

Davide Amato

Head of Sector for Transition Analysis and Outreach

Environmental and Social Transitions Unit - DG R&I

13 11 2020

European Union



The European Green Deal Call

- The European Green Deal Call (GDC) is a cross-cutting Call of Horizon2020 that is included in the last Work Programme revision, adopted in September 2020.
- It has been designed as the first concrete R&I action in support of the **European Green Deal** (EGD).





The European Green Deal



Transforming the EU's economy for a A zero pollution ambition Increasing the EU's Climate ambition sustainable future for a toxic-free environment for 2030 and 2050 Preserving and restoring ecosystems Supplying clean, affordable The and biodiversity and secure energy European From 'Farm to Fork': a fair, healthy Green Mobilising industry and environmentally friendly food Deal for a clean and circular economy system Building and renovating in an energy Accelerating the shift to sustainable **And leaving** and resource efficient way and smart mobility no one behind Designing a set of deeply transformative policies The EU as a **A European** global leader **Climate Pact**



Preparation of the Green Deal Call:

The call has been designed in a different way than previous H2020 calls. It has been extensively co-created within the Commission, as well as with consultations of Member States (MS) / Associated Countries (AC), accompanied by a stakeholder engagement activity.

- Several rounds of consultations with MS/AC in different stages of the creation process through the Programme Committees between February 2020 and June 2020.
- Stakeholder feedback with individual surveys (1 per call area) for 16 days via web based portal presenting also the draft topic texts.
- A total of <u>5955 responses</u> to survey questions were received, about 3300 comments and 540 uploaded documents with overall <u>clear and unambiguous</u> <u>support</u> regarding the relevance of the proposed topics.



The Call: Structure and objectives

- The Green Deal Call (GDC) is a direct contribution of R&I to the European Green Deal (EGD) and to the Recovery Plan, it has a budget of 1 billion euro.
- The structure of the Call contains 10 Areas: 8 of them reflect the eight key European Green Deal (EGD) work streams and they are complemented by 2 horizontal areas (strengthening knowledge and empowering citizens), which offer a longer-term perspective in support of the transformations required by the EGD.
- The GDC is part of H2020 Work Programme, but is <u>a different call</u> in several aspects. It aims to: <u>produce tangible results</u> <u>visible to the citizens</u> <u>in a relatively short time frame</u>
- To increase impact and visibility, the Call contains a limited in number (20), of topics with a strong focus on impact, supporting <u>primarily</u> (but not exclusively) <u>Innovation and</u> <u>Demonstration actions</u>. Research Actions and Coordination and Support Actions are also included in the call.

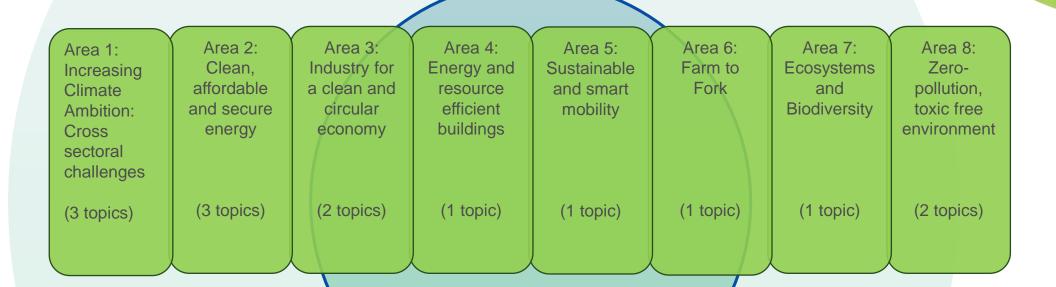


The Call: Main features

- Given it impact-oriented focus, the Call and in particular the 8 thematic areas- has a short-medium term approach (in R&I terms).
- It therefore focuses more on technologies at a rather mature state of development, which could provide tangible results over the next 4-6 years.
- Most of the topics adopt a multidisciplinary approach, tackling complex issues (e.g fighting wildfires, territorial approaches for circular economy, etc) from several perspectives.
- The size of topics is larger than most H2020 calls, since there has been an effort to gather a critical mass of resources in order to increase impact.
- Similarly, in few cases (for example topics 2.2, 3.1) the expected size of projects is also large. In most topics though, the size of projects is similar to most H2020 calls. Nevertheless, expected sizes are indicative and applicants can submit proposals of different size.



STRUCTURE OF THE GREEN DEAL CALL



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

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



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
 - <u>Subtopic 1:</u> Pan-European adaptation process to extreme wildfires (IA) with a systemic approach addressing all phases of wildfire management; <u>Subtopic 2:</u> 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
 - <u>Subtopic 1:</u> Innovation Packages for transformational adaptation of European regions and communities (IA); <u>Subtopic 2:</u> 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
 - <u>Subtopic 1:</u> Development of land-based renewable energy technologies and their integration into the energy system (RIA); <u>Subtopic 2:</u> 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 CO2 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
 - <u>Area 2:</u> 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)
 - <u>Subtopic 1:</u> Support Europe leadership in clean energy storage technologies; <u>Subtopic 2:</u> Enhancing European research infrastructures for greenhouse gases observation in and around cities; <u>Subtopic 3:</u> 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
 - <u>Subtopic 1:</u> Enabling citizens to act on climate change and for sustainable development through education; <u>Subtopic 2:</u> Enabling citizens to act on climate change and for sustainable development through better monitoring and observing of the environment and their environmental impacts.



Timeline

- 18 September 2020: Call published
- 22 September 2020: Call open
- 26 January 2021 –Closing deadline for the call
- Spring 2021: Evaluation
- Q4 2021 Expected signature of grant agreements.



Main links

• Funding and Tenders portal :

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

R&I days- Infoday for the Green Deal Call:

https://research-innovation-days-conference.online/hubs/green-deal



