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Horizon 2020 Work Programme for Research & Innovation 2018-2020

Societal Challenge 5 'Climate
action, environment, resource
efficiency and raw materials'

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Research and
Innovation



Call "Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement"

- **LC-CLA-04-2018: Resilience and sustainable reconstruction of historic areas to cope with climate change and hazard events (RIA)**
- **LC-CLA-06-2019: Inter-relations between climate change, biodiversity and ecosystem services**

LC-CLA-04-2018: Resilience and sustainable reconstruction of historic areas to cope with climate change and hazard events (RIA) (1/3)

- For **historic areas and their surroundings** (both in urban and rural environments):
 - Increase **proactively** their **resilience** through 'preparedness' interventions;
 - In case of **damage** or **destruction**, secure their **sustainable and integrated reconstruction and recovery** (in line with "build back better" principle of Sendai Framework)
- Proposals can address sustainable reconstruction and recovery **and/or** enhanced resilience

LC-CLA-04-2018: Resilience and sustainable reconstruction of historic areas to cope with climate change and hazard events (RIA) (2/3)

- Take stock of existing experiences in **Europe and globally** and **recommend** interventions, including **replicability conditions**;
- Tools, models, plans, methodologies etc. for resilience and sustainable reconstruction, **vulnerability assessment** and prediction of **impacts** of climate, global and environmental change on historic areas;
- **Test and pilot** novel cost-effective **solutions** to enhance the **resilience** of **buildings** and **whole historic areas**;
- Knowledge and evidence-based **guidelines** for **reconstruction** within a **participatory and community-based context** and **new government and finance models**;

LC-CLA-04-2018: Resilience and sustainable reconstruction of historic areas to cope with climate change and hazard events (RIA) (3/3)

- **Multi-disciplinary** consortia, including **societal** stakeholders and **community-based** partners – role of **SSH essential**;
- Envisage also **resources for clustering** with other relevant projects
- **Indicative budget** per proposal: **EUR 5 million - EUR 6 million**

Eligibility and admissibility conditions

- **At least 3 historic areas from different Member States and/or Associated Countries** to cover diversity of natural and climate change hazards in different regions of Europe

LC-CLA-06-2019: Inter-relations between climate change, biodiversity and ecosystem services (RIA) (1/2)

- Investigate **interactions and feedbacks** between climate change and biodiversity, ecosystem functions and services at **all relevant spatial and temporal scales**
- Assess and model **vulnerability** of biodiversity and ecosystems functions and services to **climate change** and climate change relevant human activities
- Improve **predictive capacity for climate-change through** models better accounting for biodiversity, ecosystems and the climate system **interactions and feedbacks**

LC-CLA-06-2019: Inter-relations between climate change, biodiversity and ecosystem services (RIA) (2/2)

- Identify **tipping points** and **safe operating spaces**
- Assess **role of nature-based solutions** in Climate Change **adaptation and mitigation** strategies;
- Projects should envisage **resources for clustering** with other relevant EU-funded projects
- **International cooperation** particularly with **CELAC** countries is **encouraged**
- **Indicative EU contribution**: EUR 5 million to 7 million



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

- **Budget in 2018**
€219.7 million
- **2018 topics open:**
7 November 2017
- **First call deadline:**
27 Feb 2018

- ✓ **CE-SC5-03-2018:** Demonstrating systemic urban development for **circular and regenerative cities**
- ✓ **SC5-13-2019:** Strengthening **EU-CELAC cooperation** on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems
- ✓ **SC5-17-2018:** Towards **operational forecasting of earthquakes** and early warning capacity for more resilient societies
- ✓ **SC5-19-2018:** International network to **promote cultural heritage innovation and diplomacy (CSA)**

CE-SC5-03-2018: Demonstrating systemic urban development for circular and regenerative cities (IA) (1/3)

In **urban and peri-urban** areas (including surrounding industrial areas and commercial ports) develop and implement:

- **innovative urban planning** allowing for the design and implementation of circular and regenerative processes and the sustainable (re)using and (re)programming of existing buildings, open spaces and (infra)structures for circular initiatives;
- **innovative solutions to close the loop** of urban **material** and **resource flows** within and across **sectors** and **nexuses**;
- innovative **monitoring**, new **indicators** and **digital solutions** enabling **continuous monitoring**;

CE-SC5-03-2018: Demonstrating systemic urban development for circular and regenerative cities (2/3)

- **Multi-stakeholder** consortia actively involving public authorities, scientific community, societal stakeholders and **community-based partners (e. g. city-makers, urban (fab-) labs, start-ups etc.)**;
- **innovative local governance structures** and **interdisciplinary practices**, including SSH (e.g. **behavioural economics**);
- **Sustainable data platforms** for **open access data** on impact of the intervention;
- Projects **must** engage in substantial **networking, training** and **mentoring** towards **cities outside the project** to disseminate experience, knowledge and expertise for **replication** of "approaches";
- Resources must be foreseen for **clustering**;
- Indicative budget per project: **EUR 10 million**

CE-SC5-03-2018: Demonstrating systemic urban development for circular and regenerative cities (3/3)

Eligibility and admissibility conditions

At least 4 cities from different Member States and/or Associated Countries to ensure coverage of diverse contexts across the EU

Grant Conditions

Funding rate for direct costs of construction and installation of “**infrastructure-targeted**” interventions is 20% of the eligible costs.

SC5-13-2019: Strengthening EU-CELAC cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems (1/2)

- Models, tools, DSS, methodologies, guidelines, standards, indicators for the **design, construction, deployment and monitoring** of **nature-based solutions** for **restoration and rehabilitation** for **urban and peri-urban ecosystems**;
- **Systemic “approaches”** embedded in **integrated urban planning** and city-making process;
- Review and capitalise upon **existing experiences** and **good practices** in Europe and CELAC;
- Methodologies for assessment of **cost-effectiveness** of measures, accounting for **totality of the benefits** by restored ecosystems;

SC5-13-2019: Strengthening EU-CELAC cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems (2/2)

- Raise **awareness** through **outreach** and **education** activities about benefits from nature;
- **Multi-stakeholder, multi-disciplinary** (including social sciences and humanities) and **balanced EU-CELAC consortia**
- Indicative budget per proposal: **EUR 5 million**

Eligibility and admissibility conditions

- Consortia must comprise **at least three participants from CELAC**

SC5-17-2018: Towards operational forecasting of earthquakes and early warning capacity for more resilient societies (RIA)(1/2)

- To enhance **real time seismic risk reduction capacity** through improvements of **observational, forecasting modelling** and **testing- validation** capabilities;
- **Multi-disciplinary** research to better understand **conditions** leading to an **earthquake** and identify the **properties to be monitored as precursors** to the event;
- New generation of **early warning systems**, integrating **innovative concepts and technologies, decisional expert systems** using **local and regional information** (including social and economic data) and capable of **triggering automatic safety actions** and **reach people before ground shaking**;

SC5-17-2018: Towards operational forecasting of earthquakes and early warning capacity for more resilient societies (2/2)

- **Communication systems** and **structures** to improve **dialogue** between science and relevant users and authorities;
- Strong **European and international scientific collaboration** is needed to make substantial progress in the domain;
- Indicative budget per project: **EUR 6 million - EUR 8 million**

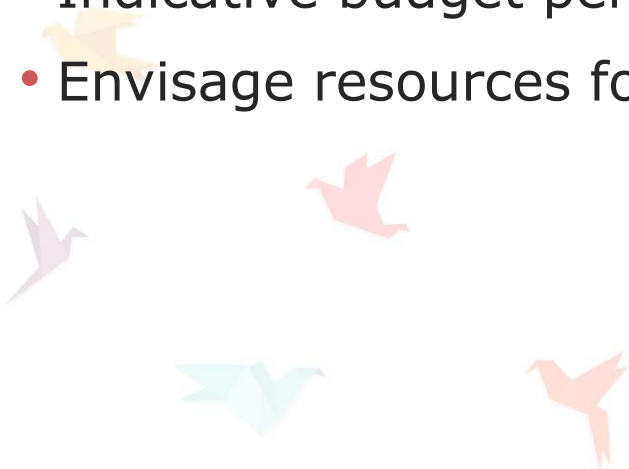
SC5-19-2018: International network to promote cultural heritage innovation and diplomacy (CSA)

Establish an **international network** that, through **continuous dialogue**, will capitalise on **EU expertise** to **leverage value** of cultural heritage assets and **promote** heritage-led **innovation** for sustainable development

- Map, review, document and promote **successful heritage-led "paradigms"** as catalysts for sustainable development; New **governance, business and finance models**;
- Provide expertise, assistance and **capacity building** particularly in **countries where heritage is at risk**
- Develop **guidelines to leverage CH** potential for diplomacy
- **Multi-stakeholder composition** (e.g. researchers, policy-makers, businesses (including SMEs), societal and cultural institutions, NGOs and CSOs, public and private organisations, investors, experts, innovators and citizens)

SC5-19-2018 International network to promote cultural heritage innovation and diplomacy (CSA)

- identify **priorities**, knowledge **gaps** and **research and innovation needs** and **barriers** and propose ways to overcome them;
- **International cooperation** is encouraged, particularly with **EU Neighbourhood countries** and with **countries** where **cultural heritage is at risk**;
- Indicative budget per proposal: **EUR 2.5 to EUR 3 million**
- Envisage resources for **clustering**;



Thank you!

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More information:

www.ec.europa.eu/research

Participant Portal:

www.ec.europa.eu/research/participants/portal/desktop/en/home.html

SC5 social media network on 'Yammer':

<http://www.tinyurl.com/greenRTD>