HORIZON 2020

Climate action, environment, resource efficiency and raw materials

11 October 2018, CULS
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HORIZON 2020

I. Excellent Science	II. Industrial Leadership	III. Societal Challenges
ERC	LEIT (ICT, Nanotechnologies, Advanced materials, Biotechnology, Manufacturing and Processing, Space)	Health, demographic change and wellbeing
FET		Food security, sustainable agriculture … and bioeconomy
Marie-Sklodowska-Curie Actions		Secure, clean and efficient energy
		Smart, green and integrated transport
Infrastructures	Access to Risk Finance	Climate action, environment, resource efficiency and raw materials
	Innovation in SMEs	Inclusive, innovative and reflective societies
		Secure societies

Spreading excellence and widening participation

Science with and for Society

Joint Research Centre (JRC)

The European Institute of Innovation and Technology (EIT)

CALLS 2019

Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement (PA)

- budget: 2019 – 116 mil. eur
- deadline 2019: 19.2.2019 (1st stage), 4.9.2019 (2nd stage)
- efforts to limit global temperature rise to well below 2°C (in comparison with pre-industrial period)
- solutions for the achievement of the PA's mitigation and adaptation goals
- scientific knowledge for the implementation of relevant policies

Greening the economy in line with the Sustainable Development Goals (SDGs)

- budget: 2019 – 256 mil. eur
- deadline 2019: 19.2.2019 (1st stage), 4.9.2019 (2nd stage)
- moving to a greener, more resource efficient and climate-resilient economy, reduction of waste production, circular economy in cities, …

2stage evaluation: all IAs a RIAs
1stage evaluation: all CSAs, ERA-NET Cofunds

STRATEGIC DOCUMENTS AND INITIATIVES

- Intergovernmental Panel on Climate Change + COP 21
  http://unfccc.int/paris_agreement/items/9485.php

- UN's Sustainable Development Goals (SDGs) -
  http://www.un.org/sustainabledevelopment/sustainable-development-goals/

- 7th Environmental Action Programme

- Circular economy action plan

- EU Biodiversity Strategy

- Joint programming initiatives (JPI) Water, Cultural heritage, Climate knowledge

- European innovation partnerships (EIP) Water, Raw materials

- European technology platforms

- …

INTERNATIONAL COOPERATION

- **EU member states +H2020 associated countries (AC)**
- **Countries outside EU and AC**
  - ➢ In general supported in all topics
  - ➢ In some topics *encouraged*
  - ➢ In some topics required = *eligibility condition*
    - Specific region is given, e.g. cooperation with CELAC countries in SC5-13-2018-2019, number of participants from the region (here at least 3 countries from Latin America or Caribbean States)

Funding
- ➢ AC under the same conditions as EU Member States
- ➢ Participants from ca 130 developing countries automatically eligible for funding
- ➢ Industrialised countries and emerging economies exceptionally only (provision in WP, bilateral agreement, essential for project)

BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: CLIMATE ACTION IN SUPPORT OF THE PARIS AGREEMENT

Decarbonisation

✓ LC-CLA-02-2019: *Negative emissions and land-use based mitigation assessment* (2x RIA, 5-7 mil. €) –> (feasibility of negative emissions for climate stabilisation; land-based mitigation)

Climate adaptation, impacts and services

✓ LC-CLA-05-2019: *Human dynamics of climate change* (2x RIA, 5-7 mil. €) –> (Climate services for Africa – at least 3 participants from at least 2 diff. African countries; Climate and human migration)

BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: CLIMATE ACTION IN SUPPORT OF THE PARIS AGREEMENT

Inter-relations between climate change, biodiversity and ecosystem services

✓ LC-CLA-06-2019: *Inter-relations between climate change, biodiversity and ecosystem services* (RIA, 5-7 mil. €) –> (impact of climate change on ecological processes, biodiversity and ecosystems, vulnerability of ecosystems and biodiversity, adaptation and mitigation strategies, NBS; terrestrial and marine ecosystems; coop. with CELAC encouraged)

✓ LC-CLA-09-2019: *ERA-NET Cofund action on biodiversity and climate change: Impacts, feedbacks, and nature-based solutions for climate change adaptation and mitigation* (ERA-NET Cofund, EU contrib. 5 mil. €) –> (cooperation with BiodivERsA and FACCE JPI)

BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: CLIMATE ACTION IN SUPPORT OF THE PARIS AGREEMENT

Cryosphere

✓ LC-CLA-07-2019: *The changing cryosphere: uncertainties, risks and opportunities* (3x RIA, 1x CSA) –> (sea-level changes 8-10 mil. €; changes in Arctic biodiversity 5-6 mil. €; new economic activities 5-6 mil. €; Arctic standards 2 mil. €; participation of social sciences and humanities important; proposals shall include at least 2 participants from third countries; Japan and India have declared their intension to financially support their research institutions)

GREENING THE ECONOMY IN LINE WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Connecting economic and environmental gains - the circular economy

- ✓ CE-SC5-04-2019: *Building a water-smart economy and society* (2x IA, 10-15 mil. €; TRL 5-7) –> (symbiosis between industry and water utilities; testing and demonstration of systemic innovation in real life, large scale operational environments)

GREENING THE ECONOMY IN LINE WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Raw materials

✓ CE-SC5-07-2018-2019-2020: *Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes* (4x IA, 8-13 mil. €) –> (primary and/or secondary raw materials; end-of-life products; buildings; sorting systems for high-performance recycling)

✓ CE-SC5-08-2018-2019-2020: *Raw materials policy support actions for the circular economy* (CSA, 3 mil. €) –> (platform for responsible sourcing of raw materials)

✓ SC5-09-2018-2019: *New solutions for the sustainable production of raw materials* (2x RIA, 3-7 mil. €) –> (digital mine; recovery of metals and minerals from sea resources)

✓ SC5-10-2019-2020: *Raw materials innovation actions: exploration and Earth observation in support of sustainable mining* (2x IA, 8-13 mil. €)

GREENING THE ECONOMY IN LINE WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Inovating cities

- ✓ SC5-13-2018-2019: *Strengthening international cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems* (RIA, 5 mil. €) –> (strengthening EU-CELAC collaboration, min. 3 participants from CELAC)

- ✓ SC5-14-2019: *Visionary and integrated solutions to improve well-being and health in cities* (IA, 10 mil. €) –> (min. 4 cities from different EU or AC)

GREENING THE ECONOMY IN LINE WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Earth observation

✓ SC5-16-2019: *Development of commercial activities and services through the use of GEOSS and Copernicus data* (CSA 1 mil. €, IA 2-3 mil. €)

Nature-based solutions, disaster risk reduction and natural capital accounting

✓ SC5-23-2019: *Multi-stakeholder dialogue platform to promote nature-based solutions to societal challenges: follow-up project* (CSA, 2 mil. €; attention: deadline 4.9.2019; building upon ThinkNature achievements)

GREENING THE ECONOMY IN LINE WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Heritage alive

✓ SC5-20-2019: *Transforming historic urban areas and/or cultural landscapes into hubs of entrepreneurship and social and cultural integration* (IA, 7-8 mil. €) –> (min. 4 historic areas and/or cultural landscapes from different EU or AC)

Specific support and implementation aspects

✓ SC5-21-2019-2020: *ERA-NET Cofund action(s) for climate action, environment, resource efficiency and raw materials* (ERA-NET Cofund, 4,5 mil. €) –> (***Exposure to pollutants and pathogens present in water resources***)

✓ SC5-22-2019: Assessing and fostering the impacts of Research and Innovation Actions (RIA) and Innovation Actions (IA) granted by Societal Challenge 5 in 2014-2015 (CSA, 0,6 mil. €)

WORK PROGRAMME 2020
- UNDER PREPARATION,
SUBJECT TO CHANGES !

BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: CLIMATE ACTION IN SUPPORT OF THE PARIS AGREEMENT - 1

Identifier	Topic	Action
LC-CLA-10-2020	Scientific support to designing mitigation pathways and policies (climate policies; decarbonisation and lifestyle changes; preparation of NDCs)	RIA
LC-CLA-11-2020	Innovative nature-based solutions for carbon neutral cities and improved air quality	IA
LC-CLA-12-2020	Advancing climate services (coastal infrastructure; extreme events; impacts of overshooting)	RIA
LC-CLA-13-2020	Climate resilience of European coastal cities	RIA
LC-CLA-14-2020	Pre-commercial procurement of solutions for climate change resilience	PCP
LC-CLA-15-2020	Understanding climate-water-energy-food nexus and streamlining water-related policies	RIA
LC-CLA-16-2020	Forest fires risk reduction and multihazard risk management in the E.U.	RIA

BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: CLIMATE ACTION IN SUPPORT OF THE PARIS AGREEMENT - 2

Identifier	Topic	Action
LC-CLA-17-2020	Polar climate: understanding the polar processes in a global context	RIA
LC-CLA-18-2020	Developing the next generation of Earth System Models	RIA
LC-CLA-19-2020	Integrated GEOSS climate applications to support adaptation measures of the Paris Agreement	RIA
LC-CLA-20-2020	Supporting the implementation of GEOSS in the Arctic in collaboration with Copernicus	RIA
LC-CLA-21-2020	Coordination of European Polar research	CSA
LC-CLA-22-2020	Enhancing the Belmont Forum Collaborative Research Action on Climate, Environment and Health	CSA

GREENING THE ECONOMY IN LINE WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) - 1

Identifier	Topic	Action
CE-SC5-07-2020	Raw materials innovation for the circular economy	IA
CE-SC5-08-2020	Raw materials policy support actions for the circular economy	CSA
CE-SC5-10-2020	Raw materials Innovation actions	IA
CE-SC5-21-2020	ERA-NET Cofund action(s) for climate action, environment, resource efficiency and raw materials	ERA-NET
CE-SC5-24-2020	Improving the sorting, separation and recycling of composite and multi-layer materials	RIA
CE-SC5-25-2020	Understanding the transition to circular economy and its implications	RIA
CE-SC5-26-2020	Sustainable management in extractive industries	CSA
CE-SC5-27-2020	Enhanced natural treatment solutions for water security and ecological quality in cities	RIA
CE-SC5-28-2020	Develop and pilot circular systems in plastics, textiles and furniture sectors	IA
CE-SC5-29-2020	Addressing wild pollinators decline and its effects on biodiversity and ecosystem services	RIA

INFORMATION SOURCES

H2020 webpage administrated by Technology Centre CAS

http://www.h2020.cz

➢ News, events, Newsletter subscription, publications, presentations, analysis

Participant Portal

http://ec.europa.eu/research/participants/portal/

➢ Entry point for project proposals submission, open calls, reference documents, …

CORDIS

http://cordis.europa.eu/projects/

➢ Funded projects, partner searches

Any questions?

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