



Circular Economy policies and upcoming R&I initiatives

30 June 2021

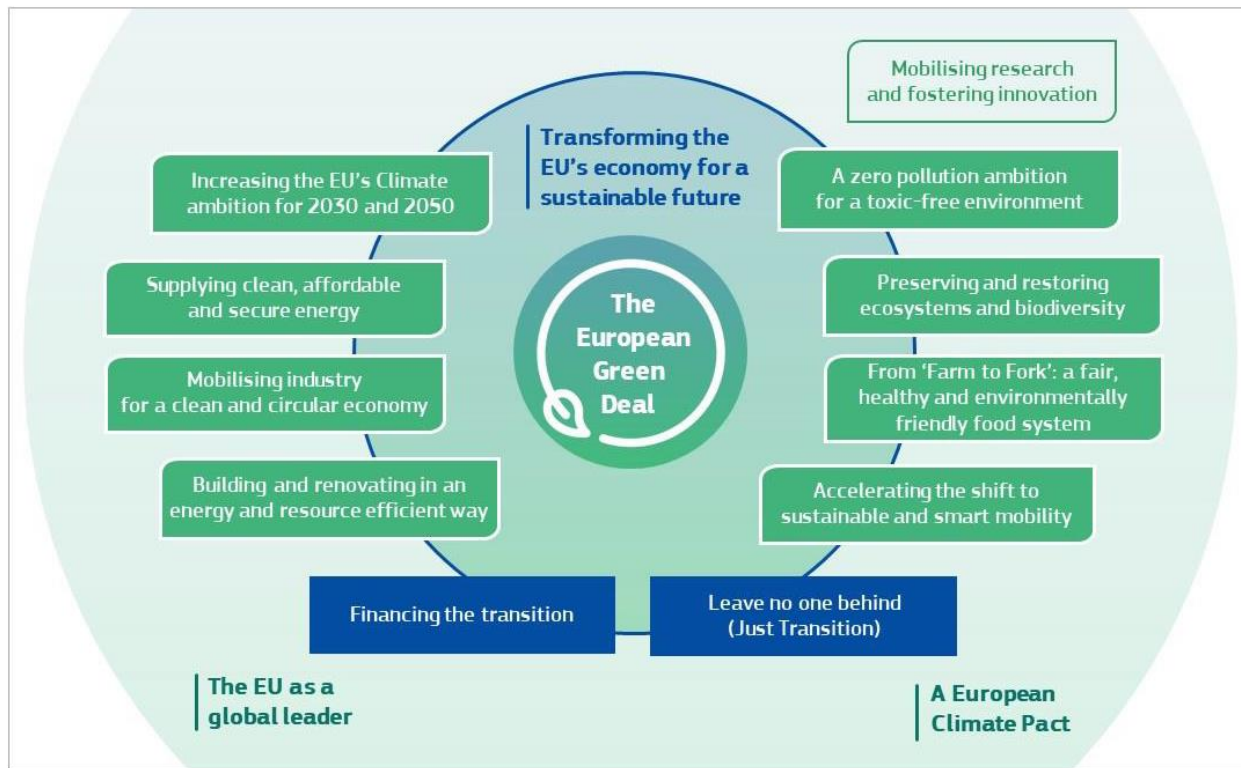
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European Commission DG Research&Innovation



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The policy context



The policy context

- CE vs food, water and nutrients
- BIOECONOMY

CEAP

- Waste reduction targets for specific streams and other measures on waste prevention
- Policy framework for bio-based plastics and biodegradable or compostable plastics
- Scoping the development of further EU-wide end-of-waste and by-product criteria



European *Green Deal* call

- LC-GD-3-2-2020: Demonstration of systemic solutions for the territorial deployment of the circular economy

Territorial solutions – **CCRI**

https://ec.europa.eu/info/research-and-innovation/research-area/environment/circular-economy/circular-cities-and-regions-initiative_en

Green Deal Call for the demonstration of systemic solutions for the territorial deployment of the circular economy

Call for tender Operation of the Circular Cities and Regions Initiative's Coordination and Support Office (CCRI-CSO)

CCRI in Horizon Europe 2021/22



European *Green Deal*

- Zero Pollution: EU action plan
 - by more than 55 % the health impacts (premature deaths) of air pollution;
 - by 30 % the share of people chronically disturbed by transport noise;
 - by 25 % the EU ecosystems where air pollution threatens biodiversity;
 - by 50 % nutrient losses, the use and risk of chemical pesticides, the use of the more hazardous ones, and the sale of antimicrobials for farmed animals and in aquaculture;
 - by 50 % plastic litter at sea and by 30 % microplastics released into the environment;
 - significantly total waste generation and by 50 % residual municipal waste



European *Green Deal*

- Zero Pollution: EU action plan
 - revision of the Ambient Air Quality Directives;
 - introducing more stringent emission limits for motor vehicles
 - looking into the need to set noise reduction targets
 - reviewing and, if necessary, revising the Bathing Water Directive;
 - revising the Environmental Quality Standards Directive and the Groundwater Directive;
 - reviewing and, if necessary, revising the Marine Strategy Framework Directive;
 - **revising the Urban Waste Water Treatment Directive;**
 - **reviewing the majority of EU waste laws to adapt them to the clean and circular economy principles;**
 - reviewing the Industrial Emissions Directive
 - revising the Mercury Regulation to phase out the use of dental amalgam and prohibit the manufacture and trade of some mercury-added products;
 - strengthening the Environmental Crime Directive and evaluating the Environmental Liability Directive's fitness for purpose

Horizon Europe 2021-2027



Pillar 1 Excellent Science

European Research Council

Marie Skłodowska-Curie
Actions

Research Infrastructures



Pillar 2 Global Challenges and European Industrial Competitiveness

Clusters

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- **Food, Bioeconomy, Natural Resources, Agriculture and Environment**

Joint Research Centre



Pillar 3 Innovative Europe

European Innovation Council

European innovation
ecosystems

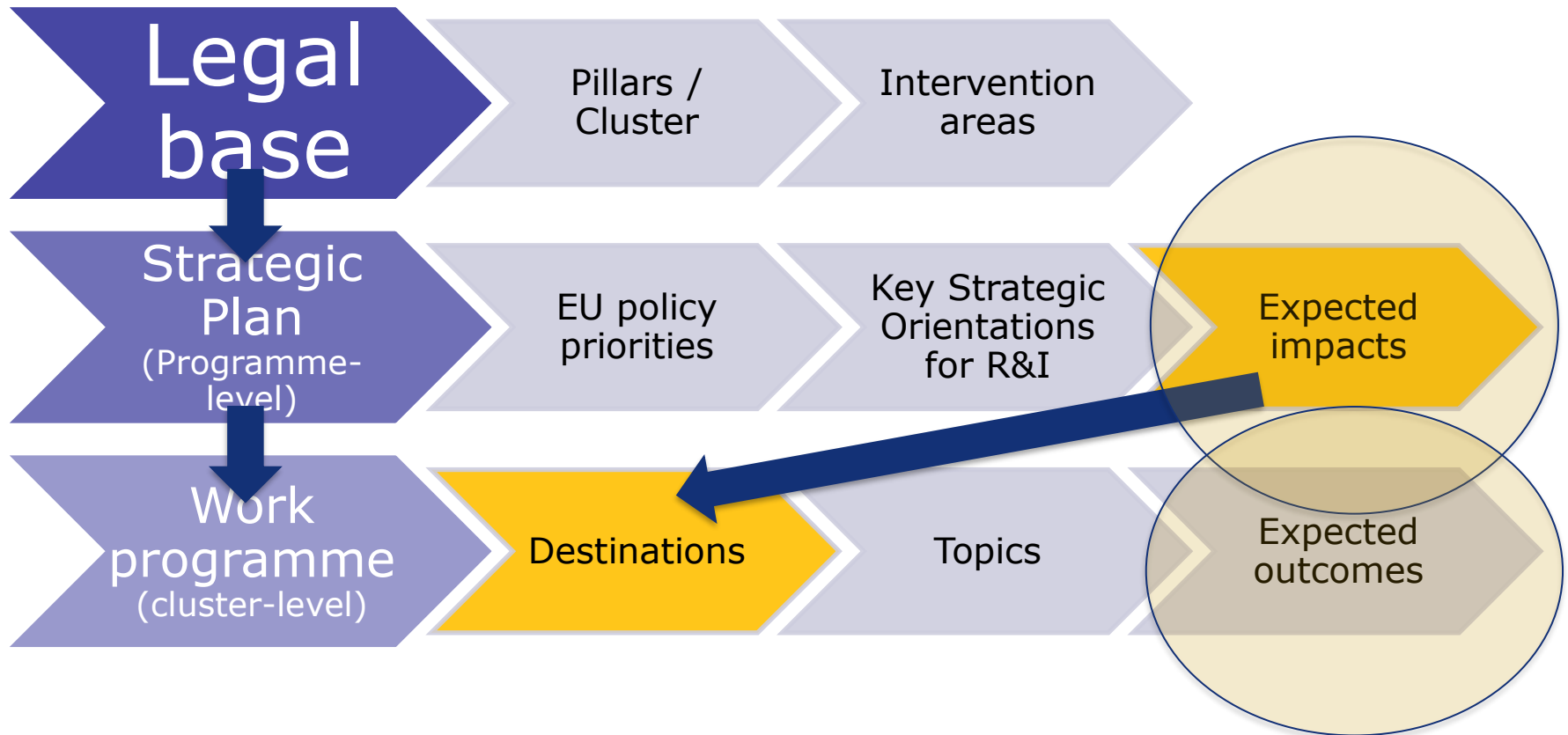
European Institute of
Innovation
and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

Horizon Europe 2021-2027





Horizon Europe: strategic orientations 2021-2024 [*and impact areas*]

- Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains
- Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources [*Clean and healthy air, water and soil*]
- Making Europe the first digitally enabled circular, climate-neutral and sustainable economy [*Circular and clean economy*]
- Creating a more resilient, inclusive and democratic European society

Horizon Europe: CLUSTER 6 contributions

KEY STRATEGIC ORIENTATIONS FOR R&I

KSO C: Making Europe the first digitally enabled circular, climate-neutral and sustainable economy

IMPACT AREAS

Circular and clean economy

EXPECTED IMPACTS

29. Sustainable and circular management of natural resources; tackling pollution; bioeconomy

INTERVENTION AREAS COVERED

Environmental Observation; Biodiversity and Natural Resources; **Agriculture, Forestry and Rural Areas;** Seas, Oceans and Inland Waters; Food Systems; **Bio-based Innovation Systems in the EU Bio-economy;** Circular Systems

EUROPEAN PARTNERSHIPS COVERED

Circular bio-based Europe: Sustainable, inclusive and circular bio-based solutions²



Horizon Europe: CLUSTER 6 contributions

*"**Sustainable and circular management** and use of natural resources as well as prevention and removal of **pollution** are **mainstreamed**, unlocking the potential of the bioeconomy, ensuring competitiveness and **guaranteeing healthy soil, air, fresh and marine water for all**, through better understanding of planetary boundaries, deployment of innovative technologies and other solutions, notably in primary production, forestry and bio-based systems."*

Cluster 6 paradigm: transformative change of EU economy and society; reducing environmental degradation; better management of natural resources; serving the EU's climate objectives

Cluster 6 destinations: Biodiversity, Food Systems, Circular Economy and Bioeconomy Sectors, Zero Pollution, Climate Action, Communities, Governance



Horizon Europe: CLUSTER 6 contributions

- **Cluster 6, destination on Circular Economy and Bioeconomy sectors**

Indicators and methods for measuring CE transition

Analysis of circular value chains

Life cycle information data base

Circular cities and regions initiative

Circular material streams: plastics, textiles, electronics; construction and buildings; packaging and SUP

Novel feedstock; biobased innovation



Horizon Europe: CLUSTER 6 contributions

- **Cluster 6, destination on Zero Pollution**

Expected impacts:

- Balanced N/P flows well within safe ecological boundaries
- Circular bio-based systems reversing climate change, restoring biodiversity and protecting air, water and soil quality along supply chain of biological feedstock and industrial value chains



Horizon Europe: the Circular Bio-based Europe partnership

to accelerate the transformation into a circular bio-based economy in the EU

- (i) decarbonise the economy, thus minimise the carbon need and footprint;
- (ii) supply the remaining carbon need from sustainably produced bioresources (including bio-waste);
- (iii) minimise impact and maximise efficiency: use 'cascading' for all carbon resources and avoid all harmful emissions

Adaptation to climate change, including societal transformation



**Healthy
oceans,
seas,
coastal
and inland
waters**

**Mission
areas**



Cancer



**Climate-neutral
and smart cities**



**Soil health
and food**



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https://www.horizon-europe-infodays2021.eu



Horizon Europe Info Days 2021

The EU Research & Innovation Programme 2021 -2027

**HORIZON
EUROPE**

Info days 2021

From June 28th till July 9th



Horizon Europe Info days

Following the policy-related discussions during the [European Research and Innovation Days 2021](#) (23 & 24 June), the 10-day event of Horizon Europe Info Days will give prospective applicants and other stakeholders of EU research and innovation the opportunity to get information and ask questions about main funding instruments, processes of [Horizon Europe](#) and what is new.

Quick link

Download the calendar





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Thank you