

READING GUIDE

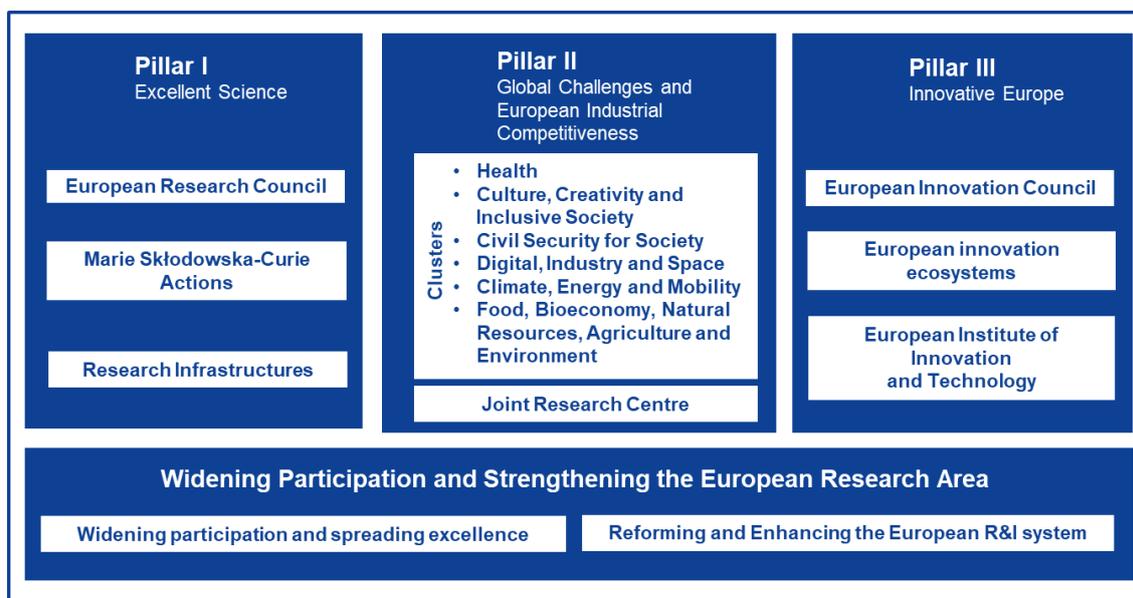
The purpose of this document is to inform and stimulate a co-design process that will prepare the **first Strategic Plan for Horizon Europe** – the European Union Framework Programme for Research and Innovation 2021 – 2027 (Horizon Europe).

Horizon Europe will be based on two legal acts: one laying down its structure, rules for participation and dissemination, the other containing the Specific Programme that sets out thematic clusters and the broad lines of action for future research and innovation activities.

In April 2019 the European Parliament and the Council reached a **political agreement** on the two legal acts. According to this agreement, Horizon Europe will be structured in three pillars, supported by activities aimed at widening participation and strengthening the European Research Area (see figure 1):

- Pillar I, **Excellent Science** will reinforce EU scientific leadership through the European Research Council (ERC), Marie Skłodowska-Curie Actions and Research Infrastructures.
- Pillar II, **Global Challenges and European Industrial Competitiveness** will take forward the societal challenges and enabling and industrial technologies to better address EU and global policy priorities and accelerate industrial transformation. Pillar II includes six broad thematic “clusters” of activities.
- Pillar III, **Innovative Europe**, focuses on stimulating, nurturing and deploying disruptive and market-creating innovations, and on enhancing European ecosystems conducive to innovation, including through the new European Innovation Council.

Preliminary Horizon Europe Structure



In line with the political agreement between the Council and the Parliament, the preparation of the Strategic Plan, referred to as the **strategic planning process**, will focus in particular on the pillar ‘Global Challenges and European Industrial Competitiveness’ and its six thematic clusters, while also including relevant activities in the other two pillars and the part ‘Widening Participation and Strengthening the European Research Area’.

The first Horizon Europe Strategic Plan will facilitate the implementation of Horizon Europe by acting as a bridge between the Horizon Europe Specific Programme and the future, multi-annual work programmes that will contain the calls and topics to which interested parties can apply. The Strategic Plan will set out key **strategic orientations for the support to research and innovation**, including a description of targeted impacts, cross-cluster issues and intervention areas covered. It will also identify missions and European Partnerships. As such, the plan will not repeat the rationale of the Horizon Europe Specific Programme, nor the intervention logic that led to the component parts of the programme. Rather, taking the Specific Programme as a starting point, it will identify the major policy drivers, the strategic policy priorities, and the targeted impacts to be achieved, focussing on those elements within the Specific Programme that should be supported from 2021 to 2024. The projects supported in the first four years of Horizon Europe will normally be completed after 2025. As it takes time to transform new ideas to concrete actions, the planning process focuses on identifying the impacts targeted with European research and innovation from 2030 onwards.

The strategic planning process will also include close coordination and synergy with the planning of the Knowledge and Innovation Communities (KICs) of the European Institute of Innovation and Technology (EIT) and consider the balance of research and innovation activities, so to promote technological, non-technological and social innovation as appropriate in view of the targeted impact.

At a later stage, the strategic planning process will address **synergies** between Horizon Europe and other Union programmes thus becoming a point of reference for research and innovation in all related programmes across the EU budget and non-funding instruments. It will also provide the framework for linking the direct actions of the **Joint Research Centre** and other actions supported under Horizon Europe, including the use of results and data for support to policy. Further details on the **international cooperation** strategy and targeted impacts for international cooperation will also be added.

Content

The present document consists of General Orientations and six annexes corresponding to the six clusters of Pillar II, Global Challenges and European Industrial Competitiveness. Annex 7 describes mission areas and possible partnerships in further detail.

The **General Orientations** bring to the debate the possible impacts to be targeted with the future Strategic Plan. They also outline the challenges that the EU is currently facing and the drivers that are likely to exacerbate them. They refer to the key EU policy objectives and responses to these challenges and outline how to target research and innovation impacts for achieving these objectives. This part also briefly describes research and innovation policy priorities and specific issues that will be taken into account during the implementation of Horizon Europe, as well as shared objectives and coordination of relevant activities throughout Horizon Europe. Finally, it presents the novel instruments and approaches for maximising the targeted impacts: the missions and partnerships in Horizon Europe.

Cluster 1, '**Health**', aims to promote and protect human health and well-being, prevent diseases and decrease the burden of diseases and disabilities on people and communities, support the transformation of health care systems in their efforts towards fair access to innovative, sustainable and high quality health care for everyone, and foster an innovative, sustainable and globally competitive European health industry. Research and innovation actions under this cluster will be key to address the health-related challenges and drivers delivering new knowledge and capabilities, improving our understanding of health and diseases, developing innovative methodological and technological solutions to better manage health and diseases, and designing sustainable approaches for the digital transformation and delivery of integrated and person-centred health and care services supported by needs-driven innovation and reliable supply chains in Europe.

Cluster 2, '**Culture, Creativity and Inclusive Society**' aims to meet EU goals and priorities on enhancing democratic governance and citizens participation, and on the safeguarding and promotion of cultural heritage, and to respond to multifaceted social, economic, technological and cultural transformations. Activities will contribute to expanding civic engagement, boosting transparency, accountability, inclusiveness and legitimacy of governance, improving levels of trust and tackling political extremism. Activities within the Cluster will also promote better access and engagement with cultural heritage and improve its protection, enhancement and restoration. Research and innovation will support sustainable growth and job creation through contributing to a European industrial policy for the cultural and creative industries. At the same time, actions will help tackle social, economic and political inequalities, support human capital development and contribute to a comprehensive European strategy for inclusive growth. This also involves understanding and responding to the impacts of technological advancements and economic interconnectedness with a view to social resilience. Finally, the Cluster will support EU migration and mobility policies, both internal and external, while aiming to promote integration.

Cluster 3, '**Civil security for Society**', aims to contribute to protecting the EU and its citizens from the threats posed by crime and terrorism (including in the cyber environment) and from the impacts of natural and man-made disasters. As shown in Eurobarometer surveys, security is one of the main concerns of EU citizens and is therefore among the top priorities for the Commission. Modern security threats are evolving rapidly, and technological and societal changes are creating unprecedented complexity, but so also are opportunities for addressing them more efficiently. In this regard, security research provides the resources to be able to adequately counter current threats, by enabling the availability of state of the art equipment and knowledge. Furthermore, by working to anticipate future threats, security research develops today the capabilities that will be needed in the future.

Cluster 4, '**Digital, Industry and Space**' will advance key enabling, digital and space technologies, underpinning the transformation of our economy and society, support the digitisation and transformation of European industry and contribute to securing global industrial leadership and autonomy in terms of technologies and resources. Furthermore, activities with the Cluster will contribute to growing a low-carbon, circular and clean industry respecting planetary boundaries and to fostering inclusiveness in the form of high-quality jobs and societal engagement in the use of technologies. Thereby it will contribute to addressing the challenges European industry is facing, such as its reliance on imported key technologies and raw materials, the scarcity of resources including energy, as well as skills mismatches and ethical considerations relating to technological progress.

Cluster 5, '**Climate, Energy and Mobility**', aims to fight climate change while improving the competitiveness of the energy and transport industries as well as the quality of the services that these sectors bring to society. This entails establishing a better understanding of the causes, evolution, risks, impacts and opportunities of climate change, as well as making energy and mobility systems more climate- and environment-friendly, smarter, safer, and more resilient, inclusive, competitive and efficient. Actions of this Cluster will contribute to the technological, economic and societal transformations required to achieve climate neutrality and to ensure a socially fair transition, as outlined in the Commission's long-term strategy (adopted in November 2018).

Cluster 6, '**Food, Bioeconomy, Natural Resources, Agriculture and Environment**' will advance knowledge, expand capacities and deliver innovative solutions to accelerate the transition towards the sustainable management of natural resources (such as biodiversity, water and soils). This will include measures for: climate adaptation and climate neutrality of sustainable primary production (agriculture, forestry, fisheries and aquaculture), value chains, food systems and bio-based industries; optimising ecosystem services including for climate mitigation; reversing biodiversity decline; and reducing environmental degradation and pollution. Activities will benefit people and society by promoting safe and healthy food as well as human well-being, including through a better understanding of consumer behaviour. Furthermore, activities will help to develop vibrant rural and coastal areas and to establish governance models for the transition towards sustainability. To this end, actions under this Cluster will lead and support the switch to a competitive, more circular and bio-based,

climate-neutral, resilient and environmentally-friendly economy in compliance with the Paris Agreement on Climate Change and the United Nations Sustainable Development Goals.

A starting point for further debate and new ideas

This document is based on a comprehensive set of sources, has been the subject of extensive exchanges with Member States and takes into account underlying analysis. It is not the Strategic Plan or its draft, but a starting point for debate and new ideas during the co-design process, including the public consultation during the summer 2019. The co-design process will also include the debates during the European Research and Innovation Days in Brussels from 24 to 26 September 2019, as well as other possible initiatives. To register and participate in the European Research and Innovation Days go to the [event website](#).

A dedicated implementation strategy is expected to be finalised at the end of 2019, timed in conjunction with the adoption of the Strategic Plan. The implementation strategy will cover, among other aspects, the organisation of calls, evaluation of proposals, grant agreements and project management. There will be a separate consultation later in the year on these practical issues which need to be put in place to help deliver the objectives of the new programme.