The European Green Deal

One of the flagship initiatives of the current European Commission is a wholesale review of existing EU environmental and sustainability policy and the introduction of new legislation to achieve the target of making the EU 'carbon neutral' by 2050.

It was formally launched in December 2019 and will encompass every sector of EU activity, establishing a new approach to address the effects of climate change.

This factsheet is meant to provide a high-level overview of the Green Deal's main features and how it operates, with a focus on its relevance to European research and innovation policy and funding.

What is the Green Deal?

The Green Deal includes a wide range of funding opportunities, new policy initiatives and alterations to existing approaches in eight key areas:



Increasing the EU's climate ambition for 2030 & 2050



Supplying clean, affordable and secure energy



Mobilising industry for a clean and circular economy



Building & renovating in energy, resource efficient ways



Accelerating the & smart mobility



From 'Farm to Fork': shift to sustainable designing a fair, healthy & environmentally-friendly food system



Preserving & restoring ecosystems & biodiversity



A zero-pollution ambition for a toxic-free environment

The Green Deal is the most important of the current **six priorities** of the European Commission that apply broadly over the political and programmatic agenda at EU and Member State levels.

Within each of these priorities, research and innovation is expected to play an important role, primarily through Horizon Europe.

European political objectives linked to the Green Deal

To become climate-neutral by 2050;

Protect human life, animals and plants by cutting pollution:

Help EU companies become world leaders in clean products and technologies;

Help ensure a just and inclusive transition.



Main elements of the Green Deal

The main elements of the European Green Deal take the form of legislation, action plans and other initiatives that apply across the EU as one of its key priorities to be applied in as many areas as possible.

European Climate Law

A key purpose of the Green Deal is to ensure that the EU meets its commitment to become 'climate-neutral' by 2050. In this context, the 'European Climate Law' Regulation entered into force on 29 July 2021. This legislation sets a legally binding target of net zero greenhouse gas emissions by 2050. The EU institutions and the Member States are bound to take the necessary measures at the EU and national levels to meet this target.

The Climate Law includes measures to keep track of progress and adjust our actions accordingly. It sets an ambitious target for 2030 to reduce net greenhouse gas emissions by at least 55% compared to levels in 1990. The European Commission has developed an action plan comprised of a suite of legislative and supporting activities called the **'Fit for 55 Package'** which was also adopted in 2021.

Just Transition

In support of this overall Green Deal objective, the European Commission set up the <u>Just Transition Mechanism</u> to provide the necessary financial tools to assist Member States in their 'transition' towards a net-zero economy. It is recognised that some Member States and specific regions are more reliant upon carbon-intensive industries and will therefore need additional help from the <u>Just Transition Fund</u> and the <u>Just Transition Platform</u> to address the social and economic effects of the transition.

Digital transition

The EU Green Deal is often coupled with <u>'Europe's Digital Decade'</u> which is another overarching policy priority that sets out an important role for research and innovation. Together, these are often referred to as the Green and Digital Transitions.

Many of the technologies identified for development by the Commission in the **EU Industrial Technology Roadmap** are expected to have, develop or improve their twin features of digitisation and sustainability.

Farm to Fork

Key areas of Green Deal activity are agriculture and food. The Commission adopted the <u>'Farm to Fork' strategy</u> in May 2020 and this was later approved by the European Parliament in October 2021. It is intended to shift the current EU food system towards a sustainable model at all stages along its supply chain from production to consumption, hence 'Farm to Fork'. Reforms to the Common Agricultural Policy were adopted in December 2021 with the Farm to Fork Strategy built in.

New Circular Economy Action Plan

This new policy framework, <u>released in March 2020</u>, is intended to stimulate the development of lead markets for climate-neutral and circular products in the EU and beyond. A <u>package of proposals</u> was launched for this plan in March 2022 to apply to almost all physical goods on the EU market more friendly to the environment, circular, and energy efficient throughout their whole lifecycle from the design phase through to daily use, repurposing and end-of-life.

European Bauhaus Initiative

The European Commission adopted the <u>'European Bauhaus' initiative</u> in September 2021 to bring a cultural and creative dimension to the European Green Deal. Its activities are meant to link science and technology with art and culture to help design a sustainable and inclusive future.

Activities have included a <u>Festival in June 2022</u>, a <u>Prize scheme</u> and projects funded as <u>lighthouse demonstrators</u> to create more sustainable, inclusive, and beautiful spaces in locations across the EU and will involve citizens in the green transition at the local level, in the context of Horizon Europe missions



European Climate Pact

The **European Climate Pact** focuses on engaging with the public on climate action. It builds on the Commission's ongoing series of citizens' dialogues and assemblies across the EU.

The Green Deal and EU Research and Innovation

The Green Deal in Horizon Europe

The Green Deal provides one of the main policy drivers for the development of the Horizon Europe programme, with at least 35% of the Horizon Europe budget contributing to climate objectives. The Green Deal is also embedded as a new principle of 'Do No Significant Harm' to environmental objectives, which all applicants should now consider with the scientific methodology and impact of their project.

The Green Deal also influences the longer-term **Strategic Plan for Horizon Europe** which states that research and innovation will determine the speed at which the climate transition can take place, and therefore whether the targets are met in time. This plan then provides a set of key strategic orientations that set out what top-down funding opportunities researchers will be required to address.

The Green Deal in the Pillars of Horizon Europe

In the <u>first pillar of Horizon Europe</u>, the programmes are predominantly researcher-led and bottomup, which means that specific topics are not set by European Commission. Nevertheless, these programmes do have guidance, scheme rules and initiatives that support or recognise applicants who contribute to the Green Deal.

The objectives of the Green Deal are addressed by each of the **six Clusters under the second pillar** of Horizon Europe. Following the direction given by the Strategic Plan described above, Green Deal objectives are reflected in the Work Programme guidance, scope and expected impacts of Cluster calls. As such, an understanding of these objectives and policies is crucial for applicants who are expected to address these in their proposals.

In the 'Innovative Europe' pillar of Horizon Europe, there are a variety of different forms of action that are intended to nurture disruptive innovation itself and the capacity to innovate in Europe. As highlighted below, innovation that is sustainable and contributes to the objectives of the Green Deal is prioritised, with dedicated funding and collaborative efforts.

Social sciences and humanities funded under any of the Horizon Europe pillars are expected to contribute to the European Green Deal in many ways. Notable examples include understanding social and economic impacts to enable a just transition towards environmental sustainability, or the role of behaviour change in such transitions, which can be as important if not more than new technologies.

Selected Green Deal highlights in Horizon Europe Funding Opportunities

Four out of the five **Horizon Europe Missions** directly support the European Green Deal's objectives. For further information on how Missions work in an interdisciplinary way and link research and non-research actions, read **UKRO Mission's factsheet**.

The <u>Marie Skłodowska Curie Actions (MSCA)</u> part of Horizon Europe has a <u>Green Charter</u> which establishes a set of principles and objectives for beneficiaries and recruited researchers. These are designed to promote the sustainable implementation of research activities in line with the European Green Deal, the United Nation's 2030 Agenda and the Sustainable Development Goals.

The <u>European Research Council (ERC)</u> has <u>highlighted</u> the contribution to Green Deal objectives made by ERC-funded frontier research. Even though the ERC makes no specific requirements or incentives to support this policy, researchers have consistently delivered results with environmental benefits when selected through a strictly bottom-up funding programme that uses research excellence as its sole evaluation criteria.



<u>Cluster 5 on Climate, Energy and Mobility</u> covers many Green Deal related themes, including a Destination called "Cross-sectoral solutions for the climate transition" that provides funding for R&I areas such as batteries, hydrogen, communities and cities, as well as early-stage breakthrough technologies which can contribute to Green Deal objectives.

<u>Cluster 6 on Food, Bioeconomy, Natural Resources, Agriculture and Environment</u> also covers many Green Deal-related themes. It includes the FARM2FORK Destination where funding opportunities that can contribute to the Green and Digital transitions together. For example, R&I into the use of blockchain in the agricultural sector to facilitate fair, healthy and environment-friendly food systems.

For details on the other Clusters, their destinations and how they relate to the EU Green Deal, check UKRO's **Horizon Europe Factsheet page**.

Knowledge and Innovation Communities (KICs) run by the **European Institute of Innovation and Technology** promote collaboration on climate change, sustainable energy, food for the future, and smart, environmentally friendly and integrated urban transport.

The <u>European Innovation Council</u> dedicates funding, equity investment and business acceleration services to high-potential start-ups and SMEs for them to achieve breakthrough 'Green Deal innovation' that can be scaled up rapidly.

The European Commission's Joint Research Centre (JRC) has <u>published its 'Horizon Europe-New European Bauhaus Nexus Report'</u> (2022), an independent report offering a set of guiding principles for the New European Bauhaus initiative (NEB).

More information

Useful websites and other resources

- UKRO's Green Deal Portal Page
- Political Guidelines for EU Commission 2019-2024
- The European Commission's European Green Deal Communication
- The EC's Green Deal website
- EC Brochure on European Green Deal Delivering on our targets
- EC Sectoral Factsheets on 'Delivering the European Green Deal'
- EC Factsheet on Europe's 2030 Climate and Energy targets: Research and Innovation Actions
- UKRO's Horizon Europe Factsheet page
- European Climate Law
- The European Climate Pact
- Circular Economy Action Plan
- EU Industrial Strategy
- New European Bauhaus
- 'Fit for 55' Package
- Education for Climate Coalition
- Memo on Financing the Green Deal
- Financing the Green Transition