#InvestEUresearch

Horizon 2020
Work Programme
for Research & Innovation
2018-2020

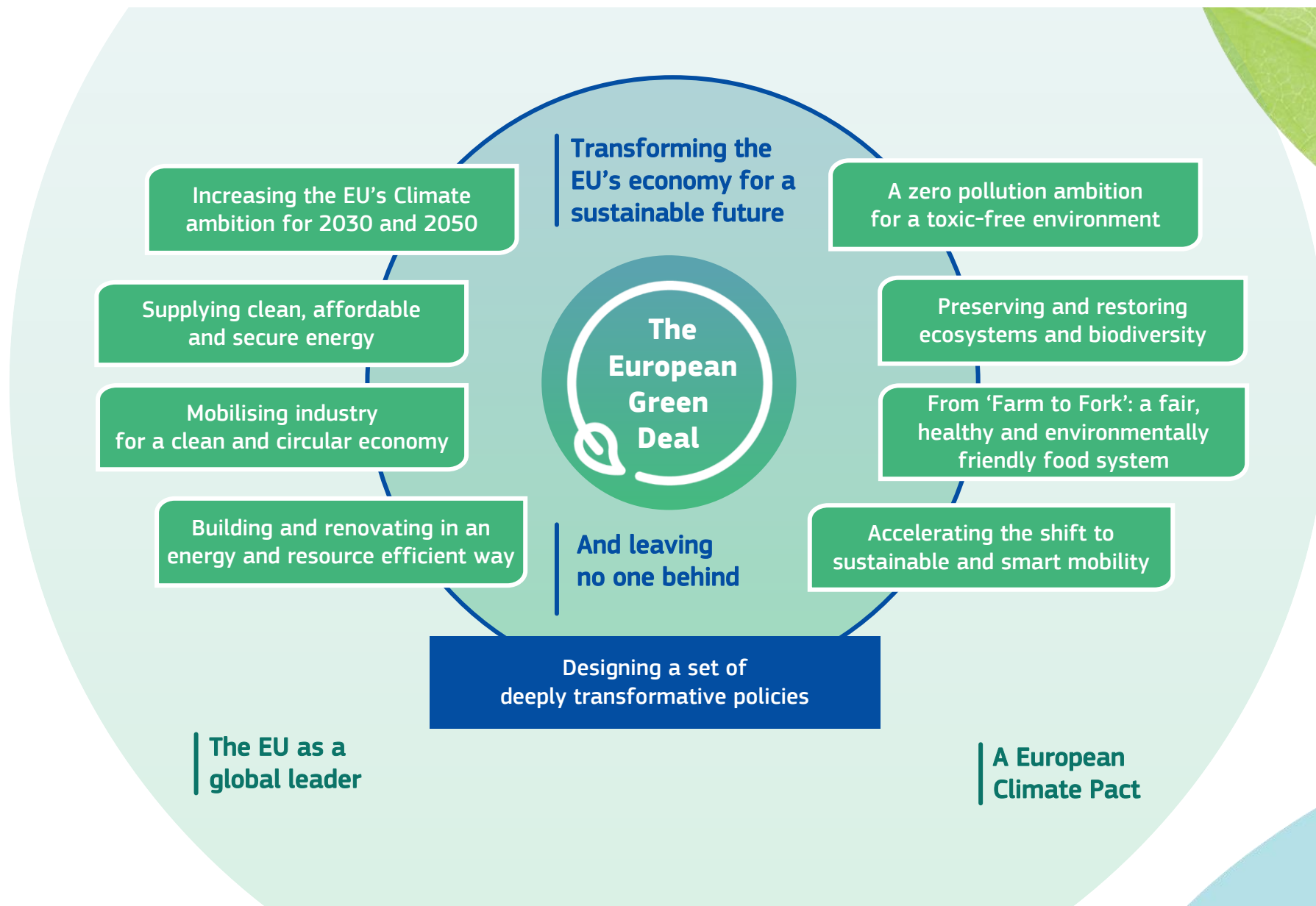**The European Green Deal Call**

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European Commission
DG Agriculture and Rural Development
Research and Innovation
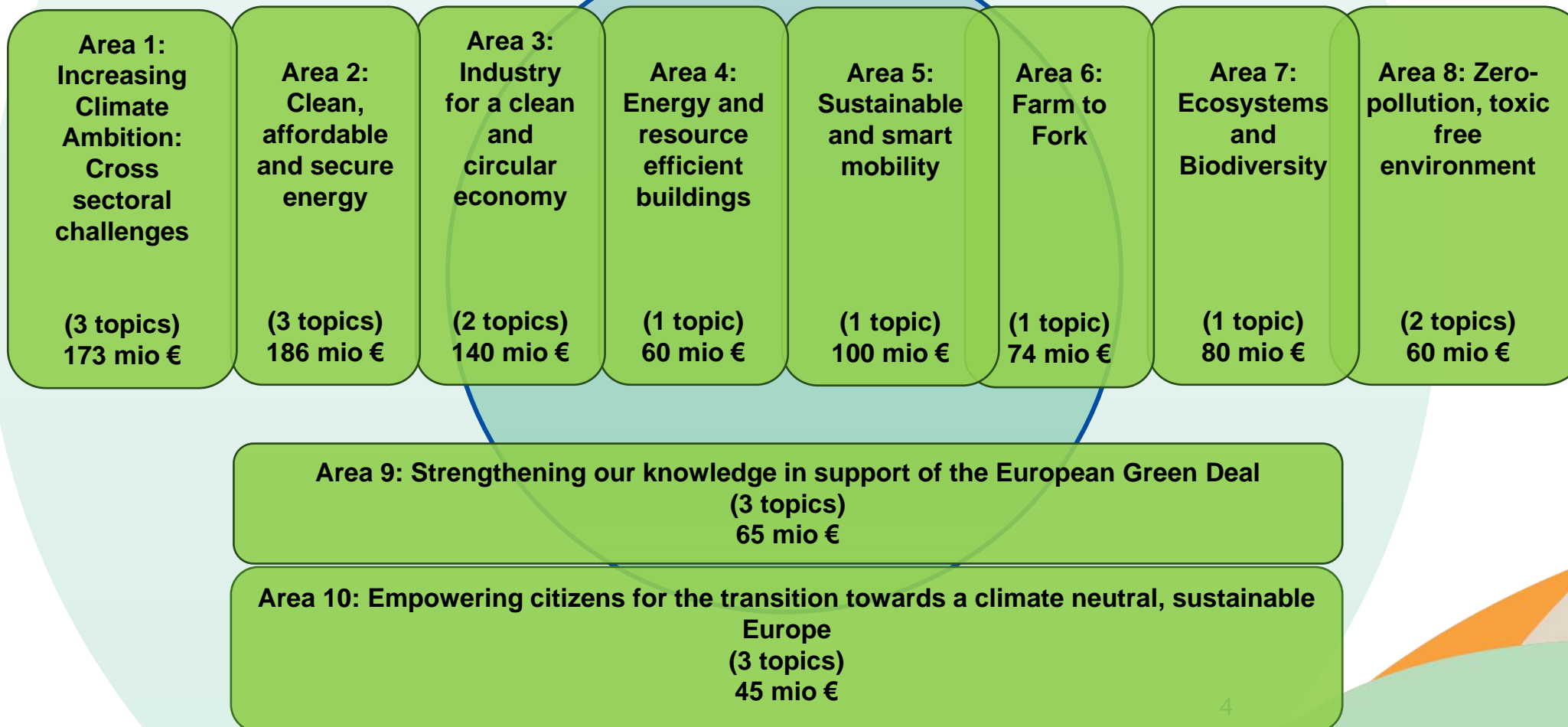
13 October 2020

European Green Deal Call

- Co-created within the Commission and with Member States

- Stakeholder engagement activity: 6000 responses

- Budget of **1 billion euro**

- **10 Areas:** 8 areas reflecting key EGD work streams, 2 horizontal areas

- [Part of H2020 Work Programme](#): limited number of topics (20), focus on **impact**, supporting Innovation and Demonstration actions

- Short-medium term: technologies at mature state of development

- Multidisciplinary approach

- **Size of topics** is larger than most H2020 calls

STRUCTURE OF THE GREEN DEAL CALL

Area 1: Increasing Climate Ambition: Cross sectoral challenges

(3 topics)
173 mio €

Area 2: Clean, affordable and secure energy

(3 topics)
186 mio €

Area 3: Industry for a clean and circular economy

(2 topics)
140 mio €

Area 4: Energy and resource efficient buildings

(1 topic)
60 mio €

Area 5: Sustainable and smart mobility

(1 topic)
100 mio €

Area 6: Farm to Fork

(1 topic)
74 mio €

Area 7: Ecosystems and Biodiversity

(1 topic)
80 mio €

Area 8: Zero-pollution, toxic free environment

(2 topics)
60 mio €

Area 9: Strengthening our knowledge in support of the European Green Deal
(3 topics)
65 mio €

Area 10: Empowering citizens for the transition towards a climate neutral, sustainable Europe
(3 topics)
45 mio €

Area 1 - Increasing climate ambition: cross sectoral challenges

Research and innovation needs for climate mitigation and adaptation, long-term vision for climate neutrality as set out in the *Clean Planet for All* Communication.

- **1.1. Preventing and fighting extreme wildfires with the integration and demonstration of innovative means (IA, CSA)**

- 1.2. Towards climate-neutral and socially innovative cities (RIA)

- 1.3. Climate-resilient innovation packages for EU regions (IA, CSA)

Area 6: Farm to fork

More sustainable food policy, to tackle climate change, protect the environment and preserve biodiversity while contributing to more circular economies and lifestyles

- **6.1. Testing and demonstrating systemic innovations for sustainable food from farm to fork (IA)**

  - **reducing GHG emissions** by increasing farm-based carbon sequestration and storage,
  - **reducing energy use** and increasing energy efficiency in processing, distribution, conservation and preparation of food,
  - **zero pollution** of water, soil and air
  - use of **antimicrobials** in animal production and in aquaculture
  - reducing **food losses**, **waste** and **packaging**
  - sustainable **healthy diets**

Area 7: Biodiversity and ecosystem services

Supporting the Biodiversity Strategy, to restore biodiversity and ecosystem services. Large-scale restoration of degraded ecosystems and deployment of nature-based solutions to accelerate transformative change in cooperation with vulnerable communities and regions.

- **7.1. Restoring biodiversity and ecosystem services (IA)**

Area 8: Zero-pollution, toxic-free environment

Measures addressing pollution from several sources, such as urban runoff, new or particularly harmful sources including micro-plastics and chemicals, or large industrial installations.

- **8.1. Innovative, systemic zero-pollution solutions to protect health, environment and natural resources from persistent and mobile chemicals (RIA)**

- 8.2. Fostering regulatory science to address chemical and pharmaceutical mixtures: from science to evidence-based policies (RIA)

Timeline 2021

Jan Feb Mar Apr May Jun Jul Aug Sep

26th January

Call deadline

Information to
applicants

Evaluation of
proposals

(5 months max)

GA signed

(8 months max)

European
Commission

Action types

Type of action	Funding	Aim of action	Evaluation
Research and Innovation Action (RIA)	100%	To establish new knowledge or explore the feasibility of a new technology, product, process, service or solution	
Innovation Actions (IA)	70% (100% for non-profit entities)	To produce plans and arrangements or designs for new, altered or improved products, processes or services	**Single stage**
Coordination and Support Actions (CSA)	100%	Accompanying measures	

European Commission

Evaluation principles

Fair and equal treatment

Based on the WP and defined criteria

Independent experts

Confidentiality and absence of CoI

European Commission

Award criteria

Excellence

Impact

Implementation

Scoring scale and tresholds

5 — **Excellent.** The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

4 — **Very Good.** The proposal addresses the criterion very well, but a small number of shortcomings are present.

3 — **Good.** The proposal addresses the criterion well, but a number of shortcomings are present.

2 — **Fair.** The proposal broadly addresses the criterion, but there are significant weaknesses.

1 — **Poor.** The criterion is inadequately addressed, or there are serious inherent weaknesses.

0 — The proposal **fails** to address the criterion or cannot be assessed due to missing or incomplete information.

Half scores given

Criteria	Threshold	IA factor (ranking)
Excellence	3/5	n/a
Impact	3/5	**x 1,5**
Implementation	3/5	n/a
TOTAL	10/15	n/a

European Commission

Competitive calls

Tips for successful preparation of a proposal

- Read carefully the Call and its conditions

- Address all the topic

- H2020 is about impact

- Build on other projects results, explain synergies with sister projects

- Leave no doubt on TRLs or State of the Art

- Dissemination & exploitation plan

- Consult / Ask a FAQ

European Commission

Tips for successful preparation of a proposal

Implementation

Consortium

Justified budget

Risks mitigated

Reasonable duration

Presentation

Easy to follow

Use graphics

No tiny fonts
or tight line spacing

Respect page limits

European Commission

Cross-cutting issues

- Holistic approach of the call

- Pilot and demonstration activities

- Cross-cutting priorities

- International cooperation
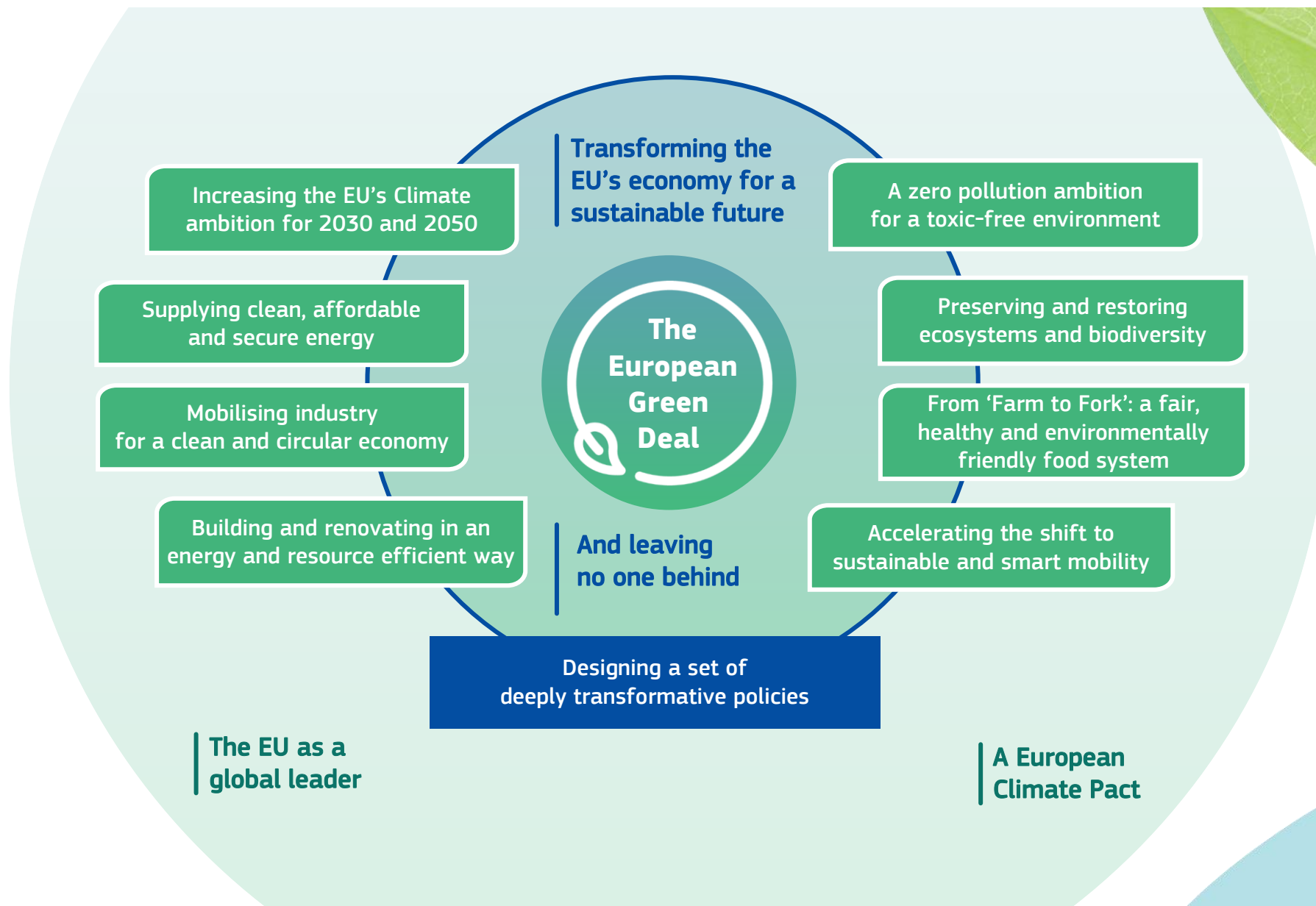
- Open access & data management

- Ethics

European Commission

Horizon Europe

Cluster 6

The **European Green Deal**

The European Green Deal

Transforming the EU's economy for a sustainable future

Increasing the EU's Climate ambition for 2030 and 2050

A zero pollution ambition for a toxic-free environment

Supplying clean, affordable and secure energy

Preserving and restoring ecosystems and biodiversity

Mobilising industry for a clean and circular economy

From 'Farm to Fork': a fair, healthy and environmentally friendly food system

Building and renovating in an energy and resource efficient way

Accelerating the shift to sustainable and smart mobility

And leaving no one behind

Designing a set of deeply transformative policies

The EU as a global leader

A European Climate Pact

Lessons Learned
from Horizon 2020 Interim Evaluation

Key Novelties
in Horizon Europe

⚡ Support breakthrough innovation → **European Innovation Council**

🎯 Create more impact through mission-orientation and citizens' involvement → **R&I Missions**

🌐 Strengthen international cooperation → **Extended association possibilities**

🔓 Reinforce openness → **Open science policy**

✓ Rationalise the funding landscape → **New approach to Partnerships**

🤝 Encourage participation → **Spreading Excellence**

Rules for participation: continuity and simplification
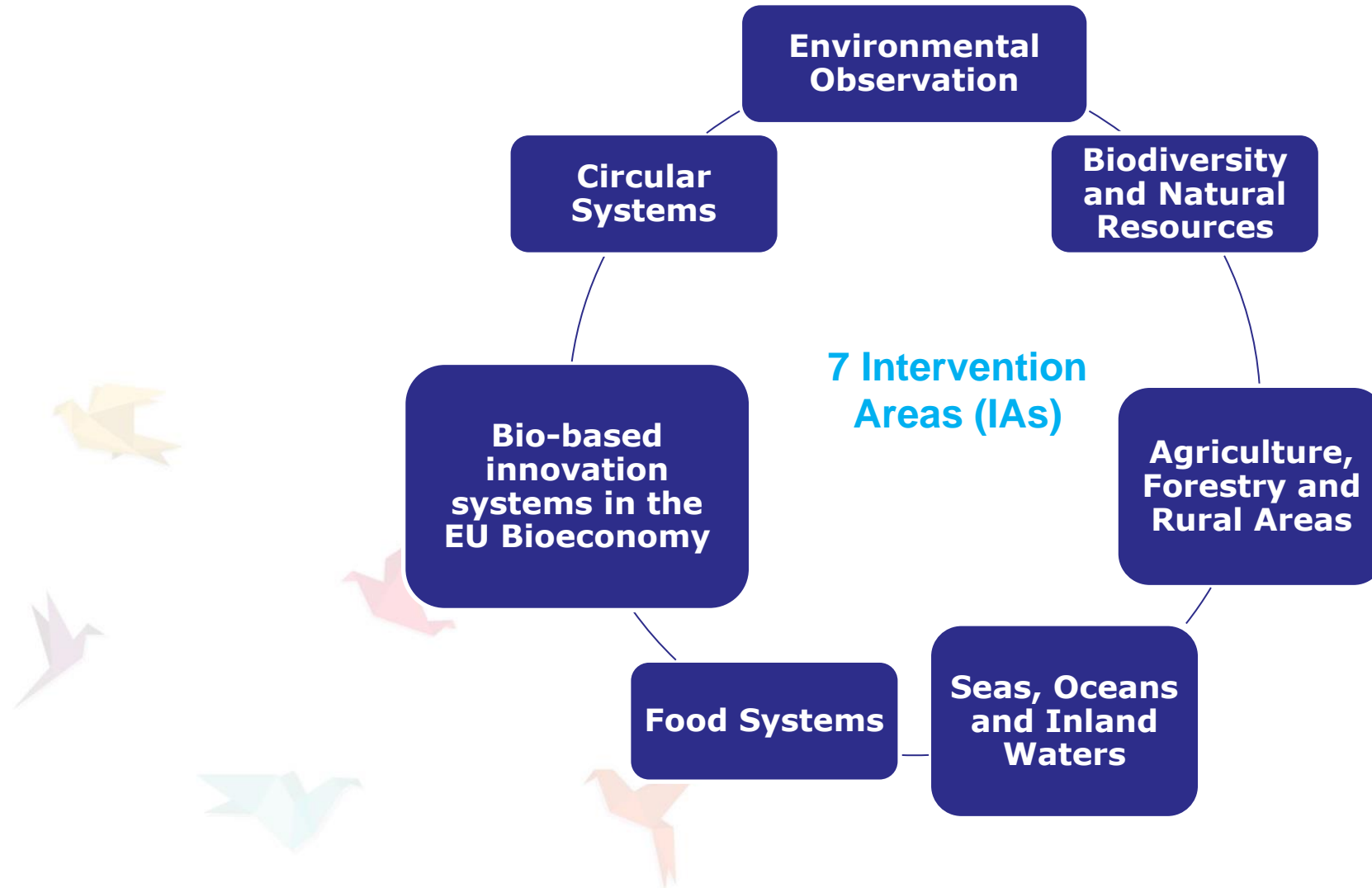
European Commission

Horizon Europe structure

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

European Commission

Strategic Plan gives direction to the Work Programme (WP)

Strategic Plan (new implementing act by the Commission) will prepare the content in the work programmes and calls for proposals for the first **four years**:

Horizon Europe legislative package

Strategic Plan 2021-2024

Work Programme 2021-2022

Calls for proposals

Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture and Environment

7 Intervention Areas (IAs)

- 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 Bioeconomy
- Circular Systems

European Commission

→ **Six cross-cutting long-term impacts**

IAs:

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 Bioeconomy

Circular Systems

European Commission

Work programme Destinations

- BIODIVERSITY AND ECOSYSTEMS

- FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

- CIRCULAR ECONOMY AND BIOECONOMY SECTORS

- CLEAN ENVIRONMENT AND ZERO POLLUTION

- LAND, OCEANS AND WATER FOR CLIMATE ACTION

- DEVELOPMENT OF RURAL, COASTAL AND URBAN AREAS

- INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND TOOLS

European Commission
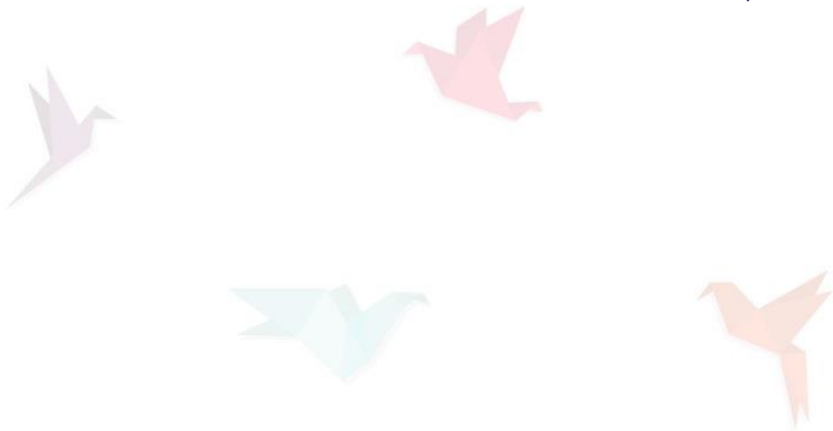
Multi-actor approach
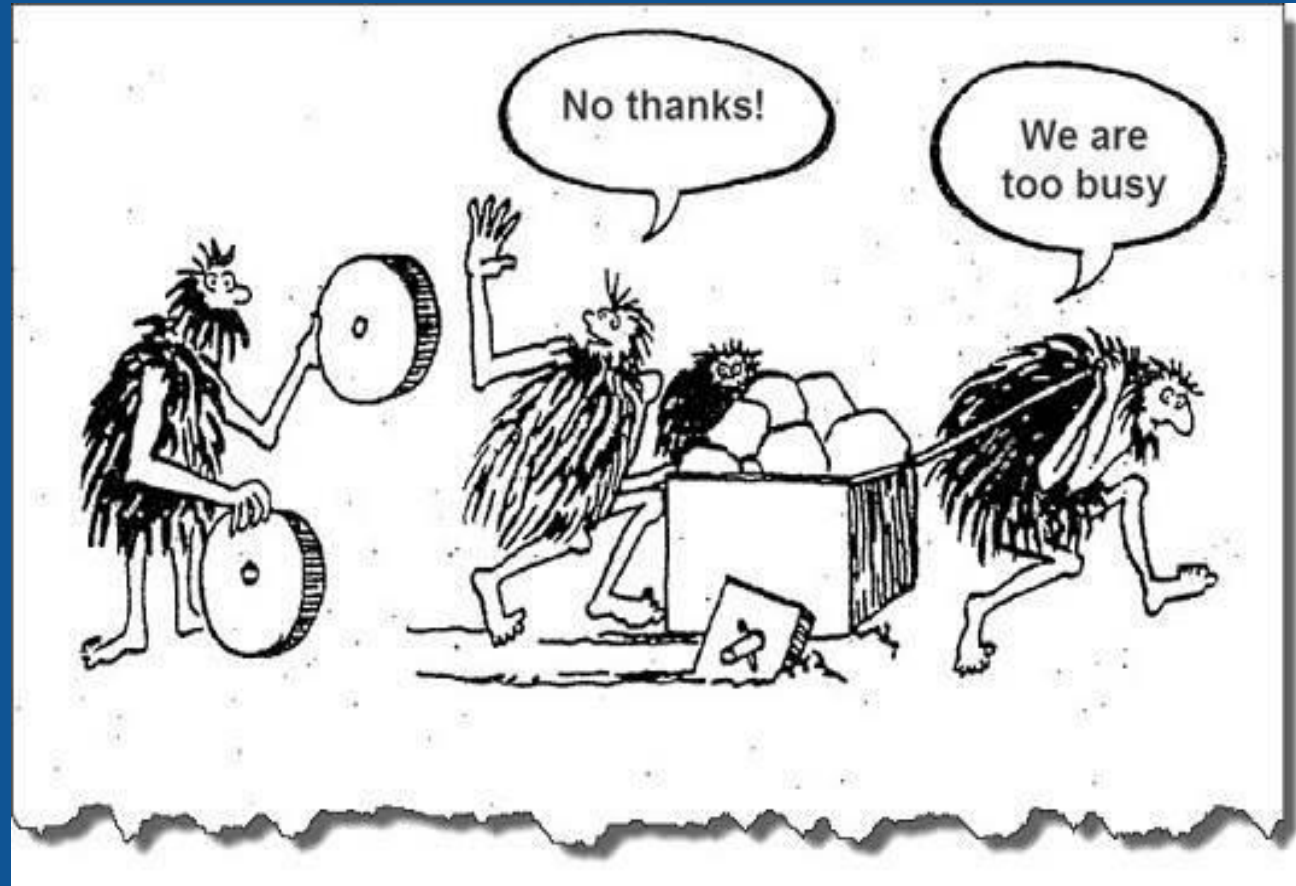
State of play on Strategic Plan & WP

Indicative timeline

Q2/2020	Co-creation of text of draft Strategic Plan, including interactions with MS, EP and stakeholders
June-September 2020	Discussions of draft Strategic Plan with Strategic configuration of the Programme committee and with the EP (ITRE Committee)
April - October 2020	Discussions of draft WPs with shadow thematic configurations of the HE PC
22-24 September	Interaction with stakeholders in the context of the R&I Days
Q4 2020	Adoption by the European Commission of the Strategic Plan
Q1 2021	Adoption by the European Commission of 2021-2022 Work Programme of Horizon Europe

European Commission

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2018-2020

Thank you for your attention

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Background slides

Area 1: Increasing climate ambition: cross sectoral challenges

Research and innovation needs for climate mitigation and adaptation, long-term vision for climate neutrality as set out in the *Clean Planet for All* Communication.

- 1.1. Preventing and fighting extreme wildfires with the integration and demonstration of innovative means

- **Subtopic 1: Pan-European adaptation process to extreme wildfires (IA) with a systemic approach addressing all phases of wildfire management; Subtopic 2: Demonstration of innovative and integrated approaches (CSA)**

- 1.2. Towards climate-neutral and socially innovative cities (RIA)

- **One stop shop platform to drastically reduce GHG, with cascade funding**

- 1.3. Climate-resilient innovation packages for EU regions

- **Subtopic 1: Innovation Packages for transformational adaptation of European regions and communities (IA); Subtopic 2: Support the Innovation Packages (CSA)**

Area 2: Clean, affordable and secure energy

The production and use of energy accounts for more than 75% of the EU's greenhouse gas emissions; therefore, further decarbonising the energy system is fundamental for reaching the climate targets set for 2030 and 2050.

- 2.1. Innovative land-based and offshore renewable energy technologies and their integration into the energy system

- **Subtopic 1: Development of land-based renewable energy technologies and their integration into the energy system (RIA); Subtopic 2: Demonstration of innovative technologies to enable future large scale deployment of offshore renewable energy (IA)**

- 2.2. Develop and demonstrate a 100 MW electrolyser upscaling the link between renewables and industrial applications (IA)

- 2.3. Accelerating the green transition and energy access partnership with Africa

- **Actions should demonstrate innovative and sustainable energy solutions that consider climate adaptation and climate mitigation in the African social, economic and environmental contexts.**

Area 3: Industry for a clean and circular economy

Aim is to switch to alternative, climate-neutral energy and feedstock sources and, in line with the EU's new industrial strategy, adopting more circular product designs. The area includes sectoral and territorial approaches.

- 3.1. Closing the industrial carbon cycle to combat climate change (IA)

- **Significant reduction of industrial CO_2 emissions through the development of an industrial scale demonstrator and novel, highly optimised and energy efficient catalytic systems.**

- 3.2. Demonstration of systemic solutions for the territorial deployment of the circular economy (IA)

- **Decouple economic growth from resource use and to ensure a swift transition to climate-neutral and circular solutions and to increase the security of EU value chains.**

Area 4: Energy and resource efficient buildings

Construction and renovation of buildings, together with their use and operation, consumes significant amounts of energy as well as mineral resources.

- 4.1. Building and renovating in an energy and resource efficient way (IA)

- **Large-scale, real-life demonstrations of promising technology, process and social innovations, in different regions of Europe to reduce embodied GHG and increase energy efficiency.**

Area 5: Sustainable and smart mobility

A clear commitment of the European Green Deal is that "transport should become drastically less polluting", highlighting in particular the urgent need to reduce greenhouse gas emissions (GHG) in aviation and waterborne transport.

- 5.1. Green airports and ports as multimodal hubs for sustainable and smart mobility (IA)

- **"Lighthouse-and-fellows" approach**

- **Area 1: Green Airports with 1) Transport, 2) Terminal, 3) Energy and 4) Cross-cutting aspects**

- **Area 2: Green Ports, covering energy supply and production, efficient logistics and multimodality, governance and policy**

Area 6: Farm to fork

In line with the Farm to Fork Strategy, the actions under this area pave the way to a more sustainable food policy. This will strengthen the efforts of farmers and fishermen and -women to tackle climate change, protect the environment and preserve biodiversity while contributing to more circular economies and lifestyles.

- 6.1. Testing and demonstrating systemic innovations for sustainable food from farm to fork (IA)

- **Six food system challenges: (1) reducing GHG emissions and by increasing farm-based carbon sequestration and storage, (2) reducing energy use and increasing energy efficiency in processing, distribution, conservation and preparation of food, (3) zero pollution of water, soil and air (pesticides and fertilisers), (4) Use of antimicrobials in animal production and in aquaculture , (5) Reducing food losses, waste and packaging, (6) sustainable healthy diets.**

- **Close link to the "Farm to Fork Strategy" (European Commission Communication "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system", COM(2020)381).**

Area 7: Biodiversity and ecosystem services

Supporting the Biodiversity Strategy adopted by the European Commission, the actions under this area aim to restore biodiversity and ecosystem services. Large-scale restoration of degraded ecosystems and deployment of nature-based solutions will accelerate transformative change in cooperation with vulnerable communities and regions.

- 7.1. Restoring biodiversity and ecosystem services (IA)

- **This topic responds to the urgent double challenge of (1) accelerating transformative change through (2) upscaling restoration of ecosystems at sea or on land.**

- **Projects include widespread and innovative scaling-up of ecosystem restoration to maintain and enhance natural carbon sinks and other ecosystem services.**

Area 8: Zero-pollution, toxic-free environment

Actions under this area envision measures addressing pollution from several sources, such as urban runoff, new or particularly harmful sources including micro-plastics and chemicals, or large industrial installations.

- 8.1. Innovative, systemic zero-pollution solutions to protect health, environment and natural resources from persistent and mobile chemicals (RIA)

- **mitigation solutions based on better understanding the sources and distribution of the targeted chemicals, improved risk assessment, support policy development.**

- 8.2. Fostering regulatory science to address chemical and pharmaceutical mixtures: from science to evidence-based policies (RIA)

- **Advance regulatory science to provide policy-makers and risk assessors with validated and practically applicable approaches, methods and tools and to study the effectiveness and efficiency of different policy approaches on exposure to chemical and pharmaceutical mixtures.**

Area 9: Strengthening our knowledge in support of the EGD

Activities to strengthen the European knowledge base, adopting a longer-term perspective while also acting as a bridge to Horizon Europe.

- 9.1. European Research Infrastructures' capacities and services to address European Green Deal challenges (RIA)

- **Subtopic 1: Support Europe leadership in clean energy storage technologies; Subtopic 2: Enhancing European research infrastructures for greenhouse gases observation in and around cities; Subtopic 3: Enhancing observations for air quality and citizens' health in urban areas.**

- 9.2. Developing end-user products and services for all stakeholders and citizens supporting climate adaptation and mitigation (RIA)

- **Informing citizens and decision-makers about the impacts of climate change in the decades to come, identify adaptation options, and illustrate what pathways towards climate neutrality entail.**

- 9.3. A transparent and accessible ocean: towards a digital twin of the ocean (IA)

- **Consistent high-resolution, multi-dimensional and (nearly) real-time description of the ocean.**
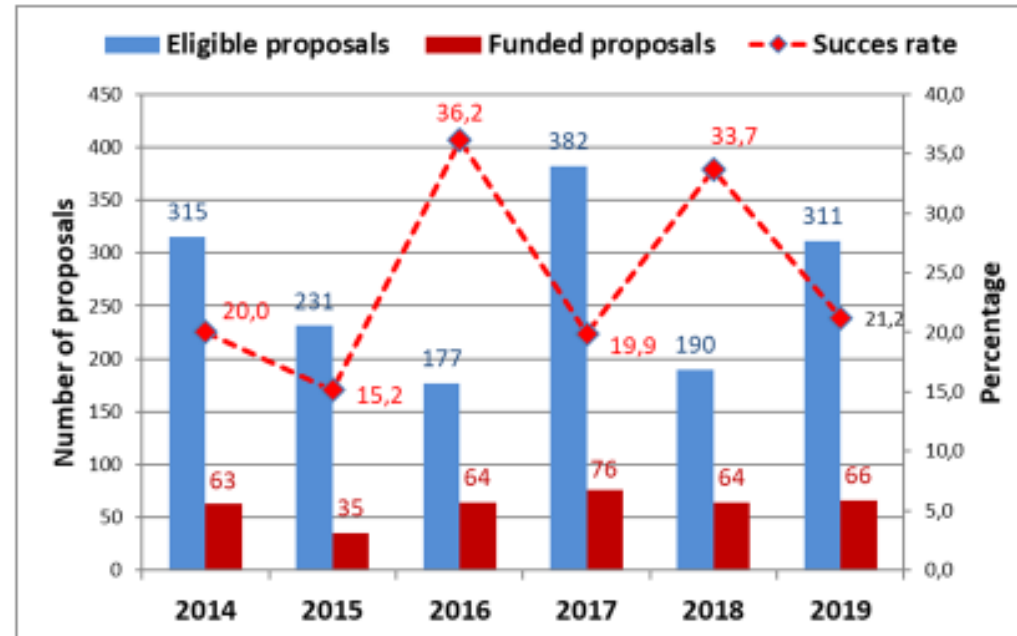
Area 10: Empowering citizens for the transition towards a climate-neutral, sustainable Europe

The transition towards sustainability must be just and inclusive, put people first and bring together citizens in all their diversity.

- 10.1. European capacities for citizen deliberation and participation for the Green Deal (RIA)

- **Topic aims for enhanced involvement of citizens in the implementation of the European Green Deal.**

- 10.2. Behavioural, social and cultural change for the Green Deal (RIA)

- **Actions should address behavioural change at individual and collective levels, including public and private organisations, as well as broader changes in social practices related to the European Green Deal through structurally enhanced research and innovation capacities in this area.**

- 10.3. Enabling citizens to act on climate change and environmental protection through education, citizen science, observation initiatives, and civic involvement

- **Subtopic 1: Enabling citizens to act on climate change and for sustainable development through education; Subtopic 2: Enabling citizens to act on climate change and for sustainable development through better monitoring and observing of the environment and their environmental impacts.**

Success rates H2020 SC2

- Overview of GDC topics prepared by Technology centre of the CAS:
https://www.h2020.cz/files/cejkova/topics-overview-Green-Deal-rozsirene-def.pdf

- Funding and Tenders portal:
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/h2020

- Partner search:
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/partner-search

- R&I days Infoday on the Green Deal Call:
https://research-innovation-days-conference.online/hubs/green-deal

- Ethics:
Ethics in the H2020 online manual

FAQ on ethics

Help desk: RTD-ETHICS-REVIEW-HELPDESK@ec.europa.eu

Explore other EU projects in the field

- CORDIS
- Horizon dashboard - data discovery
- Horizon Results Platform
- Horizon Results Booster
- Innovation radar

- EASME data hub
- INEA data base

European Commission

The F&T Portal

- **H2020 online manual**:
  - **-** Find partners
  - - OA & data management
  - - International cooperation
  - - Ethics
  - - IP & European IPR Helpdesk
  - - Financial instruments

- Check the **FAQ**

- Contact the H2020 Research Enquiry Service

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NCPs

European Commission