



Horizon 2020 - Work Programme 2018-2020

Topics for Circular Economy 2019-2020

The Horizon 2020 work programmes (WPs) for years 2018 - 2020 were designed around four main Focus Areas namely the Focus Area 'Connecting economic and environmental gains - the Circular Economy'.

Further development of a sustainable, resource efficient and competitive economy will require a transition to a more circular economic model with products, processes, services and business models that are designed to maintain the value and utility of materials and resources in the economy for as long as possible. The circular economy solutions should combine a strong environmental rationale with a convincing business logic.

The topics targeted to Circular Economy are resumed in the table below. For details please consult relevant WPs. The topics foreseen for 2020 are still under development.

Online sources of information

European commission Participant Portal

<https://ec.europa.eu/research/participants/portal/desktop/en/home.html>

National Contact Points for Climate Action, Environment, Resource Efficiency and Raw Materials

<http://www.ncps-care.eu/>

Created by: Anabela Carvalho (FCT/PT) and Cristina Gouveia (ANI/PT)



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Work Programme 2018-2020 Societal Challenge “Climate action, environment, resource efficiency and raw materials” (SC5)

| Topic | Title | Year | Type of Project | M€ per project | Type of Call | Deadline |
|--|--|-----------|----------------------|------------------------------|--------------|--|
| Call Greening the economy in line with the Sustainable Development Goals (SDGs) | | | | | | |
| Connecting economic and environmental gains - the circular economy | | | | | | |
| CE-SC5-04a-2019 | Building a water-smart economy and society - Symbiosis between industry and water utilities | 2019 | IA | 10-15 | Two-stage | 1 st phase: 19 Feb 2019 2 nd phase : 4 Sep 2019 |
| CE-SC5-04b-2019 | Building a water-smart economy and society - Large scale applications with multiple water users at various relevant scales | 2019 | IA | 10-15 | Two-stage | 1 st phase: 19 Feb 2019 2 nd phase : 4 Sep 2019 |
| CE-SC5-24-2020 | Improving the sorting, separation and recycling of composite and multi-layer materials | 2020 | RIA | 4-5 | | |
| CE-SC5-25-2020 | Understanding the transition to a circular economy and its implications on the environment, economy and society | 2020 | RIA | 3-4 | | |
| CE-SC5-28-2020 | (to be defined) | 2020 | IA | 4-5 | | |
| Raw Materials | | | | | | |
| CE-SC5-07-2018-2019-2020 | Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes a) Sustainable processing and refining of primary and/or secondary raw materials (2019, 2020) b) Recycling of raw materials from end-of-life products (2019, 2020) c) Recycling of raw materials from buildings (2019, 2020) d) Advanced sorting systems for high-performance recycling of complex end-of-life products (2019, 2020) e) Sustainable metallurgical processes (2020) | 2019-2020 | IA IA IA IA | 8-13 8-13 8-13 8-13 | Two-stage | 2019 1 st phase: 19 Feb 2019 2 nd phase : 4 Sep 2019 2020 (<i>tbd</i>) |
| CE-SC5-08c-2019 | Raw materials policy support actions for the circular economy - Responsible sourcing of raw materials in global value chains | 2019 | CSA | 3 | Single-stage | 19 Feb 2019 |
| CE-SC5-08d-2020 | Raw materials policy support actions for the circular economy: expert network on Critical Raw Materials | 2020 | CSA | 3 | - | - |



Work Programme 2018-2020 Societal Challenge “Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy” (SC2)

| Topic | Title | Year | Type of Project | M€ per project | Type of Call | Deadline |
|--|--|------|-----------------|----------------|--------------|-------------|
| Call Sustainable Food Security | | | | | | |
| Environment and climate-smart food production and consumption | | | | | | |
| CE-SFS-24-2019 | Innovative and citizen-driven food system approaches in cities | 2019 | IA | 7.5 | Single-stage | 23 Jan 2019 |
| Targeted international cooperation | | | | | | |
| CE-SFS-36-2020 | Diversifying farmers’ income through small bio-based concepts | 2020 | - | - | - | - |
| CE-SFS-39-2019 | High-quality organic fertilisers from biogas digestate | 2019 | IA | 5 | Single-stage | 23 Jan 2019 |
| Call Rural Renaissance | | | | | | |
| Organizing sustainable food and non-food value chains under changing conditions | | | | | | |
| CE-RUR-08b-2019 | Closing nutrient cycles - Bio-based fertilisers from animal manure | 2019 | IA | 8 | Single-stage | 23 jan 2019 |
| CE-RUR-08c-2020 | Closing nutrient cycles - Bio-based fertilizers from other by-products of the agro-food, fisheries, aquaculture or forestry industry | 2020 | IA | 8 | Single-stage | - |
| CE-RUR-10-2019 | Circular bio-based business models for rural communities | 2019 | IA | 10 | Single-stage | 23 jan 2019 |
| Call Blue Growth | | | | | | |
| CE-BG-06-2019 | Sustainable solutions for bio-based plastics on land and sea | 2019 | IA | 9 | Single-stage | 23 Jan 2019 |



Work Programme 2018-2020 “Nanotechnologies, advanced materials, advanced manufacturing and processing, biotechnology” (NMPB)

| Topic | Title | Year | Type of Project | M€ per project | Type of Call | Deadline |
|---|--|------|-----------------|----------------|--------------|---|
| Call Transforming European industry | | | | | | |
| Biotechnology | | | | | | |
| CE-BIOTEC-05-2019 | Microorganism communities for plastics bio-degradation | 2019 | RIA | 5 | Single-stage | 5 Mar 2019 |
| Factories of the Future | | | | | | |
| DT-FoF-06-2019 | Refurbishment and re-manufacturing of large industrial equipment | 2019 | IA | 12-15 | Single-stage | 21 Feb 2019 |
| Call Industrial sustainability | | | | | | |
| Sustainable Process Industry (SPIRE) | | | | | | |
| CE-SPIRE-01-2020 | Industrial symbiosis | 2020 | IA | - | - | - |
| CE-SPIRE-04-2019 | Efficient integrated downstream processes | 2019 | IA | 10-14 | Single-stage | 21 Feb 2019 |
| CE-SPIRE-05-2019 | Adaptation to variable feedstock through retrofitting | 2019 | IA (50%) | 8-12 | Single-stage | 21 Feb 2019 |
| CE-SPIRE-07-2020 | Recovery of industrial water, thermal energy and substances contained therein | 2020 | IA | - | - | - |
| CE-SPIRE-08-2020 | Improved Industrial Processing using novel high-temperature resistant materials | 2020 | RIA | - | - | - |
| CE-SPIRE-09-2020 | Making the most of mineral waste, by-products and recycled material as feed for high volume production | 2020 | IA | - | - | - |
| Catalysing the circular economy | | | | | | |
| CE-NMBP-25-2019 | Photocatalytic synthesis | 2019 | RIA | 5-7 | Two-stage | 1 st phase: 22 Jan 2019 2 nd phase : 03 Sep 2019 |

RIA - Research and Innovation Action (financiamento: 100%); Action primarily consisting of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution. For this purpose they may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment.

IA - Innovation Action (70% dos custos diretos elegíveis, com exceção das entidades sem fins lucrativos que podem ser reembolsadas a 100%); há tópicos SPIRE (devidamente assinalados) cuja taxa é 50%; Action primarily consisting of activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services. For this purpose they may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication.

CSA - Coordination and Support Action (financiamento: 100%; Actions consisting primarily of accompanying measures such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, including design studies for new infrastructure and may also include complementary activities of strategic planning, networking and coordination between programmes in different countries.

