial waste heat/cold recovery / Submission: 3.9.2019 Link			
	Symbiosis in industrial parks and clusters- non-technological barriers	CSA	1-2M	5M
	LC-SC3-EE-8-2018-2019: Capacity building program to support implementation of energy audits / Submission: 3.9.2019 Link			
	<ul style="list-style-type: none"> Staff trainings and capacity buildings programmes, facilitating SMEs to undergo energy audits and to implement the recommended energy-saving measures Capacity building to support the take-up of audits recommendations and undertake the actions necessary to reduce energy consumption 	CSA	1-2M	5M
	LC-SC3-EE-9-2018-2019: Innovative financing for energy efficiency investments/ Submission: 3.9.2019 Link			
	Development or replication and implementation of innovative financing schemes for energy efficiency investments	CSA	1-1.5M	4M
	LC-SC3-EE-10-2018-2019-2020: Mainstreaming energy efficiency finance / Submission: 3.9.2019 Link			
	<ul style="list-style-type: none"> Development, demonstration and promotion of frameworks for the standardisation and benchmarking of sustainable energy investments Capacity building for banks and investors at the national and local level, in particular on underwriting sustainable energy investments Gathering, processing and disclosing large-scale data on actual financial performance of energy efficiency investments Integration of non-energy benefits Targeting institutional investors Energy efficiency on financial regulations 	CSA	1-1.5M	6M
	LC-SC3-EE-11-2018-2019-2020: Aggregation - Project Development Assistance/ Submission: 3.9.2019 Link			
	Project Development Assistance (PDA) for: <ul style="list-style-type: none"> Existing public and private buildings with the aim to significantly decrease energy consumption in heating/cooling and electricity Energy efficiency of industry and service Energy efficiency in all modes of urban transport Energy efficiency in existing infrastructures 	CSA	0.5-1.5M	6M

	LC-SC3-EE-13-2018-2019-2020: Enabling next-generation of smart energy services valorising energy efficiency and flexibility at demand-side as energy resource / Submission: 3.9.2019 Link			
	Demonstrating and testing innovative energy services in a real environment, across several market segments and across different actors in the value chain	IA	3-4M	8M
	LC-SC3-EE-14-2018-2019-2020: Socio-economic research conceptualising and modelling energy efficiency and energy demand / Submission: 3.9.2019 Link			
	Deepening the demand side-related parameters in existing energy efficiency models and to include new aspects and data sources	RIA	1-2M	4M
	LC-SC3-EE-16-2018-2019-2020: Supporting public authorities to implement the Energy Union / Submission: 3.9.2019 Link			
	a. Support to local and regional public authorities b. Supporting the delivery of the Energy Efficiency Directive	CSA	1-1.5	10M
	LC-SC3-EE-18-2019: Bioclimatic approaches for improving energy performance in buildings in Africa and Europe / Submission: 3.9.2019 Link			
	Study the performance of a selection of European and African local bioclimatic building designs, local construction materials and techniques to determine how they could be utilized to increase the energy performance, living quality and sustainability of buildings	CSA	1M	1M

Global leadership in renewables	LC-SC3-RES-29-2019: Converting Sunlight to storable chemical energy (TRL=4-5) / Submission: 27.8.2019 Link			
	<ul style="list-style-type: none"> Improved light-harvesting and efficient charge separation in photocatalytic systems Photoelectrochemical cells – PECs and catalyst development Thermochemical pathways to energy rich chemicals (using concentrated solar light); and Design and engineering of devices, systems or prototypes integrating together the different processes, with day and night control and applicability for the production Of chemical energy rich carriers 	RIA	2-3M	6M
	LC-SC3-RES-7-2019: Solar Energy in Industrial Processes (TRL=4-5) / Submission: 27.8.2019 Link			
	Solar thermal energy solutions for heating and/or cooling demand of one or more industrial processes.	RIA	3-5M	10M
	LC-SC3-RES-16-2019: Development of solutions based on renewable sources that provide flexibility to the energy system / Submission: 27.8.2019 Link			
	<ul style="list-style-type: none"> Bioenergy carriers - Development of intermediate bioenergy carriers for energy and transport from biogenic residues and wastes and energy crops Hydropower - Development of low and ultra-low head and sea water resistant equipment Virtual Power Plant 	RIA	3-5M	15M
	LC-SC3-RES-23-2019: Development of next generation biofuel and alternative renewable fuel technologies for aviation and shipping (TRL= 3 → 5) / Submission: 27.8.2019 Link			
	Developing the next generation non-food/feed drop-in biofuel and alternative renewable fuel technologies for aviation and shipping transport	RIA	3-5M	20M

Smart and clean energy for consumers	LC-SC3-EC-1-2018-2019-2020: The role of consumers in changing the market through informed decision and collective actions Submission: 3.9.2019 Link			
	Supporting energy communities to increase energy efficiency and/or optimise energy management to integrate a higher share of renewable energy within the community	CSA	1-2M	7.5M
	LC-SC3-EC-2-2018-2019-2020: Mitigating household energy poverty Submission: 3.9.2019 Link			
	Actively alleviating energy poverty and developing a better understanding of the types and needs of energy poor households and how to identify them	CSA	1-2M	7.5M

Smart Cities and Communities	LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities Link			
	Integrated innovative solutions for Positive Energy Blocks/Districts (several buildings that actively manage their energy consumption and the energy flow between them and the wider energy system.) http://www.sharingcities.eu https://smartcities-infosystem.eu/	IA	15-20M	83M
Enabling near-zero CO2 emissions from fossil fuel power plants and carbon intensive industries .	LC-SC3-NZE-4-2019: Integrated solutions for flexible operation of fossil fuel power plants through power-to-X-to-power and/or energy storage (TRL=6-7) / Submission: 27.8.2019 Link			
	Validation and pilot demonstration of the integration of energy storage and/or use of excess energy (including via power-to-X-to-power) in fossil fuel power plants, in order to reduce air pollutants	IA	6-8M	20M
	LC-SC3-NZE-5-2019-2020: Low carbon industrial production using CCUS (TRL=6-7) / Submission: 27.8.2019 Link			
	Focusing on integrating CO2 capture in industrial installations, whilst addressing the full CCUS chain	IA	10-12M	33M
Joint Actions	LC-SC3-JA-2-2018-2019: Support to the realisation of the Implementation Plans of the SET Plan / Submission: 27.8.2019 Link			
	Supporting the execution/realisation of the SET Plan Implementation Plan: Renewable fuels & bioenergy	CSA	1M	1M
	LC-SC3-JA-3-2019: European Pre-Commercial Procurement Programme for Wave Energy Research & Development / Submission: 27.8.2019 Link			
	Design, develop and validate a cost-effective Wave energy convertors that can survive in a harsh and unpredictable ocean environment as the ocean through demand-driven Pre-Commercial Procurement.	PCP	15-20M	20M

Cross-cutting issues	LC-SC3-CC-1-2018-2019-2020: Social Sciences and Humanities (SSH) aspects of the Clean-Energy Transition / Submission: 27.8.2019 Link			
	Challenges facing carbon-intensive regions	RIA	1-3M	10M
	LC-SC3-CC-3-2019: Support for the opening of low-carbon energy research databases in Europe / Submission: 27.8.2019 Link			
	Promoting the opening of research databases for low-carbon energy in Europe: <ul style="list-style-type: none"> • Development and use of data management practices • Coordination of existing data repositories and databases • Access to tools to manage energy data with FAIR principles • Access to analytics to exploit energy data • Capacity building of data experts for the domain of low-carbon energy research • New research topics • Trans-disciplinary research • Development of partnerships with industry 	0.5-1M	CSA	2M