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**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN  
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL  
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**A Strategy for European Life Sciences  
Positioning the EU as the world's most attractive place for life sciences by 2030**

Agence Europe

**A Strategy for European Life Sciences**  
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**1. EUROPE'S LIFE SCIENCES OPPORTUNITY: A STRATEGIC VISION FOR GLOBAL LEADERSHIP**

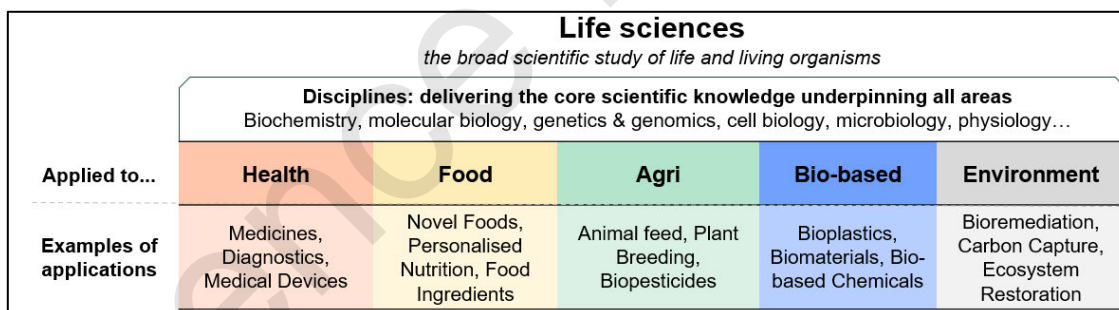
**Introduction**

Life sciences-based sectors are vital for strengthening the Union's competitiveness, sustainable prosperity, strategic autonomy and resilience, while improving people's health and well-being.

Scientific discoveries in life sciences have allowed the development and deployment of safe and sustainable products, processes, technologies and services in key economic sectors such as health, food, agriculture, fisheries and forestry, biomanufacturing and environmental protection. Taking a holistic approach and strengthening synergies across disciplines is essential to improve research quality and create new opportunities for innovation and growth, and to address challenges such as climate change, loss of biodiversity and pollution, and their dire consequences.

***What are life sciences?***

Life sciences study living systems, from human beings, animals, plants, microorganisms to ecosystems and their interconnectedness. Progress in understanding the mechanisms of life has opened new horizons and opportunities for applications in several sectors.



Recent high-level reports (Letta<sup>1</sup>, Draghi<sup>2</sup>, Heitor<sup>3</sup>, Niinistö<sup>4</sup>) provided recommendations for the European Union to strengthen its single market, competitiveness, and crisis preparedness. Life sciences and their applications offer many opportunities to address these recommendations. The life sciences sector is uniquely positioned to shape the future of Europe. President von der Leyen's Political Guidelines<sup>5</sup> set the Life Sciences Strategy as a priority for the 2024-2029 Commission.

<sup>1</sup> [https://single-market-economy.ec.europa.eu/news/enrico-lettas-report-future-single-market-2024-04-10\\_en](https://single-market-economy.ec.europa.eu/news/enrico-lettas-report-future-single-market-2024-04-10_en)

<sup>2</sup> [https://commission.europa.eu/topics/eu-competitiveness/draghi-report\\_en](https://commission.europa.eu/topics/eu-competitiveness/draghi-report_en)

<sup>3</sup> [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_24\\_5305](https://ec.europa.eu/commission/presscorner/detail/en/ip_24_5305)

<sup>4</sup> [https://commission.europa.eu/topics/defence/safer-together-path-towards-fully-prepared-union\\_en](https://commission.europa.eu/topics/defence/safer-together-path-towards-fully-prepared-union_en)

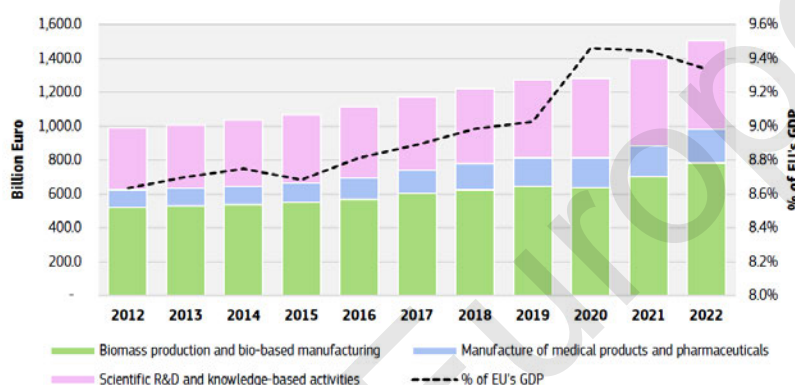
<sup>5</sup> [https://commission.europa.eu/document/e6cd4328-673c-4e7a-8683-f63ffb2cf648\\_en](https://commission.europa.eu/document/e6cd4328-673c-4e7a-8683-f63ffb2cf648_en)

The Competitiveness Compass<sup>6</sup> underlined the potential of life sciences for competitiveness across sectors, and their role in driving innovation in biotechnology<sup>7</sup>.

## Context

The European life sciences sectors employed, altogether in 2022, around 29 million people and generated 1.5 trillion EUR in value added, corresponding to almost 14% of the Union's overall employment and close to 10% of the Union's GDP<sup>8</sup>. Over the past decade, the EU's life sciences sectors generated a steady annual growth of 4-7% of their GDP contribution.

Figure 1: Value added generated in the life sciences sectors (million euro and percentage of EU's GDP)



Europe's ageing population and rising **health** care costs call for smarter, more cost-effective ways to prevent, diagnose, and treat disease. Maintaining a healthy population, including via healthy and nutritious diets, is crucial for prosperity and societal well-being. The European **agriculture and food** sectors are a hub for innovation, with new products and value chains that combine safety, sustainability, and social responsibility. Vibrant rural areas and traditional and innovative food industries rely on advancements delivered by life sciences. Life sciences technologies also play a vital role in **protecting and restoring the environment**, and in **reducing the environmental footprint** of industry, helping to safeguard Europe's natural resources for future generations.

<sup>6</sup> COM(2025) 30 final ([https://commission.europa.eu/document/download/10017eb1-4722-4333-add2-e0ed18105a34\\_en](https://commission.europa.eu/document/download/10017eb1-4722-4333-add2-e0ed18105a34_en))

<sup>7</sup> Biotechnology is an important component of life sciences. OECD defines biotechnology as the application of science and technology to living organisms, as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services (<https://dx.doi.org/10.1787/085e0151-en>)

<sup>8</sup> These figures include 14 million employed in the agri-food sector and close to 10 million in the health sector, generating a value added of 544 million EUR and 622 million EUR, respectively. Lasarte-López, J., González-Hermoso, H., M'barek, R. (2025). The Life Sciences sectors in the EU: drivers of economic growth and innovation. European Commission, Seville, 2025. **ADD THE REFERENCE TO THE POLICY BRIEF OF JRC ONCE AVAILABLE**; Dashboard accessible in [https://datam.jrc.ec.europa.eu/datam/mashup/LIFE\\_SCIENCES\\_SECTORS/index.html](https://datam.jrc.ec.europa.eu/datam/mashup/LIFE_SCIENCES_SECTORS/index.html)

## Europe's strong points

Europe holds strong assets, including freedom of science and research as emphasised in the Choose Europe Initiative<sup>9</sup>. In life sciences, Europe benefits from a dynamic landscape<sup>10</sup>, with world-class **research institutions** and research infrastructures producing pioneering work (e.g. in neuroscience, oncology and infectious diseases<sup>11</sup>) and **biotech clusters**<sup>12</sup> supporting innovation and providing a place where academic research, startups and multinational companies coexist.

The EU consistently ranks among the top regions globally for **life sciences publications**. In 2024, the EU produced three times more life sciences publications compared to China and a similar number when compared to the USA<sup>13</sup>. The EU is also dynamic in terms of **patenting activity**: in 2020 it accounted for 18% of global high-value biotech patents, ranking behind the US (39%) but in front of China (10%)<sup>14</sup>.

In terms of **industry dynamism**, biotech industries are leading contributors to the EU economy and competitiveness, with productivity significantly higher than the EU average and employment growth six times higher than the overall EU economy. The EU is home to 15% of the world's top 2500 industries in terms of research and innovation (R&I) investments in life sciences in 2023<sup>15</sup>. Products developed in the EU are associated with quality, safety and efficacy. **Business expenditure on R&D** in the life sciences sectors has followed an upward trend between 2012 and 2022, increasing from EUR 26.6 billion to EUR 45.3 billion. As a result, the contribution from life science sectors to total business expenditure on R&D increased from 17.7% in 2012 to 19.1% in 2022.

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<sup>9</sup> [https://commission.europa.eu/topics/research-and-innovation/choose-europe\\_en](https://commission.europa.eu/topics/research-and-innovation/choose-europe_en)

<sup>10</sup> In 2022, the Life Sciences sectors invested EUR 45.4 billion in R&D, representing 19.1% of the EU's total R&D expenditure. The R&D investments in health technologies (pharmaceuticals, medical devices...) was the largest contributor with EUR 23.4 billion, accounting for more than half of the EU's total R&D expenditure. Lasarte-López, J., González-Hermoso, H., M'barek, R. (2025). The Life Sciences sectors in the EU: drivers of economic growth and innovation. European Commission, Seville, 2025. **ADD THE REFERENCE TO THE POLICY BRIEF OF JRC ONCE AVAILABLE**; Dashboard accessible in: [https://datam.jrc.ec.europa.eu/datam/mashup/LIFE\\_SCIENCES\\_SECTORS/index.html](https://datam.jrc.ec.europa.eu/datam/mashup/LIFE_SCIENCES_SECTORS/index.html)

<sup>11</sup> For instance, the BioNTech-Pfizer mRNA COVID-19 vaccine breakthrough spotlighted Europe's ability to translate research excellence into world-changing therapies.

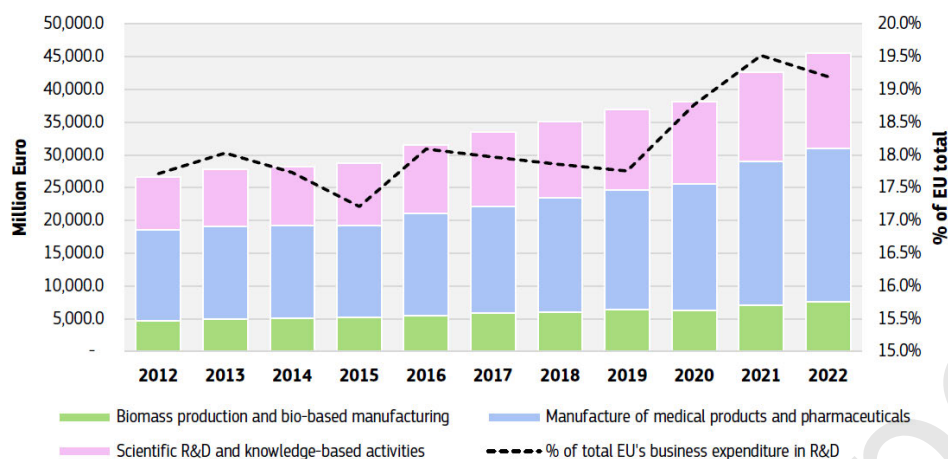
<sup>12</sup> For the purposes of this Communication, bio clusters, biovalleys and innovation hubs refer to the same notion. A biocluster, innovation hub or biovalley is a geographic concentration of interconnected companies, research institutions, and organisations focused on biotechnology and life sciences, fostering collaboration and innovation. Examples in the European Union are Leiden Bio Science Park in the Netherlands, Flanders' BioValley in Belgium or BioM cluster in Munich. Rinaldi, Andrea. "More than the sum of their parts? Clustering is becoming more prevalent in the biosciences, despite concerns over the sustainability and economic effectiveness of science parks and hubs." *EMBO reports* 7.2 (2006): 133-136.

<sup>13</sup> EC internal analysis. Normalised on the countries' respective populations; total number of publications in journals categorised as "Life Sciences" and "Health Sciences" under the ASJC Subject Areas, data retrieved in April 2025. What are Scopus subject area categories and ASJC codes? - Scopus Support Center

<sup>14</sup> Grassano, N., Napolitano, L., M'barek, R., Rodriguez Cerezo, E. and Lasarte Lopez, J., Exploring the global landscape of biotech Innovation: preliminary insights from patent analysis, Publications Office of the European Union, Luxembourg, 2024, doi:10.2760/567451, JRC137266.

<sup>15</sup> <https://iri.jrc.ec.europa.eu/data>

Figure 2: Business expenditure in the life sciences sectors (million euro and percentage of EU's total business expenditure in R&D)



A number of national and regional plans or strategies and high levels of public investments further single out life sciences and their related sectors as strategic assets across the EU.

### Challenges ahead

Nevertheless, negative trends are observed in the EU, e.g. in terms of number of clinical trials being performed, or market share for high-value products such as advanced therapy medicinal products. The EU faces **fierce competition on the global scene** from other economies such as the US and China, with a growing innovation gap and alarming failure to translate innovation into commercialisation. Innovative companies struggle to scale up in Europe<sup>16</sup>. The gap in venture capital investments is also widening. These negative trends signal structural barriers across Europe's life sciences value chains. Fragmented R&I ecosystems, limited valorisation of technology breakthroughs and underutilisation of data and artificial intelligence (AI) all hinder progress.

Furthermore, life science innovators have to navigate complex regulatory frameworks, which are not sufficiently innovation-friendly, future-proof and offering clear paths to access markets. The regulatory frameworks often combine EU legislation with national legislation. This fragmentation and complexity are particularly burdensome for those with limited regulatory capacity or experience. In this context, risks are especially high to lose competitiveness vis-à-vis other regions in areas such as novel foods, medical devices, or clinical research that requires Member States to join forces. As announced in the Communication on Biotechnology and Biomanufacturing<sup>17</sup>, the Commission is assessing how EU legislation and its implementation could be further streamlined to reduce fragmentation, explore potential simplification, and shorten the time to market for biotech innovations.

Challenges such as skills and **talent shortages**, insufficient **investment in scale-up**, and sometimes **limited public trust** further prevent many life science solutions from reaching the EU market – or cause significant delays.

<sup>16</sup> [https://commission.europa.eu/topics/eu-competitiveness/draghi-report\\_en](https://commission.europa.eu/topics/eu-competitiveness/draghi-report_en)

<sup>17</sup> [https://research-and-innovation.ec.europa.eu/document/download/47554adc-dffc-411b-8cd6-b52417514cb3\\_en](https://research-and-innovation.ec.europa.eu/document/download/47554adc-dffc-411b-8cd6-b52417514cb3_en)

Addressing these issues is essential to fully unlock the potential of life sciences for Europe's strategic autonomy and global competitiveness and for ensuring societal wellbeing.

## Unlocking the potential of vibrant life sciences in the EU - a Strategy for European Life Sciences

The overall objective of this Strategy is **to position the EU as the world's most attractive place for life sciences by 2030**.<sup>18</sup> This will be achieved by fostering a dynamic and competitive life sciences ecosystem that deliver benefits for people, patients, and planet, while also bolstering the Union's economy. Europe has the potential to lead globally in life sciences, offering top-tier research opportunities, a high quality of life, and a steadfast commitment to academic freedom, diversity, and inclusion. Realising this vision necessitates coordinated actions with Member States across **the entire life sciences value chain** – from R&I to market deployment of safe and sustainable products and services. It also requires working together with all life sciences stakeholders to leverage investments, expertise and resources effectively.

To achieve these goals, the strategy proposes actions in three interconnected pillars:

- 1) Optimising the R&I ecosystem for a globally competitive life sciences sector
- 2) Ensuring smooth and rapid access to market for life sciences innovations
- 3) Boosting the uptake, trust and use of life sciences innovation

A 'whole-of-government' approach is proposed to implement and monitor all the actions in the Strategy.

More than EUR [X] billion from EU funding programmes will support the implementation of this strategy.

## 2. OPTIMISING THE R&I ECOSYSTEM FOR A GLOBALLY COMPETITIVE LIFE SCIENCES SECTOR

### Turbocharging European R&I

While the EU has a strong R&I foundation, it faces challenges to raise and streamline investments<sup>19</sup> and barriers in turning scientific breakthroughs into real-world applications. The EU also continues to lag behind global competitors in R&I intensity<sup>20</sup>. Many funding instruments exist but seamless support for technologies at different stages of the life sciences R&I cycle remain limited, as well as insufficient follow-on funding for promising results.

Efficient translation of knowledge into applications requires dynamic and connected R&I ecosystems involving researchers, innovators, industry, users and policymakers.

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<sup>18</sup> Progress will be measured against indicators such as sector growth (employment, value added, business expenditure in R&D, number of multi-country clinical trials etc.)

<sup>19</sup> [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=R%26D\\_expenditure](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=R%26D_expenditure)

<sup>20</sup> Science, research and innovation performance of the EU, 2024 (<https://op.europa.eu/en/publication-detail/-/publication/c683268c-3cdc-11ef-ab8f-01aa75ed71a1/language-en>)

Yet, disciplinary and institutional silos persist. Europe hosts several bioclusters<sup>17</sup>, whose global standing needs to be reinforced<sup>21</sup> while new ones should be supported. Strengthening **European innovation hubs and integrating them in the value chain** will attract private capital, spur entrepreneurship, and ensure the EU remains competitive. Furthermore, through identifying more Centres of Excellence or innovation hubs the EU can attain critical capacity in life sciences innovation in line with the Strategic Technologies for Europe Platform.

As highlighted in the Draghi report, urgent action at EU level action is needed, notably in **multi-country clinical trials**, best suited to provide timely robust evidence and access to innovative therapies for patients, and **advanced therapy medicinal products (ATMPs)**. In particular, ATMPs represent a cutting-edge category of treatments designed to address a wide range of human diseases, including severe, chronic, or rare diseases where standard treatments often fall short.

For example, children with the rare genetic disease ADA-SCID (also known as “bubble children”) had to live in sterile and isolated conditions due to their compromised immune system. European researchers pioneered the first ATMP addressing ADA-SCID, in part thanks to the Framework Programmes for Research and Innovation<sup>22</sup>. The therapy, administered only once, corrects the defective gene in the immune cells allowing these children to go back to school and lead fulfilling lives. ATMPs also hold the promise of curing diseases affecting large groups. Another example is the ArrestBlindness project<sup>23</sup>, which developed a bio-cornea restoring vision to patients who otherwise would have remained visually impaired or blind.

For Europe, investing in ATMP research is critical not only to improve patient outcomes but also to strengthen its position as a global leader in biomedical innovation. Moreover, by advancing homegrown innovations, Europe can reduce dependency on external markets and ensure faster, more **equitable access** to life-changing therapies for its population. It is **essential to expand the EU’s capacity in the field of ATMPs by building on existing initiatives and consolidating EU R&D investment**.

**Clinical trials** are research studies that test whether new medical treatments – such as drugs, vaccines, surgical techniques, or medical devices – are safe and effective in people. They are essential for turning scientific discoveries into real-world healthcare solutions. Clinical trials not only help patients gain earlier access to innovative treatments, but also strengthen economies by supporting medical innovation. Europe has unique advantages in clinical research, thanks to its large population and rich genetic diversity. For rare diseases or paediatric cancers, which are hard to study in a single country, combining data across Europe makes clinical trials possible. These are known as **multi-country clinical trials**.

<sup>21</sup> Growth of biotech clusters over several decades through pioneering, variety and entrepreneurial science | Nature Biotechnology (<https://www.nature.com/articles/s41587-023-02062-6>)

<sup>22</sup> Advanced Cell-based Therapies for the treatment of Primary ImmunoDeficiency (CELL-PID) (<https://cordis.europa.eu/project/id/261387>); DevelopIng Genetic medicines for Severe Combined Immunodeficiency (SCIDNET) (<https://cordis.europa.eu/project/id/666908>)

<sup>23</sup> Advanced Regenerative and REStorative Therapies to combat corneal BLINDNESS (ARREST BLINDNESS) (<https://cordis.europa.eu/project/id/667400>)

However, such trials face several challenges, including fragmented funding, disconnected infrastructure, and data systems that do not work well together. Creating a **single market for clinical trials in Europe** would help overcome these barriers. It would benefit not only large, private pharmaceutical companies (many of which are based outside Europe), but also Europe's own public researchers, startups, and growing biotech firms.

**We have good basis to build on.** Progress has been made in supporting **multi-country clinical trials**, through the European partnerships to set up and support clinical research and clinical research networks. Networks either address specific diseases (e.g. diabetes), are disease agnostic, cater for certain population groups (e.g. children), or address cross-border pan-EU threats. Clinical research is also supported by several European research infrastructures. Some countries have established national clinical trial networks, but it is urgent to **develop a long-term, EU-wide strategy for supporting multi-country clinical research**. The strategy should identify the most efficient and effective clinical research network models, and develop sustainable funding models, where EU support for multi-country research leverages and complements investments by Member States.

The Commission will leverage the Accelerating Clinical Trials in the European Union (ACT EU<sup>24</sup>) initiative to support smarter clinical trials through regulatory, technological and process innovation. The initiative will deliver in areas such as: modernisation of Good Clinical Practices to facilitate the use of technical innovations (including digital) by trial sponsors; consolidated scientific advice to improve dialogue between regulators and sponsors; aligned clinical trial guidance across the EU. A study will also be issued on the implementation of the Clinical Trials Regulation to assess its impact on European clinical research. In parallel, development of new approaches to run clinical trials is supported through Horizon Europe and in particular the IHI JU<sup>25</sup>.

**Pan-European research and technology infrastructures**<sup>26</sup> play a key enabling role by providing access to state-of-the-art facilities, data and services. The forthcoming **EU Strategy on research and technology infrastructures** will aim to strengthen their sustainability, coordination and accessibility, in particular by startups and scale-ups.

**Creation of new knowledge**, e.g. through excellent frontier research, is an essential basis for a vibrant life sciences ecosystem and the development of technologies and innovations. Horizon Europe, the EU Framework Programme for R&I, supports fundamental and frontier research<sup>27</sup>, as well as collaborative interdisciplinary projects that translate excellent research into innovative solutions addressing global challenges.<sup>28</sup> It also fosters the translation of emerging

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<sup>24</sup> ACT EU is a joint initiative of the Commission, the European Medicines Agency and the Heads of national Medicines Agencies (<https://www.ema.europa.eu/en/human-regulatory-overview/research-development/clinical-trials-human-medicines/accelerating-clinical-trials-eu-act-eu>)

<sup>25</sup> <https://www.ihj.europa.eu/projects-results/health-spotlights/impact-clinical-trials>

<sup>26</sup> There exist already 3 technology infrastructures (called open innovation test beds) for safety testing of medical technologies and 4 for nano-enabled biobased materials: [Open Innovation Testbeds for Advanced Materials – European Commission](#)

<sup>27</sup> See for example European Research Council funding on frontier research (<https://erc.europa.eu/projects-statistics/mapping-erc-frontier-research>) and EIC Pathfinder, which supports research developing the scientific basis to underpin breakthrough technologies ([https://eic.ec.europa.eu/eic-funding-opportunities/eic-pathfinder\\_en](https://eic.ec.europa.eu/eic-funding-opportunities/eic-pathfinder_en))

<sup>28</sup> Horizon Europe, pillar II - Global challenges and European industrial competitiveness

discoveries into practical applications and products<sup>29</sup>. The Commission will continue to promote robust and sustainable European and national environments by investing in life sciences research.

Instruments such as **Horizon Europe partnerships and Missions** are vital for building EU-wide R&I ecosystems. They foster long-term collaboration, reduce fragmentation and bring critical scale. One example is the **European Rare Diseases Research Alliance**, which brings together 180 partners to position Europe as a global leader in rare diseases research: EU and national research funders, life sciences research infrastructures, the JRC-managed European Platform on Rare Disease Registration, patient organisations, the EU4Health-funded European Reference Networks and industry. Another example is the Food System Partnership (FutureFoodS), which brings together 84 partners from 29 countries to accelerate the transformation of national, EU, and global food systems. By achieving critical mass through the joint implementation of research agendas and establishing structured R&I ecosystems, EU public-public and public-private partnerships enable faster delivery of results. Therefore, the Commission urges Member States and industry to boost their support for EU Partnerships and to scale up targeted R&I investments at local, regional, and national levels.

Finally, to stay ahead globally, the EU must identify emerging scientific breakthroughs early through ‘**horizon scanning**’<sup>30</sup>, and support their rapid translation into innovation. A more efficient identification of European opportunities will help to inform public investments<sup>31</sup> and their prioritisation. The **Life Sciences Coordination Board** (see section 3) will play a central role in mapping opportunities, aligning funding priorities, and integrating existing activities<sup>32</sup>.

Proposed actions:

- **(Flagship)** *The Commission will propose a long-term, Europe-wide strategy designed to create an attractive framework for boosting multi-country clinical research.*
- **(Flagship)** *The Commission will create a network of European Centres of Excellence in advanced therapy medicinal products (ATMPs) to coordinate their further development together with the Member States*
- *The Commission will launch a pilot for phased funding of collaborative research, leveraging results from past EU projects to secure the faster development of promising health technologies.*

## Promoting a holistic approach to Life Sciences

The EU currently lacks a coherent and integrated framework for life sciences, limiting policy alignment and cross-sector collaboration. Many life sciences sectors also contribute to

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<sup>29</sup> Biannual monitoring report 2024 on partnerships in Horizon Europe (<https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/8f71dfd0-76fe-11ef-bbbe-01aa75ed71a1>) and EIC Accelerator ([https://eic.ec.europa.eu/eic-funding-opportunities/eic-accelerator\\_en](https://eic.ec.europa.eu/eic-funding-opportunities/eic-accelerator_en))

<sup>30</sup> Detecting emerging evidence and early signals of change in the present to help anticipate their potential future impacts (<https://www.oecd.org/en/about/programmes/strategic-foresight.html>), including regarding scientific and technological developments with potential for application.

<sup>31</sup> See for example EIC Tech Report 2024

<sup>32</sup> For instance through the use of the Innovation Radar (<https://innovation-radar.ec.europa.eu/>); or studies like ‘Weak signals in Science and Technologies’ (2024; <https://publications.jrc.ec.europa.eu/repository/handle/JRC140959>)

environmental degradation while they depend on healthy ecosystems, which further calls for systemic action.

The **One Health**<sup>33</sup> approach which recognises the interconnectedness of human, animal, and environmental health, offers a powerful model to address global challenges in a sustainable manner. One Health can for instance guide reduction of anti-microbial resistance and the risks for pandemics, the development of innovative and sustainable agri-food systems, while also contributing to ecosystems restoration and biodiversity objectives.

The EU has the potential to lead globally on One Health. By embedding this approach across policies, the Union can better protect people's health, empower the green transition, and enhance competitiveness. However, its implementation is constrained by fragmented policies, lack of trans- and interdisciplinarity and insufficient coordination among relevant sectors. In line with the recommendations of the scientific opinion by its **Scientific Advice Mechanism (SAM)** on 'One Health Governance in the EU'<sup>34</sup>, the coordination mechanisms need to be established to drive implementation.

One Health is well illustrated by the field of **microbiomes** – communities of microorganisms such as bacteria living together in a specific environment (in humans, animals, plants, soils...), with deep interconnections. Understanding these interactions through a One Health approach offers opportunities to develop new products in medicine, food, sustainable agriculture, aquaculture, and ecological restoration.

A holistic interdisciplinary approach is also needed to understand links between climate change and health. The new, ambitious **Strategic Research and Innovation Agenda on Health and Climate Change**<sup>35</sup> outlines the future vision and will support the development and deployment of high impact solutions such as health risk surveillance tools, prevention enhancing interventions, infrastructural adaptation and low-carbon medical technologies.

In parallel, the upcoming **European Climate Adaptation Plan** will support the Member States with resilience planning, updated climate risk assessments and more robust climate-proof infrastructure.

Proposed actions:

- **(Flagship)** *The Commission will lead the implementation of the new Strategic Research and Innovation Agenda on **health and climate change**, including through mobilising EUR 170 million through the Horizon Europe Health Work Programmes 2026-2027, and invites Member States to contribute. The Commission will also propose a global research collaboration to foster alignment between global funders and support the development of solutions for increased resilience, adaptation and mitigation.*
- **(Flagship)** *The Commission will propose a One Health microbiome research and innovation strategy to make the EU a world-class innovator for the development and*

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<sup>33</sup> [https://health.ec.europa.eu/one-health/overview\\_en](https://health.ec.europa.eu/one-health/overview_en)

<sup>34</sup> One Health Governance in the European Union (<https://op.europa.eu/en/publication-detail/-/publication/56b65e58-a309-11ef-85f0-01aa75ed71a1/language-en>)

<sup>35</sup> **ADD REFERENCE TO THE SRIA, ONCE PUBLISHED**

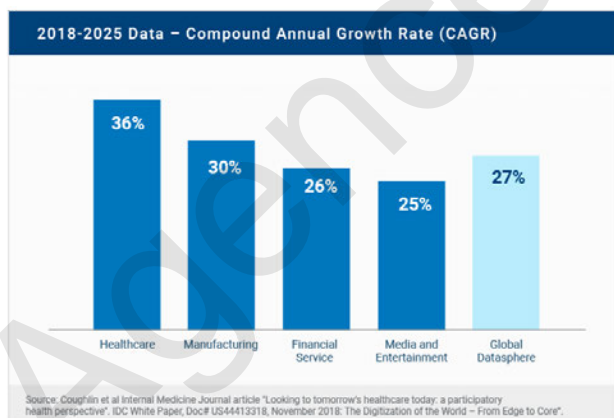
*deployment of microbiome-based solutions, including through mobilising over EUR 30 million through the Horizon Europe Work Programmes 2026-2027*

- *The Commission will develop a strategic R&I agenda on food systems to foster the development of innovative and sustainable food systems solutions, complementing the forthcoming strategic approach to R&I in agriculture, forestry and rural areas.*
- *The Commission will promote One Health approaches in research and innovation by collaborating with Member States and other relevant stakeholders to:*
  - i) identify further priority areas that would benefit from One Health strategies and provide financial support, leveraging existing data and repositories, and*
  - ii) develop guidance to support inter- and transdisciplinary R&I in the field of One Health.*

### Unlocking the power of data and AI for breakthrough innovation

Access to large-scale, high-quality datasets and the ability to analyse them are essential for advancing life science discoveries, drive innovations and maintaining Europe's global competitiveness. The explosion of data generated worldwide<sup>36</sup>, combined with rapid advances in artificial intelligence (AI) offer significant opportunities to expand the life sciences innovation landscape and improve people's wellbeing. From enabling the analysis of complex biological systems and designing new drugs, to unleashing the development of personalised healthcare (including for specific populations such as women or elderly), and more, data powered AI tools have demonstrated their potential to improve citizen health while cutting costs.

Figure.3 Annual Growth rate of Data between 2018-2025



Europe has been a frontrunner in adopting AI for scientific research and several EU initiatives have been launched to facilitate efficient ways of using and reusing data<sup>37</sup>.

<sup>36</sup> In less than a decade, the global data volume has increased 5-fold from 33 zettabytes in 2018 to 175 zettabytes expected in 2025 (European Strategy for Data, COM (2020) 66 final). According to Forbes, healthcare data is expected to comprise around 36% of all the data in the world by end of 2025

(<https://www.forbes.com/councils/forbestechcouncil/2023/12/12/what-to-do-about-healthcares-messy-desk-data-dilemma/>)

<sup>37</sup> For example: the Data and Data Governance Act, the AI Act, the launch of the AI Factories, the "GenAI4EU", the European '1+ Million Genomes' Initiative, European Initiative to UNDERstand CANcer, European Reference Networks & Their Registries

In the health domain, the implementation of the European Health Data Space will provide a clear a framework for securely accessing and sharing electronic health data.

Nevertheless, challenges persist. Legal fragmentation – due to national derogations from the EU data protection rules – and uncertainties in legal interpretations hinder the full use of personal data<sup>38</sup>. In addition, data is often siloed, scattered across different projects and systems and varies in quality and accessibility. The coexistence of personal and non-personal data, combined with diverse data access regimes, adds further complexity. These challenges are exacerbated by ethical concerns around AI use, uneven AI uptake and fragmented EU AI research environment across the EU. To fully unlock the potential of AI in life sciences, the Commission is preparing a dedicated **Strategy for AI in science**.

A **closer cooperation** should be established between the various **Member States' authorities** working in relevant domains (e.g. national data protection, AI health, research and innovation authorities) and respective EU institutional stakeholders, to ensure that data-related challenges (e.g. national health data fragmentations and diverging interpretations) are tackled. Thanks to such cooperation between Authorities, other EU bodies and relevant stakeholders the Commission could consider targeted adjustments to relevant legislation.

In addition, to fast-track their journey from idea to market, researchers and innovators should be supplied with a **trustworthy interactive tool** to navigate through the complex European regulatory data landscape and take full advantage of the available data repositories and services (see section 3). Life sciences R&I also depends heavily on understanding and exploring **non-human genomic and biological data** (biodata)<sup>39</sup>. Improving the quality, accessibility, interoperability, and sustainability of these resources will further accelerate scientific discoveries. Stronger international collaboration is imperative to ensure long-term access to and stewardships of global biodata resources.

Proposed actions:

- **(Flagship)** *The Commission will establish a European Life Sciences R&I Data Assembly bringing together diverse group of EU and Member States authorities working in data-related life sciences domains and key EU R&I bodies to support the consistent interpretation and harmonisation of relevant legal data frameworks and strengthen coordination and collaboration.*
- *The Commission will support activities to develop and populate strategic biodata resources for life sciences, including non-human biodata, and ensure access for European and global users.*

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<sup>38</sup> Second Report on the application of the General Data Protection Regulation, COM(2024) 357 final

<sup>39</sup> Such as the 'Catalogue of Life', which provides an index of known species of animals, plants, fungi, and microorganisms, as the basis for collaboration with like-minded partners in international fora such as the G20 and contribute to achieving the objectives set in relevant international agreements such as the Kunming Montreal Global Biodiversity Framework.

## Life sciences as a driver for industrial sustainability

Accelerating the development and uptake of innovative circular, resource efficient and low-emission solutions is vital to address climate change, biodiversity loss and pollution – the triple interlinked planetary crises. Investments across the full innovation pipeline – from early-stage research to scale-up – are needed to realise the potential of biotechnology, synthetic biology, and bioengineering in greening European industry, in line with the Clean Industrial Deal.

Life sciences-based innovation can reduce resource, water and energy use of industrial processes. They can also reduce reliance on limited sustainable primary biomass by increasing the efficiency of biomass use, enabling the conversion of waste into valuable products, and by supporting the use of carbon from carbon capture and utilisation (CCU). Emerging technologies for **bioremediation** further contribute to environmental restoration.

For example, the project **Circular Biocarbon**, funded by the Circular Bio-based Europe Joint Undertaking is working with local authorities to use municipal waste for the production of biopolymers with applications from agriculture to advanced materials. The results can be replicated by over 20,000 European waste recover facilities working in a global market valued more than EUR 100 billion in 2024<sup>40</sup>.

Precision fermentation exemplifies how life sciences can transform food production through microbial innovation<sup>41,42</sup>. To support its uptake the Commission will launch an annual Food Fermentation Conference to connect stakeholders, strengthen networks and support scale-up of sustainable solutions.

The upcoming new **Bioeconomy Strategy (2025)** will support the deployment and uptake of these innovations across value chains, while related initiatives, including the **Circular Economy Act**, the **Communication on Advanced Materials for Industrial Leadership**<sup>43</sup> and the revised **Commission recommendation on Safe and Sustainable by Design (SSbD) Chemicals and Advanced Materials**<sup>44</sup> will reinforce EU sustainable and competitiveness objectives. The SSbD framework aspires to be a global benchmark for innovation in clean industrial transition, encouraging the substitution of substances of concern by identifying safer and more sustainable alternatives. As part of preparations for the **Advanced Materials Act**, the Commission will also engage stakeholders on the interface between life sciences and materials sciences.

Novel tools such as **New Approach Methodologies (NAMs)** can support faster innovation, cost reduction, and more efficient R&D processes in industry. NAMs are innovative experimental methods that do not involve live animals.

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<sup>40</sup> [Municipal Solid Waste Management Market Size Report - 2034](#)

<sup>41</sup> As identified in the Transition Pathway for the agri-food system, [https://single-market-economy.ec.europa.eu/sectors/agri-food-industrial-ecosystem/transition-pathway-agri-food-industrial-ecosystem\\_en](https://single-market-economy.ec.europa.eu/sectors/agri-food-industrial-ecosystem/transition-pathway-agri-food-industrial-ecosystem_en)

<sup>42</sup> <https://www.fao.org/food-safety/news/news-details/en/c/1735814/>

<sup>43</sup> [https://research-and-innovation.ec.europa.eu/document/download/0fcf06ea-c242-44a6-b2cb-daed39584996\\_en?filename=com\\_2024\\_98\\_1\\_en\\_act\\_part1.pdf](https://research-and-innovation.ec.europa.eu/document/download/0fcf06ea-c242-44a6-b2cb-daed39584996_en?filename=com_2024_98_1_en_act_part1.pdf)

<sup>44</sup> [https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/chemicals-and-advanced-materials/safe-and-sustainable-design\\_en](https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/chemicals-and-advanced-materials/safe-and-sustainable-design_en)

They include a variety of modern technologies, such as lab-grown human tissue, advanced computer models, and digital twins<sup>45</sup>, which are virtual versions of organs or living systems. They can complement or even replace certain animal studies, especially where traditional models are limited in predicting human outcomes. By combining scientific progress with a commitment to more humane methods, NAMs will for instance speed up the development of safe and effective medicines, including preventive measures, and improve how we assess the safety of chemicals and other products. These new tools will help industry innovate faster, lower costs, and make research and development more efficient. By relying less on animal testing and more on smart, data-driven methods, NAMs will also help reducing waste and support a more sustainable, eco-conscious way of producing medicines and chemicals.

Proposed actions:

- *The Commission will support research and innovation on cross-sectoral life sciences technologies to develop novel molecules and advanced materials, improve the efficiency of biomanufacturing and other industrial processes, and support bioremediation efforts. This includes mobilising EUR 200 million through the Horizon Europe Work Programmes 2026-2027 and Commission contribution to the Circular Bio-based Europe Joint Undertaking.*
- *The Commission will collaborate with Member States, industry, academia, and regulators to support the development, validation, and uptake of emerging New Approach Methodologies to de-risk the development of new medicinal products and medical devices through a new European Research Area (ERA) policy action. In addition, the Horizon Europe Work Programme 2026-2027 will dedicate EUR 100 million to such methodologies, including for the development of virtual human twins to support integrated clinical decision in prevention and diagnosis.*

### **Strengthening skills and careers for competitive European Life Sciences**

Life sciences are evolving rapidly. Constantly emerging new knowledge, techniques and technologies make it challenging for academics, researchers and practitioners to keep up with advances due to a shortage of education, training and skilling programmes that offer cutting-edge knowledge, interdisciplinary skills and competences. Currently, gaps in education, training, and skills development make it difficult for researchers and professionals to keep up with the latest breakthroughs. At the same time, research careers face challenges, including low remuneration, limited career prospects, restricted mobility, and persistent gender imbalances in Science, Technology, Engineering and Mathematics (STEM) fields<sup>46</sup>.

In the current geopolitical context, the EU remains committed to academic freedom and open international collaboration in research, establishing itself as a hub for global innovation,

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<sup>45</sup> <https://interoperable-europe.ec.europa.eu/collection/elise-european-location-interoperability-solutions-e-government/glossary/term/digital-twin>

<sup>46</sup> E.g. women file only 10 % of patent applications (<https://projects.research-and-innovation.ec.europa.eu/en/knowledge-publications-tools-and-data/interactive-reports/she-figures-2024>)

attracting top talent and fostering progress in critical life science fields such as health and climate.

The EU offers a range of instruments, including the **Marie Skłodowska-Curie Actions**, the **European Institute of Innovation and Technology**, **Erasmus+** and training schemes offered by European research infrastructures, which are supporting the development of skills and fostering stronger links between academia and industry. The Commission encourages Member States to reinforce national level programmes that promote innovation and entrepreneurship in key life sciences sectors.

The recently launched Union of Skills<sup>47</sup> and the STEM Education Strategic Plan<sup>48</sup> propose targeted actions to tackle the skills, competences and training shortages in the EU. These actions include the **STEM Specialist Fellowships**, to attract top scientists to the EU and the development of new, transdisciplinary life science curricula at secondary and tertiary education levels.

To make research careers more attractive and sustainable, the EU will implement the new **European framework for research careers**, the **Council Recommendation** on higher education careers and the European Charter for Researchers<sup>49</sup>, supported by tailored instruments<sup>50</sup>. Building on these, the Commission will reinforce efforts to attract global researcher talent and address remaining legal barriers through the forthcoming **European Research Area (ERA) Act** (2026).

Proposed actions:

- **(Flagship)** *The Commission will support the career development of life sciences researchers and the establishment of talents from third countries in the EU, including through the 'Choose Europe' initiatives, and in synergy with similar activities from Member States*
- *The Commission will launch a foresight study to identify competences, skills and training needs for the life sciences, including for optimising the uptake of artificial intelligence, and monitor needs through the European Skills Intelligence Observatory*

### 3. ENSURING A SMOOTH AND RAPID ACCESS TO MARKET FOR LIFE SCIENCES INNOVATIONS

#### Promoting innovation responsive regulation

Europe's high standards for quality, safety, and efficacy in life sciences underpin public trust and ensure that innovations deliver real value to patients, consumers, and society. Regulatory and administrative hurdles, however, significantly slow down the journey from idea to market, driving up costs and creating uncertainty – particularly for start-ups and innovators. One of the main challenges lies in the fragmentation and complexity of regulatory pathways, especially for

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<sup>47</sup> [Union of Skills - European Commission](#)

<sup>48</sup> [STEM Education Strategic Plan \(legal document\) - European Education Area](#)

<sup>49</sup> Council Recommendation of 18 December 2023 on a European framework to attract and retain research, innovation and entrepreneurial talents in Europe.

<sup>50</sup> <https://european-research-area.ec.europa.eu/horizon-europe-support-research-careers>

novel products, or combined products (for example, medicines paired with diagnostics or medical devices used off-label) that fall under multiple legal frameworks or progress through different regulatory stages.

This leads to prolonged timelines and the risk of conflicting decisions, which creates an all the more challenging context when compared with more centralised and expedited approaches in other jurisdictions. And even when there are centralised approaches, prolonged authorisation procedures under frameworks like the Novel Food Regulation often delay the market entry of innovative food and feed, thereby hindering uptake and competitiveness in these emerging sectors. Diverging national procedures for ethical approval of clinical trials further compound the problem, often resulting in inconsistent timelines and delays, which are especially detrimental to multi-country studies.

The EU is committed to advancing the **innovation principle**<sup>51</sup>, ensuring that policy and regulation actively support innovation as a driver for achieving EU strategic objectives, including health security, sustainability, and economic resilience. This means shaping a regulatory environment that both upholds Europe's rigorous standards and creates the best possible conditions for life sciences innovation to thrive in service of societal needs.

Encouraging innovation-driven research requires regulatory systems that are responsive to emerging technologies and capable of evolving in step with scientific progress. To this end, several tools and initiatives can ensure that EU legislation remains fit for purpose – serving the needs of people, patients, and consumers, while also supporting sustainable business models and enhancing societal resilience and preparedness.

Early regulatory guidance for researchers and innovators plays a critical role in this process. The Commission intends to establish **an AI-powered interactive tool to help researchers and innovators navigate the EU regulatory landscape**, particularly in the early stages of research and development. Such a personalised assistance tool will help researchers to consider the regulatory framework from the early design of innovations. This will complement the existing pre-market advisory services provided by EU agencies such as EFSA and EMA.<sup>52</sup> To fast-track the research journey of researchers and innovators, the interactive tool will also facilitate the findability and accessibility of the key datasets and tools.

The Commission will also step up the work of **MedEthicsEU**<sup>53</sup> that brings together Member States medical research ethics committees, to harmonise and align their operational procedures. The **COMBINE programme**<sup>54</sup> aims to improve the interface between the regulatory frameworks for clinical trials of medicines and for medical devices when these are studied in combination. The results of the pilot will help set up an 'all-in-one' approval procedure to support sponsors in developing innovative and personalised therapies, such as medicines in combination with diagnostic tests.

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<sup>51</sup> [https://research-and-innovation.ec.europa.eu/law-and-regulations/ensuring-eu-legislation-supports-innovation\\_en](https://research-and-innovation.ec.europa.eu/law-and-regulations/ensuring-eu-legislation-supports-innovation_en)

<sup>52</sup> <https://www.ema.europa.eu/en/human-regulatory-overview/research-development/scientific-advice-protocol-assistance>

<sup>53</sup> [https://health.ec.europa.eu/medicinal-products/clinical-trials/medethicseu\\_en](https://health.ec.europa.eu/medicinal-products/clinical-trials/medethicseu_en)

<sup>54</sup> <https://ec.europa.eu/newsroom/sante/items/862110/en>

The Commission works to **address some of the challenges identified regarding medical devices and in vitro diagnostic devices**, exercising its legislatively conferred empowerment. It is also conducting a targeted evaluation of the medical devices and in vitro diagnostic regulations to further assess the challenges and identify possible solutions. Based on this evaluation, the Commission will be ready to **propose a legislative intervention** that strikes the balance between simplifying EU regulations related to medical devices and in vitro diagnostics, and effectively protecting patient safety and public health.

A study will be issued on the implementation of the Clinical Trials Regulation to assess its impact on European clinical research. In parallel, development of new approaches to run clinical trials is supported through Horizon Europe and in parallel the IHI JU.

The reform of the EU pharmaceutical legislation, currently discussed by the Council and the European Parliament, includes measures to streamline the regulatory framework for the development and timely authorisation of innovative medicines. This reform provides mechanisms for early interaction between regulators and companies, especially start-ups and SMEs. It also includes future-proofing measures to ensure that the regulatory system keeps pace with scientific and technological progress, such as regulatory sandboxes aiming to the regulatory learning and adapted frameworks to foster cutting-edge innovation in the field of medicines.

The Commission will propose an **EU Biotech Act** to ensure that the EU makes the most of the biotech revolution for the benefit of our society and economy. It will make the EU regulatory environment more conducive to innovation, by making it easier to develop biotech products and bring them to the EU market. To this end, the Commission will notably consider targeted amendments to legislations on clinical trials and Health Technology Assessment. Health Technology Assessment is conducted after the development, to assess whether a new health technology works better, equally well, or worse than existing alternatives.

More generally, future legislation should integrate experimentation clauses, derogations, and the use of test environments such as regulatory sandboxes, testbeds, and living labs<sup>55</sup>. These mechanisms provide the flexibility needed to trial new solutions, gather evidence, and ensure that regulatory frameworks remain responsive and supportive of innovation.

Horizon Europe Partnerships are well placed to support regulatory science and strengthen the capacity of the EU to adapt regulation to emerging technologies. For example, a pilot action on regulatory sandboxes is underway through the Innovative Health Initiative Joint Undertaking (IHI JU). The co-funded Partnership for the Assessment of Risks from Chemicals<sup>56</sup> fosters R&I cooperation between national and EU Agencies. Building on such experience, the Commission will help Agencies to continue their joint engagement in regulatory science and innovation.

A predictable and balanced intellectual property (IP) framework is crucial for a vibrant life science innovation ecosystem and IP is frequently a critical asset which emerging start-ups

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<sup>55</sup> Commission Staff Working Document: Regulatory learning in the EU Guidance on regulatory sandboxes, testbeds, and living labs in the EU, with a focus section on energy (SWD(2023) 277/2 final)

<sup>56</sup> <https://www.eu-parc.eu/>

leverage to secure financing for their R&I activities. The Commission is promoting the Unitary Patent system and encouraging all EU Member States to join this system as soon as possible. To facilitate rapid adoption, the Commission supports the ongoing co-decision process for an upgrade of the current EU system of supplementary protection certificates (SPCs) and monitors application of the Biotech Directive 98/44/EC, so it remains fit for purpose. Finally, the Commission supports filing and management of IP rights, including under the SME Fund.

Proposed actions:

- **(Flagship)** *The Commission will propose a **Biotech Act** to make the EU regulatory system more conducive to biotech innovation in various sectors such as health and food; and will facilitate and accelerate the approval procedures for Novel Foods.*
- **(Flagship)** *The Commission will be ready to **propose a legislative intervention** that strikes the balance between simplifying EU regulations related to medical devices and in vitro diagnostics, and effectively protecting patient safety and public health*
- *The Commission will establish **an interactive tool** to help researchers and innovators, particularly in the early stages of research and development, navigate the EU regulatory landscape.*
- *The Commission will streamline the ethics assessments across the EU, working with Member States under the MedEthicsEU initiative.*

## Unlocking public and private investment

The life sciences industry in Europe faces a range of financing and investment challenges. These include fragmented capital markets, an over-reliance on banks (where loans need to be secured and typically are limited in volume and duration), and fragmentation in public financing. Europe's relative lack of a strong Initial Public Offering (IPO) market, small Venture Capital (VC) and market fragmentations, along with limited role of institutional and foreign investors create additional barriers to innovation growth and scaling up<sup>57</sup>.

Investment challenges outlined in the Commission's 2024 Communication on biotechnologies and biomanufacturing apply across the life sciences sectors. Specific challenges, such as the particularly long development and authorisation timelines for health products or the expertise required to support investments in this field, make it more difficult for investors to connect with the right opportunities. This hampers innovators from expanding and marketing life sciences-related products in Europe.

In the past decade, venture capital investments in EU have improved but remain low in comparison to the funds available in other regions.

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<sup>57</sup> The Biotech sector is an good example of the access to finance challenges faced by life science innovators: European biotechs are listed on 14 different European stock exchanges, 90% of the companies are listed in their home countries, institutional investors hold a smaller share of the top ten regional biotechs in Europe (60% as compares to 85% in USA) and the three largest US biotech funds are twice of the size of their European counterparts (Attracting Life Science Investments in Europe, Oct 2023; [https://www.biomedeuropa.org/wp-content/uploads/2024/09/Life\\_Science\\_Attractiveness\\_-\\_2023\\_November\\_22\\_Final\\_Final\\_LR2.pdf](https://www.biomedeuropa.org/wp-content/uploads/2024/09/Life_Science_Attractiveness_-_2023_November_22_Final_Final_LR2.pdf))

Health/life science and deep tech were the industries that attracted significantly more funding than any other industry in 2024<sup>58</sup>, yet much more is needed to fully realise European competitive advantages in these fields.

Public support mechanisms are seen as critical to de-risk investments and help companies reach milestones that attract follow-on private capital. The European Commission has already taken steps to support access to finance for technologies and innovations, such as launching the European Circular Bioeconomy Fund (ECBF) and providing funding e.g. through the European Innovation Council (EIC) and HERA Invest. Additionally, initiatives like the Strategic Technologies for Europe Platform (STEP) and the InvestEU programme improve access to finance and support innovative companies, including through the provision of anchor investments in Venture Capital funds (through the European Investment Fund) supporting innovations in the life sciences sector<sup>59</sup>.

Moreover, recent Commission strategies, such as the Savings and Investment Union (2025) and the **European Startups and Scaleups Strategy** (2025) explore how to facilitate the growth of innovative companies in Europe and accelerate their access to financing and market. The latter specifically acknowledges the critical strategic importance life sciences and biotech.

The upcoming **European Innovation Act** (2026) will further promote the access to intellectual assets generated by publicly funded R&I, regulatory sandboxes for innovators and measures to boost public and private innovation procurement, helping innovative companies to overcome difficulties in applying for those procurements.

Unlocking the participation of institutional investors and pension funds is also crucial, as these actors remain underrepresented in the European life sciences funding landscape. Mechanisms that enable their engagement could mobilise substantial additional capital, as underlined in the recently published **European Startup and Scaleup Strategy**.

Joint investments by public funders, foundations and industry have also proven to be efficient means to address high-risk research and novel applications areas with potentially high benefits in the life sciences. European Partnerships, such as the Innovative Health Initiative Joint Undertaking, the Global Health EDCTP3 Joint Undertaking or the Circular Bio-Based Europe Joint Undertaking, bring together private and/or public partners. They have enabled long-term research collaboration and financing to tackle targeted challenges for their respective sectors, and demonstrated their usefulness in strengthening the European competitiveness.

A structured interaction between industrial partners and investors needs to be established to further accelerate the growth and scale-up of breakthrough life sciences start-ups. This strategic interface should address some recurring challenges and be shaped around shared interest, such as early engagement on unmet technological needs, co-investment opportunities and acquisition pathways. Horizon Europe partnerships will be leveraged, together with the EIC portfolio of

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<sup>58</sup> The 2025 European Deep Tech Report

<sup>59</sup> Overall, the EIB is the largest venture debt provider to the life sciences sector in Europe with a portfolio of over EUR 2.7 billion at the end of 2023 supporting more than 100 innovative companies, almost half of which are in the biotechnology field (Draghi Report 2024)

cutting-edge life sciences companies and the EIC Trusted Investors Network (TIN), comprising experienced investors managing over EUR 300 billion in assets.

Unlocking the participation of institutional investors and pension funds is also crucial, as these actors remain underrepresented in the European life sciences funding landscape. Mechanisms that enable their engagement could mobilise substantial additional capital, as underlined in the recently published **European Startup and Scaleup Strategy**.

Proposed action:

- **(Flagship)** *The Commission will launch a strategic interface connecting life sciences startups, industry, and investors, leveraging the EIC's portfolios and EIC's Trusted Investors Network (TIN)*

#### **4. BOOSTING THE UPTAKE AND USE OF LIFE SCIENCES INNOVATION**

##### **Fostering uptake of innovation through public procurement**

The public sector needs innovative, sustainable solutions and at the same time has the power to shape markets. As suggested in the Letta report, EU and national budget should prioritise investment and deployment of advanced health technologies through public procurement. Public institutions are also an important policy lever for incentivising green procurement<sup>60</sup>, such as to promote healthy and sustainable diets.

Public procurement rules are however fragmented, not sufficiently suited for small actors and overall there is underinvestment in innovation procurement. Innovative companies in the life sciences therefore continue to face difficulties in entering the EU public procurement market. The revision of the **EU Public Procurement rules** and the **European Innovation Act** will promote measures to overcome difficulties faced by innovative companies to find first customers due to lack of public and private innovation procurement and barriers in applying for those procurements. The Commission will launch actions to foster the broader use of innovation procurement across the Union.

In sectors with high public spending, such as the healthcare sector, public procurement of innovation is a strategic tool to foster the uptake of innovation and create opportunities for European companies to access markets and grow.

Proposed action:

- *The Commission will, through its funding programmes, stimulate the procurement of life science innovation via dedicated calls, in areas such as adaptation to climate change, next-generation vaccines, or affordable solutions for cancer, with approximately EUR 300 million*

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<sup>60</sup> The European Commission's Green Public Procurement requirements include options for higher levels of environmental performance, supporting environmental and innovation goals.

## **Building public trust and engagement**

Life science innovations significantly contribute to peoples' daily life and their individual and social wellbeing. To foster public trust and the acceptance of technologies, people must understand how these technologies work, their purpose and how they help improve their wellbeing. The EU enjoys a comparative advantage in this area, as its products and policies are widely trusted to uphold ethical and safety standards.

However, this trust is not guaranteed. It is increasingly threatened by the rapid spread of mis- and disinformation (especially on social media), and by insufficient engagement with people around their concerns and expectations. To maintain and reinforce trust, especially among young people, R&I policymakers and actors must be better equipped to engage with the public and pursue responsible research. The 2025 Eurobarometer reflects a general increase in trust in science, yet concerns around life sciences remain. The Commission will conduct regular Eurobarometer surveys to monitor public perceptions in this area.

Public understanding is particularly critical in areas like food technology, where innovation intersects with health and sustainability. A lack of clear information about the risks and benefits of processed foods creates uncertainty for consumers and hampers market uptake. The Commission will seek scientific and ethical advice on this issue from the **Scientific Advice Mechanism** and the **European Group on Ethics in Science and New Technologies**.

EU-funded research projects have a key role in engaging people, civil society, public authorities and value chain actors. Ensuring inclusive dialogue helps improve awareness, build acceptance, and support the responsible deployment of life science innovations. Collaboration among all stakeholders is also essential to promote accurate information and counter disinformation and misinformation.

Proposed actions:

- *The Commission will support life science stakeholders and policy makers in societal engagement by setting up a repository of tools and best practices in the areas of responsible R&I, risk communications, and science communication, and pilot societal engagement actions.*
- *The Commission calls on Member States to strengthen community engagement and citizen science by relevant actors, such as universities, museums and research organisations.*

## **5. GOVERNANCE – A LIFE SCIENCES COORDINATION BOARD**

There is a pressing need for policy coordination of life sciences in the EU to help address the existing barriers and challenges that hinder the translation of innovative ideas into commercial products and services. Moreover, bringing together European and global stakeholders including industry, academia and civil society is key to ensure that EU actions are aligned with stakeholder priorities and resources and international developments and support is leveraged for the development and uptake of innovative life sciences. Proposed action:

- ***(Flagship) The Commission will establish a “Life Sciences Coordination Board” within the Commission, in a ‘whole-of-government’ approach, which will ensure innovation-friendly coherent policies, funding and activities. The coordination board will also:***
  - *organise and manage high-level topical discussions between policy makers and relevant stakeholders*
  - *monitor progress of the implementation of this Strategy*
  - *manage the European Life Science R&I Data Assembly*
  - *support the development of interactive tool to help European researchers and innovators in navigating the life science regulatory landscape and provide information on data services and tools*
  - *organise and manage other activities, such as:*
    - *the establishment of a stakeholder forum for life sciences to encourage broad dialogue and engagement*
    - *the development and coordination of horizon scanning capabilities to identify promising emerging technologies with high potential for life sciences*

## 6. CONCLUSIONS

The European life sciences sector stands at a pivotal moment. Life sciences and their related sectors are important contributors to Europe's competitiveness and prosperity and hold immense potential for future economic growth and societal well-being. As such, it is essential to strengthen their whole value chain, from R&I to deployment and uptake of applications. This also requires a regulatory environment that is responsive to innovation, and open to experimentation, so that emerging solutions can be tested, refined, and brought to market in a timely and responsible manner.

The strategy will be implemented in a multi-stakeholder approach, engaging a wide range of actors, including Member States, researchers, innovators, companies and investors, as well as legislators, citizens, and civil society organisations. The success of this initiative will depend on participation and commitment of all stakeholders at European, national, and regional levels. Furthermore, global collaboration and cooperation are crucial to address the complex challenges and opportunities in the life sciences and to ensure that benefits are shared equitably among nations and communities.

The Commission will report by 2028 on the implementation of the Strategy.

Choose Europe for life sciences!