APRE
Conferenza
Annuale 2023

Conferenza Annuale APRE 2023

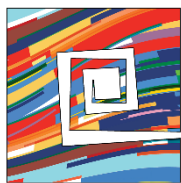VERSO UN NUOVO FUTURO

14 —— 17 NOVEMBRE

EVENTO IN PRESENZA* & ONLINE

*partecipazione in presenza su invito

#aprecon2023

Verso il Piano strategico 2025-27

Mattia Ceracchi

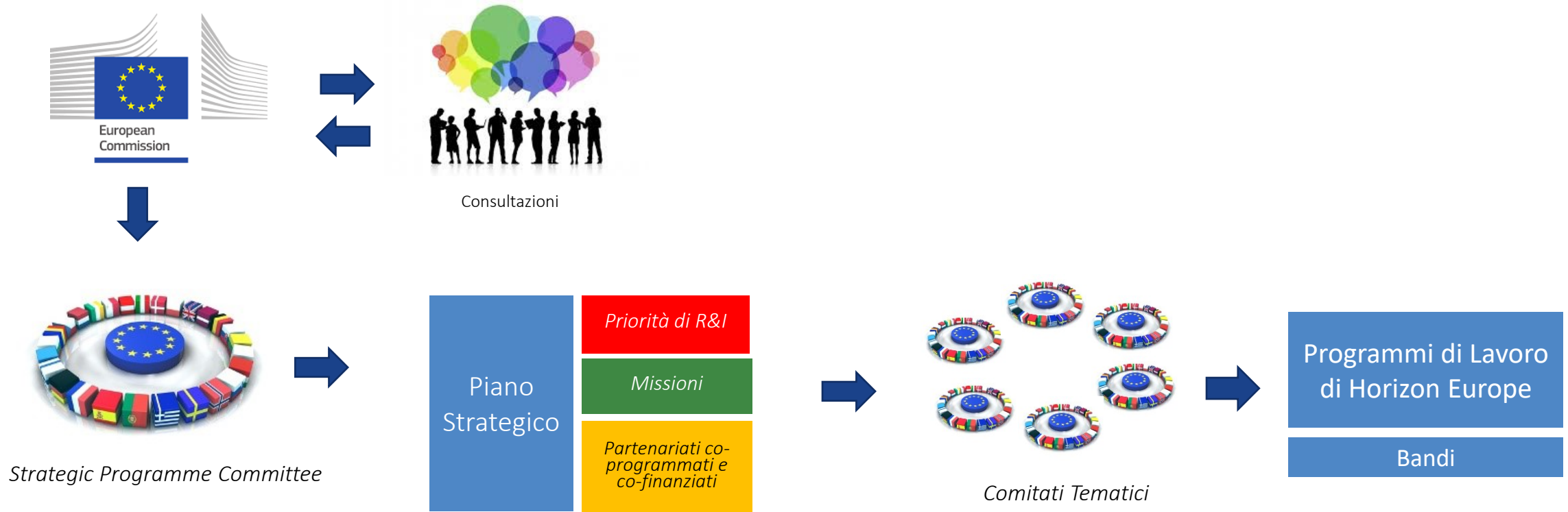APRE
Conferenza
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APRE*brief*

Cos'è il Piano strategico di Horizon Europe?

- Il documento che fissa orientamenti e priorità di ricerca e innovazione dell'Unione europea per un periodo pluriennale, gettando così le basi per i Programma di lavoro e bandi (pubblicati solitamente a cadenza biennale)

- Il primo piano strategico ha «coperto» gli anni dal 2021 al 2024. Il secondo riguarderà il periodo 2025-2027
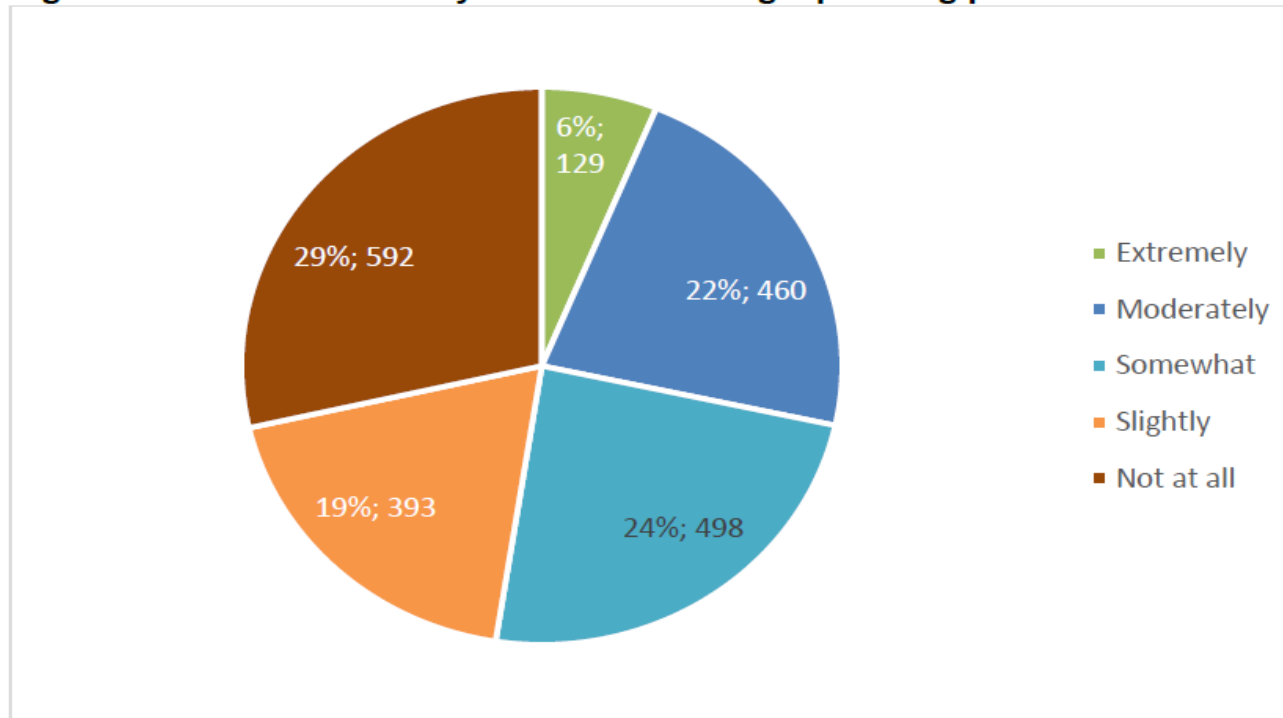
La pianificazione strategica e lo *Strategic Programme Committee*

Consultazioni

Strategic Programme Committee

Piano Strategico

Priorità di R&I

Missioni

Partenariati co-programmati e co-finanziati

Comitati Tematici

Programmi di Lavoro di Horizon Europe

Bandi

Neanche gli addetti ai lavori conoscono bene la pianificazione strategica di Horizon Europe...

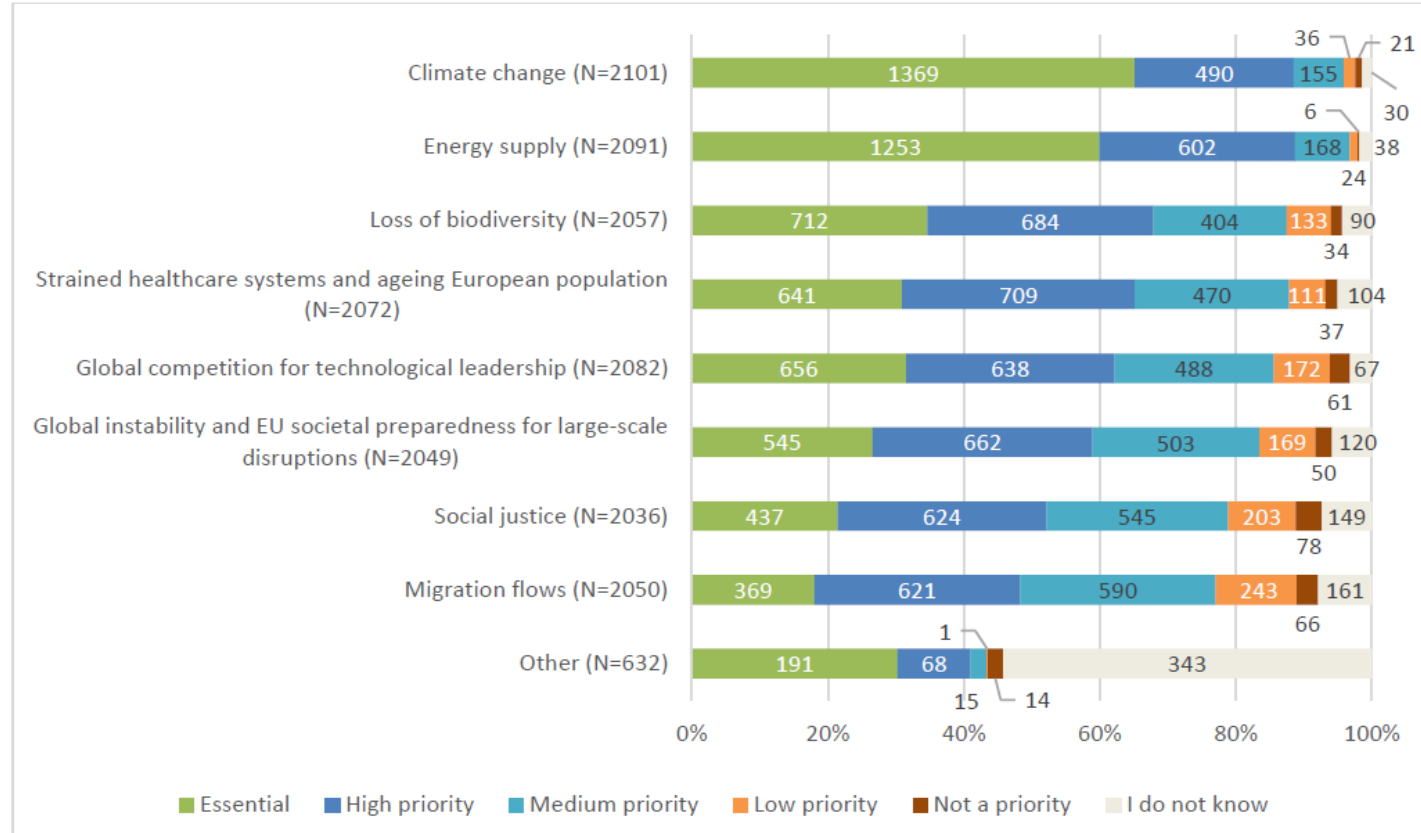Figure 12. How familiar are you with the strategic planning process for Horizon Europe? (N=2 072)

6%; 129 — 22%; 460 — 29%; 592 — 24%; 498 — 19%; 393

- Extremely
- Moderately
- Somewhat
- Slightly
- Not at all

Source: European Commission (2023), *Synopsis Report - Looking into the R&I future priorities 2025-2027,* Directorate-General for Research and Innovation, Publications Office of the European Union, 2023.

Le sfide sociali al centro degli investimenti dell'UE per le attività di ricerca e innovazione: cambiamento climatico in testa
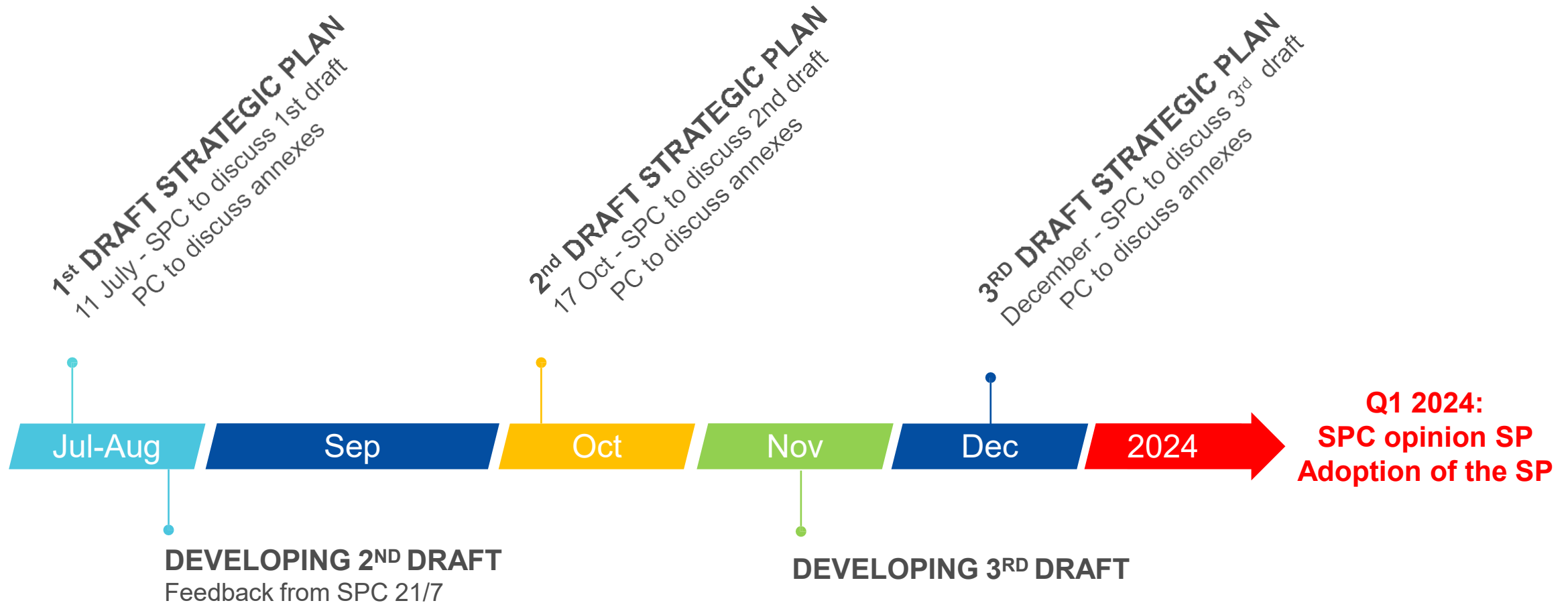

Figure 15. In the next three years, which societal challenges should be the focus of EU investments for research and innovation activities?

Le tempistiche per la preparazione del Piano strategico 2025-27
Indicative timeline

1ST DRAFT STRATEGIC PLAN
11 July - SPC to discuss 1st draft
PC to discuss annexes

2ND DRAFT STRATEGIC PLAN
17 Oct - SPC to discuss 2nd draft
PC to discuss annexes

3RD DRAFT STRATEGIC PLAN
December - SPC to discuss 3rd draft
PC to discuss annexes

Jul-Aug | Sep | Oct | Nov | Dec | 2024

Q1 2024:
SPC opinion SP
Adoption of the SP

DEVELOPING 2ND DRAFT
Feedback from SPC 21/7

DEVELOPING 3RD DRAFT

La struttura del documento è molto simile al Piano strategico 2021-24

Horizon Europe strategic plan (2025-2027)

Draft – October 2023

This document has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended to be indicative only.

Content

Le premesse

⏋ Contesto geopolitico instabile (guerra in Ucraina)

⏋ Cambiamento climatico in accelerazione

⏋ 35% del bilancio di HE per il clima (obiettivo sui sette anni)

⏋ 13 miliardi di euro per le tecnologie digitali (obiettivo sui sette anni)

⏋ Investimenti per la biodiversità, 10% di HE nel 2025-27

⏋ *EU Biotech and Biomanufacturing initiative (2024)*

⏋ Supporto allo Spazio europeo della ricerca e alla nuova Agenda per l'Innovazione

Introduction

The second strategic plan builds on the objectives of Horizon Europe, the largest EU research and innovation (R&I) framework programme to date. It sets out the key strategic orientations for R&I investment in the 2025-2027 programme period.

The strategic plan:

- acts as a compass to stay on course with the green and digital transitions;
- responds to new challenges;
- identifies current gaps in R&I funding; and
- takes into account the lessons learned since the launch of Horizon Europe and from Horizon 2020.

Since its start in 2021, Horizon Europe has been generating excellence through breakthrough knowledge and investment in **solutions to long-term societal challenges**, such as climate change, biodiversity loss, pollution, the digital transformation and an ageing population.

These challenges not only remain highly relevant in the second half of the Horizon Europe - programme period – they have also been exacerbated by an **unstable geopolitical context**. Russia's war of aggression against Ukraine poses new security and supply challenges worldwide. This has also put the ambition of the EU's green and digital transitions under pressure. At the same time, the pace of **climate change** is accelerating. Europe is by now the fastest-warming continent of the world, which has extensive socio-economic, environmental and health consequences. Thus, transformation measures towards climate neutrality and climate resilience, supporting the objectives of the European Green Deal, are becoming even more urgent.

Therefore, Horizon Europe has an explicit and **ambitious commitment** to spend at least **35% of resources on climate action**. To further step up action for biodiversity, Horizon Europe also commits to increasing investment in **biodiversity to 10%** of the Horizon Europe budget for 2025-2027. In addition, the framework programme includes a spending target for **core digital technologies** of at least EUR 13 billion during 2021-2027.

The strategic plan for 2025-2027 sets the **direction for Horizon Europe** to strengthen Europe's knowledge base through frontier research, breakthrough innovation and the development and implementation of innovative solutions, supporting the transition towards a more circular, digital, and competitive economy. It will also support the goals of the **EU Biotech and Biomanufacturing initiative**. A good **balance** of support for R&I activities at various stages of maturity is key for Horizon Europe to help provide solutions for current and future challenges.

The strategic plan aims to coordinate work in the EU and beyond, to increase the impact of investment in R&I and boost **Europe's leadership in science and innovation**. In addition, **international cooperation** will remain bedrock of the EU's endeavours to lead the green and digital transitions, to address global health and environmental challenges at the right level, to make Europe more resilient and stronger in the world, and to promote open strategic autonomy. At the same time, measures to safeguard the EU's strategic assets, interests or security should be put in place where necessary to mitigate risks related to research security and technology leakage.

Helping to deliver a better future requires the integration of technological and **social innovation** and a transformation of socio-economic systems. It is essential to continue **acting collectively and**

Tre KSO – orientamenti strategici chiave, «principi guida», più comprensibili rispetto ai precedenti 4 e che meglio racchiudono le politiche europee di riferimento (doppia transizione)

- **Key strategic orientation 1 – The green transition:** Horizon Europe R&I activities must support the EU to become the world's first climate-neutral continent by 2050 and to tackle biodiversity loss and pollution. At least 35% of Horizon Europe's resources are committed to be spent on climate action and 10% for 2025-2027 on biodiversity action.

- **Key strategic orientation 2 – The digital transition:** Research to support the digital transition is key to Europe's competitiveness and open strategic autonomy, and to setting human-centred standards. It is also key to achieving the green transition. In 2021-2027, it is agreed to invest at least EUR 13 billion from Horizon Europe in core digital technologies.

- **Key strategic orientation 3 – A more resilient, competitive, inclusive and democratic Europe:** Europe's democratic values and principles need a strong foundation so they can be promoted globally. Horizon Europe research activities will help provide this foundation. This includes research on civil security, a fair and environmentally friendly economic model, health and democratic participation.

I 32 impatti attesi (expected impacts) ricalcano quelli del precedente Piano strategico

1. *Staying healthy in a rapidly changing society*

2. *Living and working in a health-promoting environment*

3. *Tackling diseases and reducing disease burden*

4. *Ensuring access to innovative, sustainable and high-quality healthcare*

5. *Developing and using new tools, technologies and digital solutions for a healthy society*

6. *Maintaining an innovative, sustainable and competitive health industry in Europe*

CLUSTER 1

7. *Reinvigorating democratic governance*

8. *Realising the full potential of cultural heritage, arts and cultural and creative sectors*

9. *Strengthening social and economic resilience and sustainability*

10. *Boosting inclusive growth and reducing vulnerabilities effectively*

CLUSTER 2

11. *Reducing losses from natural, accidental and human-made disasters.*

12. *Legitimate passengers and goods travel more easily into the EU, while illicit acts are prevented.*

13. *Tackling crime and terrorism more effectively and enhancing resilience of infrastructures.*

14. *Increasing cybersecurity and a more secure online environment.*

CLUSTER 3

Non ci sono più le aree d'impatto (impact areas). La Commissione ha scelto quindi di semplificare le logica dell'impatto

15. Achieving global leadership in climate-neutral, circular and digitised industrial and digital value chains
16. Technological leadership for Europe's strategic autonomy while preserving an open economy in raw materials, chemicals and innovative materials
17. Developing an agile and secure single market and infrastructure for data services and trustworthy AI services
18. Achieving open strategic autonomy in digital and emerging enabling technologies
19. Achieving open strategic autonomy in global space-based infrastructures, services, applications and data
20. Digital and industrial technologies driving human-centric innovation

CLUSTER 4

21. Advancing science for a transition to a climate-neutral and resilient society
22. Facilitating a clean and sustainable transition of the energy and transport sectors towards climate neutrality through cross-cutting solutions
23. Ensuring more sustainable, secure and competitive energy supply through solutions for smart energy systems based on renewable energy solutions
24. Using energy in buildings and industry in an efficient, affordable and sustainable way
25. Achieving sustainable and competitive transport modes
26. Multimodal systems and services for climate-neutral, smart and safe mobility

CLUSTER 5

27. Fostering mitigation of and adaptation to climate change in areas and sectors covered by Cluster 6
28. Biodiversity is back on a path to recovery, and ecosystems and their services are protected and restored
29. Guaranteeing healthy soils, forests, clean air, and fresh and marine water and ensuring the transition to a clean, circular and competitive economy by scaling up circular economy principles and bioeconomy
30. Food and nutrition security is ensured by sustainable, resilient, and inclusive agriculture, fisheries, aquaculture and food systems within planetary boundaries
31. Rural and coastal areas are sustainably developed
32. Establishing innovative governance models and tools enabling sustainability and resilience

CLUSTER 6

Altre cose nuove rispetto al Piano strategico attuale su autonomia strategica, copertura dei pilastri 1 e 3, nuove sezioni sugli aspetti specifici

- transformed '**open strategic autonomy'** and 'securing Europe's leading role in developing and deploying **critical technologies** (in particular those identified in the list of critical technologies proposed by the Commission in the context of the European Economic Security Strategy) into overarching principles that apply **across all three key strategic orientations**;

- strengthened the strategic plan's coverage of **Pillar I ('Excellent Science'), Pillar III ('Innovative Europe')** and the '**Widening Participation and Strengthening the ERA**' part, to ensure better consistency between all parts of Horizon Europe, while respecting their specific objectives;

- added **new sections on specific issues**, in particular synergies, balance between R&I and social innovation;

- addressed the **latest developments** since the first strategic plan, particularly the new geopolitical situation and security concerns

Che succede con le missioni?

Horizon Europe: EU Missions on track to meet their 2030 ambition towards a greener and healthier continent

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Quote(s)
Print friendly pdf
Contacts for media

During their first two years, the EU Missions in Horizon Europe have supported the Commission's work on the European Green Deal, making Europe fit for the Digital Age, and Europe's Beating Cancer Plan. Since their inception, EU Missions have demonstrated their potential to accelerate change. Supported primarily by Horizon Europe funding, they have also connected and supported EU policies and programmes with local action and citizen engagement. They are on track to achieve their ambitious goals by 2030 in critical areas such as adaptation to climate change, improving the life of cancer patients, cleaning up the marine and freshwater ecosystems, making cities climate-neutral, and making soils healthy.

These are the conclusions of the Communication on EU Missions under Horizon Europe adopted today. The Communication provides a thorough assessment of progress so far, as required by the co-legislators after their first two years of operation. It highlights the main achievements of the current five individual Missions, while also

In light of this balanced assessment, today's Communication also proposes to spend 11% of the Horizon Europe Pillar 2 budget on EU Missions in the last part of the Programme (up from 10% currently). **This corresponds to a total amount of over €3 billion for the period 2024-2027**. *It also launches preparations for a new EU Mission on the New European Bauhaus.*

La Commissione ha avviato la preparazione di una sesta missione, sul New European Bauhaus, ma i Paesi membri hanno accolto la proposta con freddezza

NEWS ANNOUNCEMENT | 31 July 2023 | Joint Research Centre

EU Commission is looking for top experts to advise on a potential future EU Mission on the New European Bauhaus

Become a MEMBER of the BOARD TO STRUCTURE A POTENTIAL NEW EU MISSION on the NEW EUROPEAN BAUHAUS

Today, the European Commission launched a call for experts ⊕, to join an advisory expert group with the purpose of structuring a potential new Mission on the New European Bauhaus ⊕, under Horizon Europe.

La discussione principale di queste settimane è sulle 10 nuove partnership proposte dalla Commissione

NEWS ARTICLE | 17 July 2023 | Directorate-General for Research and Innovation

Commission proposals for new candidate European Partnerships are now public

Preparations of new European Partnerships that will be launched during the second half of Horizon Europe have reached an important milestone this week, when the European Commission presented 10 proposals for new candidate partnerships 🌐 to Member States and Associated Countries:

- 🔵 Brain Health;
- 🔵 Forests and Forestry for a Sustainable Future;
- 🔴 Innovative Materials for EU (I'M for EU);
- 🔵 In-Orbit Demonstration and Validation;
- 🔵 Raw Materials for the Green and Digital Transition;
- ⚪ Resilient Cultural Heritage;
- 🔵 Social Transformations and Resilience;
- 🔴 Solar Photovoltaics;
- 🔴 Textiles of the Future;
- 🔴 Virtual Worlds.

🔵 Co-funded

🔴 Co-programmed

⚪ Tipologia da definire

Table of contents

European Commission

Co-funded and co-programmed European Partnerships under the second Horizon Europe Strategic Plan

Draft concept papers for proposed candidate partnerships

HORIZON EUROPE

Research and Innovation

Questa lista è importante perché ci restituisce un'indicazione delle priorità europee di R&I per gli anni 2025-2027 più chiara rispetto ai KSO e agli impatti attesi.

I partenariati assorbono una fetta di bilancio significativa di Horizon Europe (quasi il 50% del Pilastro 2).

- Brain Health;
- Forests and Forestry for a Sustainable Future;
- Innovative Materials for EU (I'M for EU);
- In-Orbit Demonstration and Validation;
- Raw Materials for the Green and Digital Transition;
- Resilient Cultural Heritage;
- Social Transformations and Resilience;
- Solar Photovoltaics;
- Textiles of the Future;
- Virtual Worlds.

La Commissione ha presentato una scheda per ogni nuovo partenariato proposto, che illustra: breve descrizione, DG coinvolte, contesto di policy, obiettivi e impatti attesi, legami con altri partenariati in corso e precedentemente finanziati, tipologia e composizione del partenariato

INNOVATIVE MATERIALS FOR EU (I'M FOR EU)

General Information	
Proposed title of the European Partnership	European Partnership "Innovative Materials for EU" ("I'M for EU")
Short description of the candidate partnership	Innovative (or advanced) materials are engineered to have new or enhanced properties with superior performance relative to conventional (or raw) materials. They categorise as deep tech in line with the New European Innovation Agenda.
	These materials provide for new uses essential for the green and digital transition of a resilient Europe (70% the innovations depend on materials). They also include composite materials, nanomaterials and two-dimensional (2DM, one-atom thick) materials.
	The partnership focuses on research, development and uptake (integration into innovative products and technologies) of a new generation of 'safe and sustainable by design' innovative materials fit for the circular economy.
	It will bring together researchers, developers, upstream producers and downstream industrial users and continue opening-up these technologies to new (circular) value chains.
	The partnership will support the future Coordinated Plan on Advanced Materials with Member States, as announced in the Communication on Critical Raw Materials[9] and as proposed for the Commission WP 2024. It has a wide stakeholder support from both the Graphene Flagship as well as the Advanced Materials Initiative 2030 stakeholder groups.
Services directly involved	DGs RTD, CNECT, GROW, ENV, JRC, ENER, CLIMA

Relevant for the following parts of Horizon Europe	Pillar II 'Global Challenges and European Industrial Competitiveness'
	☐ Cluster Health
	☐ Cluster Culture, creativity and inclusive society
	☐ Cluster Civil Security for Society
	☒ Cluster Digital, Industry and Space
	☐ Cluster Climate, Energy and Mobility
	☐ Cluster Food, Bioeconomy, Natural Resources, Agriculture and Environment
	☐ Cross-cluster
	☒ Pillar III 'Innovative Europe' (Accelerator Program)
...ently ...ified links ...other ...nership ...idates / ...n ...rammes	The partnership will help to strategically coordinate and give focus to activities on materials research currently scattered between the different clusters of HE and raise the importance of innovative materials under HE pillar 3 (EIC). For maximum impact, cooperation is needed with the following partnerships: *Existing partnerships:* - Photonics Partnership; P4P (Processes for Planet),Clean Steel Partnership, MiE (Made in Europe) and EIT Manufacturing, EIT Raw Materials and the ERA-MIN, PARC (European Partnership for the Risk Assessment of Chemicals), BATT4EU (Batteries' Partnership), 2Zero Partnership, KDT Joint Undertaking (Chips Act Joint Undertaking); Clean Hydrogen Joint Undertaking, Clean Aviation Joint Undertaking *Candidate partnerships:* Photovoltaics Partnership, Textiles Partnership
...s the ...osed ...nership ...on ...ntly active ...?	The proposed partnership for Innovative Materials builds on the Graphene Flagship[18] and EMIRI, SUSCHEM, MANUFUTURE, EUMAT through the AMI2030[19] initiative. Experiences from six H2020 ERA-NETs co-funded with Member States (3 M-ERA.NET[20] and 3 FLAG-ERA[21]) is taken into account. The partnership however brings in new industrial players and has a completely new scale and ambition.
...ected type	Decisions on value chains will be made during the partnership development.
...position of ...ers	• Industry associations and individual companies, covering different value chains, will ensure "market pull" of the advanced materials innovations. • Academia and Research and Technology Organisations will provide the "technology push" for innovative solutions for cross-sectorial

[18] https://graphene-flagship.eu/
[19] https://www.ami2030.eu/
[20] https://www.m-era.net/
[21] https://www.flagera.eu/

Le tempistiche per i Programmi di lavoro dal 2024 al 2027

WP 2023-2024/2025

Includes changes to 2024 actions and recurrent actions for 2025

Indicative adoption:
Q1 2024
(2nd/"missions amendment")

WP 2025

Includes all actions for the 'main' WP 2025, except actions included in the amendment to WP 2023-2025
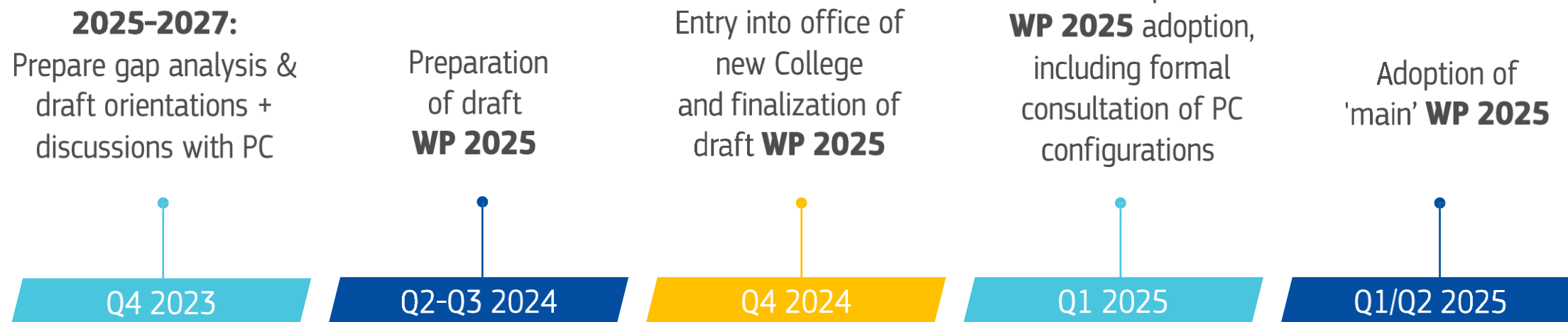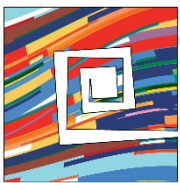
Indicative adoption:
Q1/Q2 2025

WP 2026-2027

Regular two-year WP

Indicative adoption:
Q3/Q4 2025

Le preparazione del Programma di lavoro 2025 (annuale)

Indicative adoption: Q1/Q2 2025

2025-2027:
Prepare gap analysis & draft orientations + discussions with PC

Preparation of draft **WP 2025**

Entry into office of new College and finalization of draft **WP 2025**

Procedural steps towards **WP 2025** adoption, including formal consultation of PC configurations

Adoption of 'main' **WP 2025**

| Q4 2023 | Q2-Q3 2024 | Q4 2024 | Q1 2025 | Q1/Q2 2025 |

European Commission

Domande?