

Horizon Europe Missions Monitoring Flash

Spotlight on
Missions: essential
figures & facts from
Horizon Europe



MONITORING &
EVALUATION REPORT

Horizon Europe Missions Monitoring Flash

European Commission

Directorate-General for Research and Innovation

Directorate G — Common Policy Centre

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Manuscript completed in April 2025

1st edition

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PDF	ISBN 978-92-68-26365-5	doi:10.2777/9240870	KI-01-25-080-EN-N
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Luxembourg: Publications Office of the European Union, 2025

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Horizon Europe Missions Monitoring Flash Monitoring and Evaluation Report

Paola Trucco

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INTRODUCTION

EU Missions are an innovative instrument within Horizon Europe. They integrate research and innovation (R&I) objectives with environmental and societal goals, aiming to deliver substantial and measurable impacts by 2030.

The five EU Missions were launched in 2021 following the identification of Mission Areas where challenges could be effectively addressed through a mission-based approach. These areas are Cancer; Climate-Neutral and Smart Cities; Adaptation to Climate Change, including Societal Transformation; Healthy Oceans, Seas, Coastal and Inland Waters; and Soil Health and Food.

EU Missions do not prescribe the means to reach their objectives and are therefore cross-disciplinary by design. Missions are both technological and societal in focus, ensuring a balanced approach to innovation. Distinguished by their scope and areas of activity, but similar in their common objective to lead to a clear impact in terms of societal benefits, they have some distinctive features in comparison with traditional EU research activities:

- **Time-bound:** Missions are committed to delivering concrete results by the year 2030, setting a clear timeline for progress.
- **Measurable:** Each Mission is defined by explicit societal outcomes, which go beyond scientific and economic objectives.
- **Interdisciplinary approach:** Missions are broad in aspiration yet precise in their objectives, encompassing a wide range of disciplines.
- **Leverage/ additional resources:** Missions are expected to leverage additional funding from public and private sources. This includes national and regional governments, as well as private sector investment.
- **Regulatory aim:** Missions are designed to complement existing initiatives and regulatory frameworks, promoting coherence across the EU's agenda.
- **Engagement and commitment:** Missions put a strong emphasis on citizen and stakeholder engagement, to foster a “shared sense of urgency” and public accountability.

Mission performance and monitoring requires a tailor-made approach. As Missions are not a traditional R&I instrument, achieving their objectives requires going beyond Horizon Europe calls. Monitoring the Missions needs to take this into account and capture their impact both within and outside the Framework Programme.

The analysis presented in this report provides key figures related to the performance of EU Missions based on Horizon Europe monitoring data only. This document uses information as it stood on 1 July 2024, three and a half years after the start of the Framework Programme.

1. Joint analysis of Mission-specific calls

Since their launch, EU Missions have supported targeted research and innovation across various sectors. The 2021-2023 Work Programmes established the starting point for the Missions by allocating up to EUR 1.9 billion exclusively for Mission-specific calls.

By July 2024, a total of **223 Mission-specific projects and 2 854 participants** were funded by Horizon Europe, amounting to EUR 1.7 billion in investments. This budget share represents 4.9% of the entire Horizon Europe budget and 8.4% of the budget for Pillar II for this period, the main instrument through which Missions calls are funded.



EUR 1.73 billion
EU Contribution

EUR 1.73 billion of EU funding was requested through Mission calls by 01/07/2024.



223
Projects

By mid-2024, 223 Mission-specific projects were ongoing.



4 660
Participations

2 854 participants were involved in Mission-specific projects, each taking part, on average, in 1.6 projects.



2 854
Participants

1.1. Proposals & applicants

As of July 2024, **40 Mission specific calls** were launched, covering a total of **118 topics**¹. A total of 972 proposals were submitted, of which 861 were considered eligible for a total eligible EU contribution of EUR 6.7 billion. The number of eligible applications received for Mission specific calls was 15 404 with an average of 18 applicants per proposal – i.e. each proposal involved, on average, 18 entities. Proposals for Horizon Europe Mission-specific calls have a **success rate** of 25%, which exceed the overall Framework Programme averages of 16% and Pillar II of 21%. However, mission specific calls have a higher rate of ineligible and inadmissible proposals (11%) compared to Horizon Europe (approx. 3.5%) and Pillar II (approx. 7.5%).

1.2. Key figures: projects and participants

1.2.1. Project characteristics

The **average project size** in terms of budget is **EUR 7.8 million** and each funded project involved around **21 participants on average**, representing the number of entities collaborating within the project². These figures are well above the average for Horizon Europe (EUR 2.6 million and 6 participants) and slightly above Pillar II averages (EUR 6.2 million and 16 participants).

Concerning the type of actions³ financed, projects with higher Technological Readiness Level (TRL) financed through **Innovation actions** (IA) make up the highest share of

¹ No proposals were submitted for 3 calls, while one call did not attract any eligible proposals.

² The average number of participants represents the typical number of organizations or entities involved in each project within the whole portfolio. It is calculated by dividing the total number of participants across all projects by the total number of projects.

³ Horizon Europe supports various types of actions, including research, innovation, coordination, and capacity-building activities. These actions aim to advance scientific knowledge, develop innovative solutions, and foster collaboration across sectors and disciplines. For more details refer to Annex II – Glossary of

projects (93 projects, EUR 840 million, 2262 participations). **Research and Innovation Actions** (RIA) follow up closely (88 projects, EUR 753 million, 792 participations). **Coordination and Support Actions** (CSA) are less numerous (42 projects, EUR 139 million, 1606 participations).

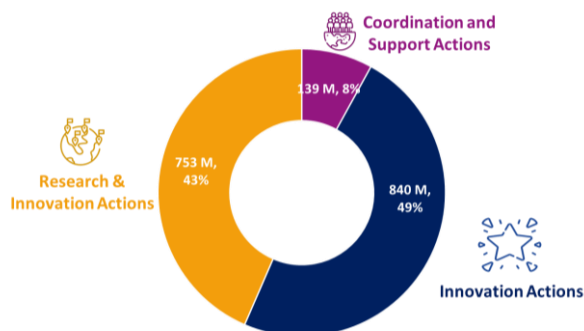


Figure 1: NET EU Contribution share by Type of Action. Source: Horizon Europe Dashboard, cut-off date 01/07/2024

Among the 42 CSAs financed, 8 projects are stemming from cross-cutting calls⁴, which provide support for all Missions. By complementing Missions-specific initiatives, these projects seek to promote knowledge sharing and mission preparedness⁵, foster coordination networks and engaging Member States⁶ and leverage the New European Bauhaus to address societal and environmental challenges through interdisciplinary solutions⁷.

1.2.2. Participants

With **2 854** unique participants, Mission-specific calls account for 11.6% of all Horizon Europe participants and **15.6% of Pillar II**. Of these, 22% (634) are SMEs, which received EUR 283 million in grants.

Newcomers, defined as those entities that did not participate in the previous framework programme, have received 15% of the total funding from Mission-specific calls and represent 35% of participations therein.

Missions have been designed to facilitate participation from a diverse array of beneficiaries. **Research Organisations (REC)** received the largest share of grants (27%, EUR 476 million), followed by **Higher Education Institutions (HES)** with 25% (EUR 428 million), and **Private for-Profit Companies (PRC)** with 24% (EUR 409 million). In terms of participation, PRC are the most numerous (864 participants) and have the highest participation rate (30%). Other organisation types show similar patterns of participation.

terms

⁴ HORIZON-MISS-2021-COOR-01, HORIZON-MISS-2021-NEB-01, HORIZON-MISS-2022-NCP-01

⁵ [TRAMI](#)

⁶ [NCP4Missions](#)

⁷ [DESIRE](#), [CULTUURCAMPUS](#), [EHHUR](#), [NEB-STAR](#), [BoSS](#), [NEBourhoods](#)

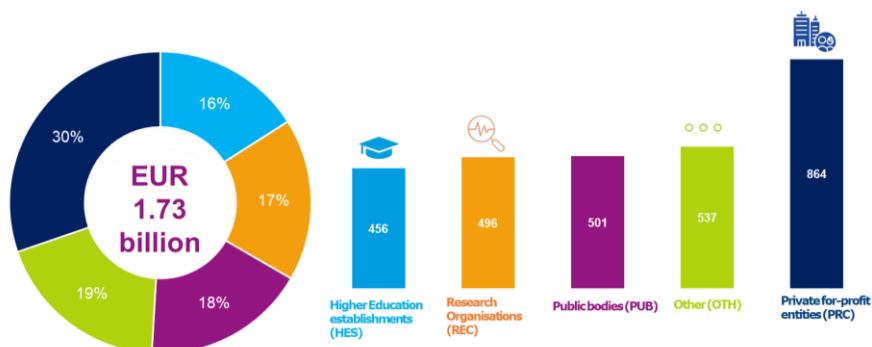


Figure 2: Beneficiaries of Horizon Europe funding in Missions specific calls according to their type of organisations by funding and total participations. Source: HE Dashboard, cut-off date 01/07/2024

1.2.3. Missions funding across Pillar II - Clusters

The budget for EU Mission-specific calls is spread across all clusters. Cluster 5 implements the largest share of funding with EUR 876 million, representing 12.7% of its total budget. Cross-cutting Mission actions are included within this Cluster. Cluster 6 follows with EUR 469 million, which is 13.3% of its budget while Cluster 1 has EUR 386 million allocated, accounting for 10.9% of its budget.

1.2.4. Country participation

Across all Missions-specific calls, **89%** of participations are from **Member States**, **9%** from **Associated countries** (including the United Kingdom) and **2%** from Third Countries non-associated with Horizon Europe. **“Widening” countries** represent 33% of participations from all Member States. In terms of total funding distribution, legal entities based in Member States receive 93% of all funding, while associated countries receive 7%. Non-widening Member States receive 73% of the funding, while Widening countries receive 20%.

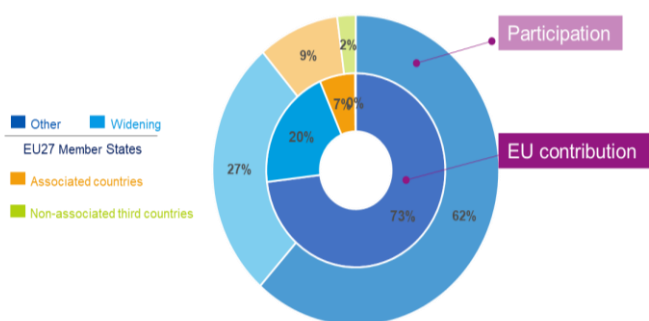


Figure 3: Beneficiaries participating to Missions-specific projects, by total participations and EU funding received according to their country groups Source: HE Dashboard, cut-off date 01/07/2024

Legal entities based in Spain, the Netherlands, Germany, and Italy, emerge as the top participants to Mission-specific projects, collectively securing EUR 758 Million. Three of the top recipient countries also boast high participation, with Spain (559), Italy (452), Germany (388) featuring among the top three countries in terms of number of participants. Together

with France (330) they account for a 37% of all participations to EU Missions specific calls projects.

Missions Calls - Net EU Contribution

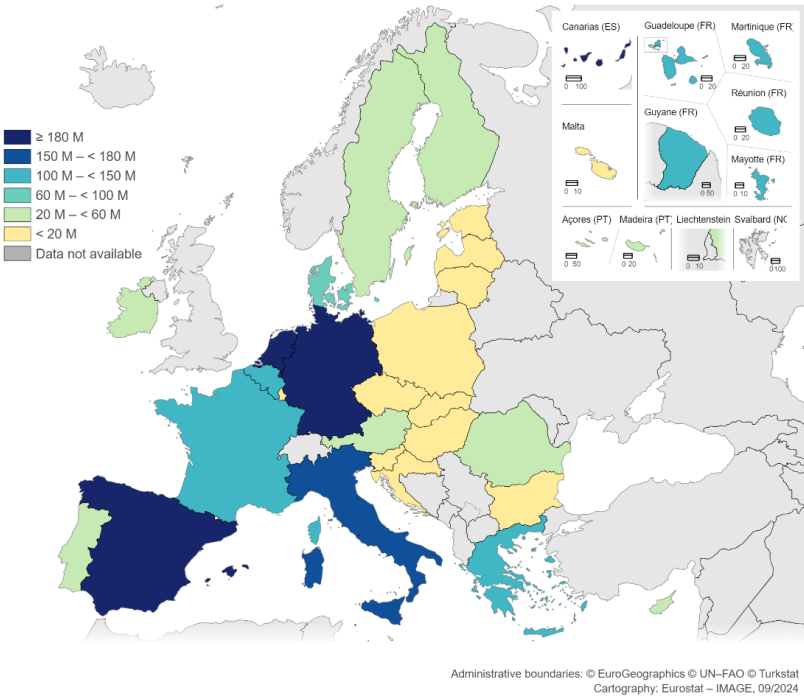


Figure 4: Funding distribution of Missions specific projects across EU Member States. Source: HE Dashboard, cut-off date 01/07/2024

Who coordinates Mission-specific projects?

The role of coordination in collaborative projects is a vital aspect of promoting further cooperation and driving innovation. Out of the 223 Missions-specific projects, 91% (203) are **coordinated by a legal entity based in a Member State**, while the remaining projects are led by an entity based in an Associated country. Data show that beneficiaries from **Spain** coordinate 34 projects (15.2%), followed by **Italian** (23, 10.3%), **German** (22, 9.8%) **French** (19, 8.5%) and **Dutch** (15, 6.7%) beneficiaries. Among Associated Countries, participants from Norway coordinate most projects (13, 5.8%).

1.3. Missions side by side

Mission-specific calls may be dedicated to one or more Missions. For this overview, joint mission funding is split between missions according to weighting based on the number of Missions each joint call is open to. When presenting separately data on participations and number of grants, the weights are not applied.

Budget

Budget distribution⁸ across the 5 Missions is evenly split, differences in the response to calls for proposals and programme implementation have led to minor differences in terms of budget allocation. The Climate-Neutral and Smart Cities Mission receives the largest portion (22,4%), with EUR 387.3 million followed by the Cancer Mission (21,8%, EUR 377.1 million). The Climate Adaptation mission secures 21% of the budget (EUR 355.1 million), while Healthy Oceans and Waters EUR 350.2 million (20%). Finally, the Mission Soil receives EUR 262.4 million (15% of the budget).

Projects

With regards to financed projects⁹, as of July 2024, Ocean accounts for 66 financed projects. Cancer and Soil follow with 48 and 43 projects respectively. Climate Adaptation includes 38 projects, while Mission Cities covers 27. Additionally, 8 projects have been funded through joint-call initiatives.

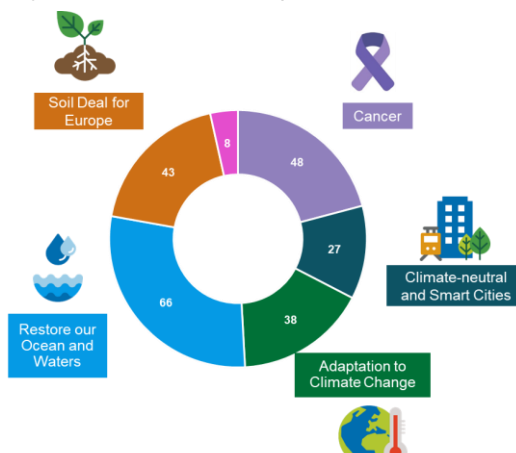


Figure 5: EU Missions specific calls projects share. Source: HE Dashboard, cut-off date 01/07/2024

Participants

Data on participants and participation levels across the five Missions is presented in the table below.

Mission	Participants	Participations	Proportion of unique participants
Cancer	726	1 082	67%
Climate Adaptation	930	1 139	82%
Cities	699	936	75%
Ocean & Waters	966	1 360	71%
Soil	747	1 009	74%

Table 1: Overview of project participants and total number of participations by Mission. Source: HE Dashboard, cut-off date 01/07/2024

⁸ The budget split also includes funding from joint-call projects, which is shared equally across all missions.

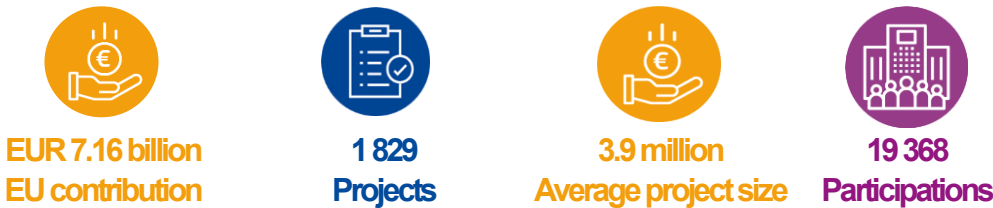
⁹ When calculating the number of projects per mission, the total may appear higher than the sum of projects presented in section 1 of this report. This is because projects that stem from joint thematic calls are attributed to more than one mission. As a result, these projects are counted multiple times—once for each mission involved—leading to a higher cumulative count across missions than the total number of unique projects.

2. Mission projects & results portfolios

The European Commission has created dedicated Mission Projects and Results Portfolios (or Mission Portfolios in this analysis) to provide a comprehensive overview of the contribution of the Horizon Europe programme to the Missions, beyond the Mission-specific Work Programmes and Calls. Through the portfolios it is possible to not only identify relevant projects that can contribute to the achievement of the Missions objectives, but also assess gaps, overlaps, and areas of focus in the research landscape related to the Missions across the whole Framework Programme and beyond. Project portfolios allow stakeholders to leverage existing knowledge, expertise, and resources to avoid duplication of efforts. In some instances, portfolios are also used to provide a complete mapping of project beneficiaries and funding dedicated to the Missions' key areas. For more details see Annex I Project Portfolio Approach.

2.1.1. Key figures

The budget for all Missions Projects & Results Portfolio¹⁰ for accounts for **EUR 7.16 billion** financing **1 829 projects, across several programme parts** (top-down as well as bottom-up)¹¹. Covering multiple programme parts, the average project size across all portfolios aligns more closely with Horizon Europe overall¹², at **EUR 3.9 million**, with on average **11** participants per project.



Project portfolios are spread across the various pillars of Horizon Europe. As of the latest validated data¹³ for each portfolio, a significant portion of the budget (72%) is allocated through Pillar II, to which all Missions-specific projects pertain. Nineteen percent of the budget is allocated through Pillar I – Excellence Science, 7% through Pillar III Innovative Europe, and 2% to the horizontal part Widening and ERA.

¹⁰ Mission portfolios may encompass programs and projects beyond Horizon Europe; however, for the purposes of this analysis, only Horizon Europe projects are considered.

¹¹ Project portfolios data are extracted from the latest available data for each Mission Projects and Results portfolio. The portfolios include data from Mission-specific calls alongside the non-specific calls described above.

¹² Unlike Mission-specific calls, Projects and Results portfolios also include data from Pillar I and Pillar II, which include smaller and/or mono-beneficiary grants,

¹³ Cut-off date for each Project Portfolio. Cancer: 01/04/2024, Climate and Ocean: 01/07/2024, Cities and Soil: 01/09/2023.

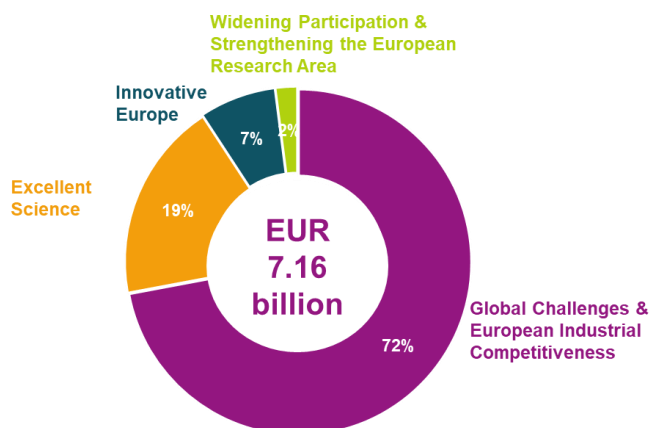


Figure 6: Share of Net EU contribution by programme part for all projects portfolios aggregated. Sources: CORTEX Dashboard for list of projects, HE Dashboard for budget data cut-off date 01/07/2024

3. Monitoring EU Missions' pathways to impact

Designed to capture the short, medium and long-term impacts of Horizon Europe and its components, Horizon Europe's monitoring and evaluation framework¹⁴ provides the set-up for the monitoring and analysis of the Horizon Europe component of Missions through Key Impact Pathway (KIP) 5 *Delivering Benefits and Impacts through Missions*. It includes three types of indicators to track the progress of missions: short-term, medium-term and long-term indicators.

Each short-term indicator measures outputs that can be aggregated from specific Missions-specific calls and from the Projects and Results portfolios. The first derive from mission work programs, while Mission Projects and Result portfolios covers multiple programme parts. See Annex I for more details. The indicators provide an overview of the Missions' performance within the Framework Programme, covering aspects such as human capital, knowledge production, innovation outputs, collaboration, and research excellence. The measurement of KIP 5 follows the same approach as the tracking and reporting of short- and medium-term indicators under Key Impact Pathways 1 to 3 (scientific outputs) and 7 to 9 (economic and technological outputs). The numbers of outputs are counted, both separately for a given Mission and aggregated across all Missions.

At the time of writing, with the programme halfway through its implementation, only a limited number of projects have completed at least one periodic report, which is necessary for calculating each KIP. Furthermore, projects funded through initial mission-specific calls primarily focused on setting up the missions and are therefore less likely to produce the types of outputs measured by the KIPs. This explains why the table below shows mostly zero values for mission-specific calls.

Indicator	Missions-specific calls	Projects & results portfolios
Publications: Peer-reviewed scientific publications resulting from projects related to EU Missions	0	107
Shared knowledge: Share of open access publications	-	331
Innovative products: processes, or methods produced and reported by the projects	0	163
IPR outputs, including patent applications, trademarks, and utility designs	0	8
Co-creation: Number and share of projects with contribution from citizens or end-user entities to the co-creation of R&I content	9	110
Co-investment: Public and private investment mobilised with the initial FP investment	EUR 0.08 billion	EUR 1.41 billion

Table 2: Available Indicators under KIP 5 Short-Term. Source: HE Dashboard, cut-off date 01/07/2024

¹⁴ Commission Staff Working Document on the Evidence Framework on monitoring and evaluation of Horizon Europe (Commission SWD(2023)132).

Focus on co-creation

The **co-creation indicator** assesses the active participation of citizens and end-users in the research and innovation process. Data show that **most of Missions-specific projects engage in co-creation (90%), higher than the 44% Horizon Europe average**. Data highlights differences in engagement types between citizens and end-users. Citizens are more likely to be involved in collecting data (33%) and providing resources (22%), while end-users are more focused on analysing data (33%) and testing and experimenting (33%).

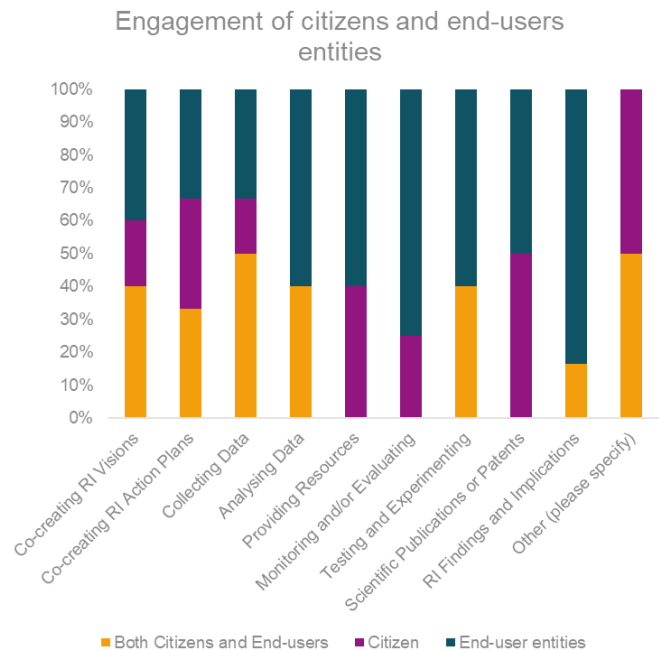


Figure 7: Engagement of citizens and end-user entities in Mission-specific projects. Source: HE KIP Dashboard (internal), cut-off date 01/07/2024

4. Overview of each mission

4.1. Mission Cancer

The Mission Cancer: working with Europe's Beating Cancer Plan to improve the lives of more than 3 million people by 2030 through prevention, cure and solutions to live longer and better aims to significantly reduce the burden of cancer by fostering groundbreaking research and innovation. Its primary objective is to enhance prevention, early detection, diagnosis, treatment, and survivorship for cancer patients across Europe. This mission takes a multidisciplinary, patient-centric approach, leveraging the latest advancements in science, technology, and policy to accelerate the translation of research into real-world solutions, ultimately working towards improving by 2030 the lives of more than 3 million people, living longer and better.

This effort also aligns with the broader Horizon Europe goals of improving public health, fostering collaborations between research institutions, industry, and policymakers, and strengthening Europe's leadership in cancer research. Cancer Mission calls are closely aligned with Europe's Beating Cancer Plan. On top of funding for cancer research available in Horizon Europe, another source of funding is EU4Health.

4.1.1. Mission-specific calls – funding and participation

The Net EU contribution to Cancer Mission specific calls amount to **EUR 370 million¹⁵** through **48 signed grants** supporting **916 participations**, which include **128 SME participations**. These projects involve **583 unique participants**. In terms of budget, this accounts approximately for **20%** of the net missions-specific EU contribution.



Calls and Proposals



A total of **five calls covering 14 topics** have been launched under the Mission-specific Work Programme and related to the Cluster 1 Health. Additionally, four calls were shared across all Missions, addressing coordination and support activities relevant to all

Mission areas. A total of 249 proposals were submitted, with 236 deemed eligible, and 45 ultimately retained, these proposals involved 3 408 eligible applications, of which 837 were retained, yielding an **application success rate of 19%**.

Beneficiaries

Focusing on the health domain, research organisations lead in terms of both funding and participation, receiving 39% of the total funding and representing 23% of participants. Higher education institutions are also active in the Mission with 29% of funding and 21% of participation. Private for-profit companies receive 17% of the funding. SMEs represent 68% of private participants and benefit from 80% of the total funding earmarked for SMEs under this Mission.

¹⁵ There are two types of Mission specific calls, those addressed at one Mission and calls that are addressed at 2, 3, or even all Missions. This overview does not include Joint Actions calls - those calls shared across all Missions.

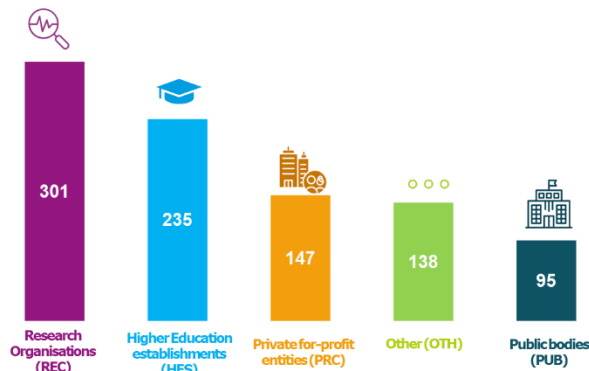


Figure 8: Participation by legal entity type to Cancer Mission projects. *Source: HE Dashboard, cut-off date 01/07/2024*

Newcomers

Returning participants make up 77.7% of total participants and receive 83.2% of total funding, which is in line with the results for the Missions as a whole. Newcomers, defined as those who did not participate in the previous Framework Programme, make up a smaller fraction of both participants (22.3%) and participations (16.8%). Their funding share is notably lower, representing only about 13.1% of the total funding. On average, each newcomer is involved in fewer ongoing projects than incumbents.

Projects dynamics

The average project size is **EUR 7.7 million** and has an average of **19 participants**, both figures slightly higher when compared to the average for Cluster 1 (EUR 7.6 million and 15 participants). Research and Innovation Actions are the most significant in terms of funding and participation, with EUR 345 million in funding across 44 grants. This type of action supports 68% of all participations (509 unique participants). This is also the action to which most SMEs contribute to – 122 SMEs for a total of EUR 53.7 million in funding. Coordination and Support Actions account for 3 grants signed and 143 participations. Only one Innovation Action has been signed, with 32 participants. The top ten projects in terms of EU funding (nine RIA and one CSA) collectively account for 29% of the overall Net EU funding for the Mission.



19
Average number
of participants
per project



7.7 million
Average project
size

Country participation

The breakdown of the funding received, number of projects and participation show that Member States, in particular non-Widening countries, receive most of the funding (74%). The main recipients are from **Belgium** (EUR 46.96 million, 34 grants signed), **Spain** (EUR 45 million, 40 grants signed), **France** (EUR 40.73 million, 28 grants) and **Germany** (EUR 39.34 M, 33 grants signed). Among Widening Member States, **Greece** (EUR 27.7 million) has 56 total participations across 19 signed grants, with significant SME involvement budget-wise, contributing EUR 8.77M through 12 SMEs. **Portugal** (28 projects, EUR 6.66M) and **Romania** (29 projects, EUR 5.8 million) also show strong participation to the Mission. With regards to Associated Countries, **Israel** (EUR 19.96 million) is the largest funding recipient, receiving funding for 14 signed grants and 23 total participations. **Norway** (EUR 10.24 million) follows with 13 signed grants and 30 total participations, including 23 unique participants.



Figure 9: Cancer Mission country participation. Source: HE Dashboard, cut-off date 01/07/2024

4.1.2. Projects and Results Portfolio

The Horizon Europe component of the portfolio includes **748 projects**, representing a combined net EU contribution of EUR 1.63 billion¹⁶. Six percent of the portfolio are Mission-specific projects. Each project has an average of five participants. **43% of the projects validated** as highly relevant to the Mission are collaborative grants with multiple beneficiaries, the average number of participants being 10.

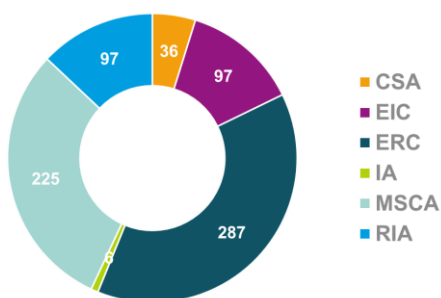


Figure 10: Number of projects by Type of Action. Source: HE Dashboard, cut-off date 01/07/2024

Pillar II Global Challenges and European Industrial Competitiveness projects have received 48% of funding and represent 14% of all projects in the portfolio. Within Pillar II, the largest share of projects falls under Cluster 1 Health, with **100 projects**. Pillar I Excellent Science contains 66% of the grants (503 grants) and 32% of the funding disbursed. Within this Pillar, the European Research Council represents 25% of the funding and 37% of the grants signed.

The portfolio features a wide range of actions financed by Horizon Europe. The largest component of the portfolio is represented by the European Research Council actions, **287 signed grants and 346 participations**, followed

¹⁶ Portfolio data were last validated in April 2024.

by Marie-Curie Actions (225 grants and 944 participations). 98 Research and Innovation Actions are included in the portfolio, 36 Coordination and Support Action and 6 Innovation Action grants.

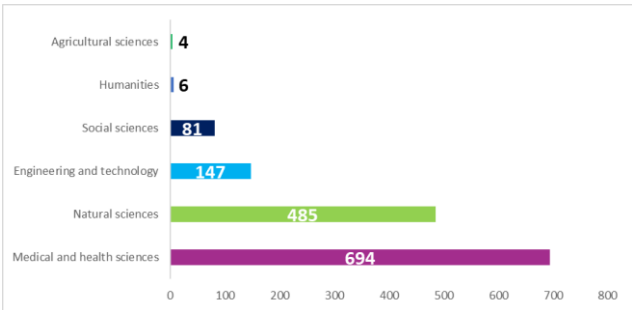


Figure 11: Number of projects by field of science. *Source: HE Dashboard, cut-off date 01/07/2024*

environmental science, physics, and chemistry. **Engineering and Technology is represented by 147 projects**, demonstrating a certain number of projects related to applied sciences and practical innovations.

4.2. Mission Cities

The Mission **100 Climate-Neutral and Smart Cities by 2030** (henceforth Cities Mission) is an ambitious initiative aimed at transforming urban areas across Europe to become climate-neutral by 2030. Recognizing that cities contribute to over 70% of global CO₂ emissions, the mission seeks to create greener, more sustainable, and digitally advanced urban environments. The Cities Mission engages a wide range of stakeholders – including local authorities, citizens, businesses, investors, as well as regional and national authorities – to achieve two overarching objectives:

- To deliver at least 100 European climate-neutral and smart cities by 2030.
- To ensure that these cities serve as experimentation and innovation hubs, enabling all European cities to achieve climate neutrality by 2050.

The hundred selected cities represent all 27 EU Member States, with an additional 12 cities from countries associated with or in the process of associating with Horizon Europe. By fostering collaboration and innovation, the Cities Mission not only supports the European Green Deal but also sets the stage for sustainable living, resilient infrastructure, and healthier communities across Europe.

¹⁷ EuroSciVoc, or the European Science Vocabulary, is a structured taxonomy developed to categorize and describe the scientific fields covered by projects funded under the Horizon Europe programme and its predecessors. By organizing projects within a structured hierarchy, it offers a systematic way to classify and analyse the areas of research and innovation represented in a project portfolio.

4.2.1. Mission-specific calls – funding and participation

The Net EU contribution to the Cities Mission calls amounts to **EUR 380 million**¹⁸, supporting **27 projects** with a total of **770 participations** from **581 participants**. Among participations, **there have been 145 instances of SMEs**, contributing to an SME Net EU contribution of **EUR 81 million**.



Calls and Proposals

A total of **ten calls covering 16 topics** have been launched in relation to the Cities Mission. Among these, nine were specific calls for proposals under the Mission-specific Work Programme and one was a joint thematic call between the Cities and Climate Missions. The calls attracted 131 submissions, among these, 94 proposals were eligible, with 26 retained for funding or 28% proposal success rate. This cohort involved 2 317 eligible applications, of which 734 were retained, yielding an application success rate of 32%. Notably, the Cities Mission thematic calls have a relatively high proportion of non-eligible proposals, with 37 out of the total 131 submissions classified as non-eligible, or 28%.



Beneficiaries

Private for-profit entities are the leading participants to the Mission, securing 40% of the total funding and accounting for 21% of overall participation. This group also boasts a significant proportion of SME involvement, with 13.4% of their participants classified as SMEs, receiving 11% of total SME funding. Other non-specified entities follow closely behind, representing 19% of the funding and 22% of participation, with 8% of their participants being SMEs. Public bodies receive 18% of funding while research organisations contribute 11% of the total funding and show moderate participation levels (11%). Higher education establishments receive 12% of the total funding, as do public bodies.

¹⁸ The budget does not include Joint Actions calls - those projects shared across all Missions. For Joint Thematic calls, participants and participations are counted for each mission separately, while funding for these calls is split between missions according to a weighting defined by the EC. The total net EU funding without the EC split is equal to EUR 398 million.

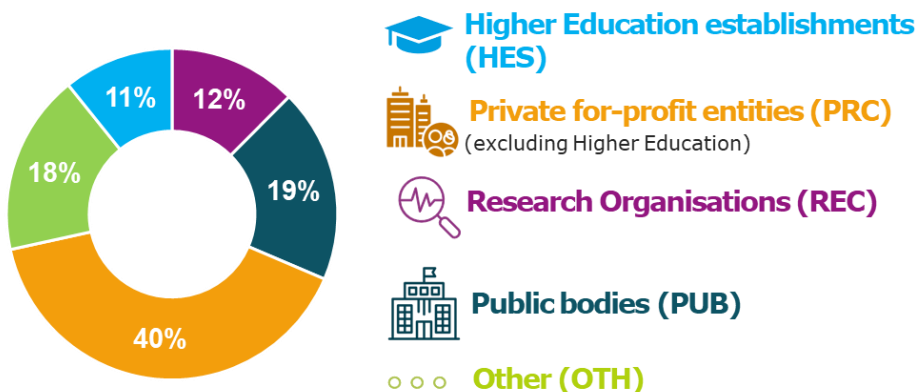


Figure 12: Funding by legal entity type to Cities Mission projects. *Source: HE Dashboard, cut-off date 01/07/2024*

Newcomers

Returning participants account for 70.7% of the total participants and receive 86.9% of the total funding, aligning with overall trends observed across the Missions. In contrast, newcomers –those who did not participate in the previous Framework Programme – constitute a smaller portion, with 29.3% of participants and 23% of participations. Their funding share is significantly lower, capturing just 13.1% of the total funding.

Projects dynamics

Innovation Actions dominate both funding and participation metrics within the Mission. The total Net EU contribution is approximately EUR **237 million**, accounting for **61%** of the total funding for this Mission. These actions also boast the highest **participation** at **609** participations and 490 unique beneficiaries. **Coordination and Support Actions** have been allocated around EUR **23 million**, representing **6%** of the total contribution. Although with limited budget, they support a significant number of participations (279). **Research and Innovation Actions** received EUR **127 million** through two signed grants.

Mission Cities shows an important element of funding concentration, considering that **the top ten projects** in terms of EU funding (two RIA and eight IA) **collectively account for a substantial 64% of the overall Net EU funding for the Mission** and 36% of its participation.¹⁹

Country participation

Member States receive the majority of funding (**95%**). Within Member States, non-Widening countries **receive 80% of funds**, while **Widening countries account for 15%** of the total funding received. Main funding recipients are the Netherlands, with 23% of Funding received through 5% of grants signed, Germany (15% funding through 8% grants), Spain (10% funding through 7% of grants) and Belgium (9% of funding through 7% of grants).

¹⁹ Funding concentration is explained by the implementation of two large specific grant agreement managed by the EIT KIC Climate NV, which see part of this funding to third beneficiaries through cascade granting.

Mission Cities - Net EU Contributions by Region

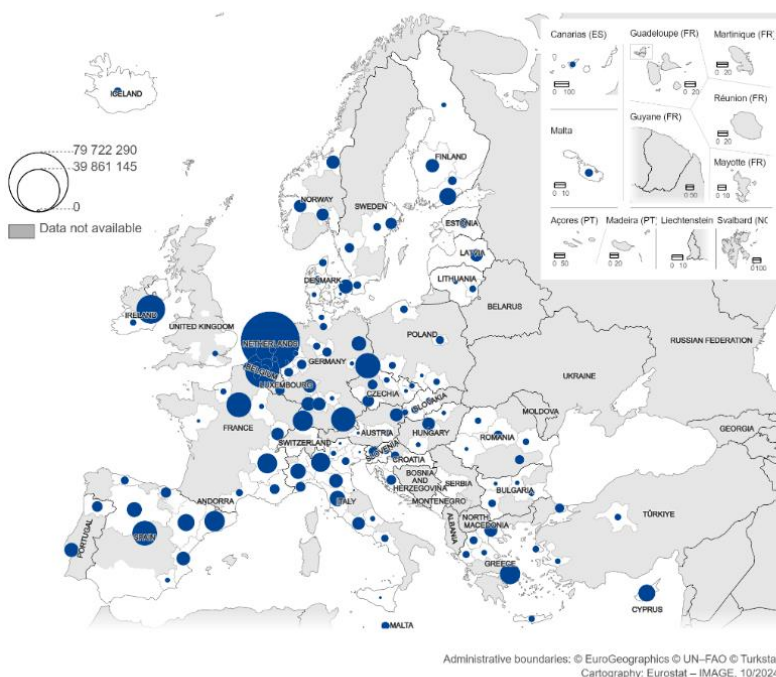


Figure 13: Net EU contributions by region for Mission Cities. *Source: HE Dashboard, cut-off date 01/07/2024*

4.2.2. Projects and Results Portfolio – Key figures

The Horizon Europe component of the Missions Cities project portfolio encompasses **309 projects**, representing a combined net EU contribution of EUR 1.87 billion.²⁰ On average, each grant amounts to approximately EUR 365 521, with an average of 16.6 participants per project. Of these, 16% are Mission-specific projects.²¹ **91.6% of the projects in the Mission's portfolio** are collaborative grants with multiple beneficiaries (18 on average), emphasizing the multi-disciplinary and cross-cutting profile of the Mission.



Pillar II - Global Challenges and European Industrial Competitiveness projects - dominate the portfolio, accounting for **234 projects** (75.7% of the total) and nearly 94% of all funding. Within Pillar II, the largest share of projects falls under Cluster 5 (Climate, Energy, and

²⁰ The portfolio data were last validated in September 2023, Missions specific calls projects initiated post-validation and up until 1st July 2024 have been incorporated manually.

²¹ On top of the Missions joint actions projects, several projects directly associated with Mission Cities and Mission climate are included in the portfolio.

Mobility) with **131 projects**, followed by Cluster 6 (Food, Bioeconomy, Natural Resources, Agriculture, and Environment) with 43 projects, and Cluster 4 (Digital, Industry, and Space) with 32 projects. Beyond Pillar II, and in particular most of the mono-beneficiary grants, 48 grants fall within the Excellence Science category, particularly in the Marie Skłodowska-Curie Actions (35 grants) and the European Research Council (12 grants).

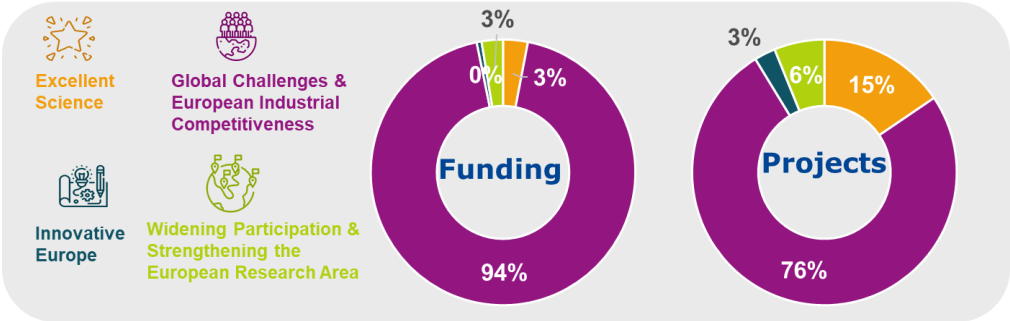


Figure 14: Funding distribution across Horizon Europe programme parts, by Net EU contribution share (funding) and projects number. *Source: HE Dashboard, cut-off date 01/07/2024*

The portfolio features a wide range of actions financed by Horizon Europe. The largest component of the portfolio is represented by Innovation Actions, **94 signed grants and 2 325 participations**, followed by Research and Innovation Actions with 83 grants and 1,390 participations, and Coordination and Support Actions with 79 grants and 985 participations. Innovation Actions also exhibit the highest SME participation, with 555 instances of SMEs involved, making up **42.69% of total SME participations within the portfolio**. Additionally, the portfolio includes two co-funded partnerships²² with over 143 participations, representing 5.7% of total funding. 33 MSCA projects are also included in the portfolio for a total of 199 participations, contributing less than 2% of total funding, while ERC instruments (ten projects) account for eleven participations and a similar budget share of 1.4%.

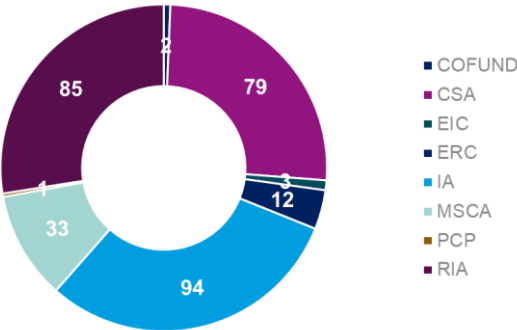


Figure 15: Number of projects in the Cities portfolios classified according to the Horizon Europe type of action financed. *Source: HE Dashboard, cut-off date 01/07/2024*

Higher Education Institutions lead in terms of participation to projects (274 signed grants), while private companies have a higher participation rate (1 573) and budget share (29.4%).

²² Driving Urban Transitions to a sustainable future - DUT Partnership (Project ID 101069506), Clean Energy Transition - CETP Partnership (101069750).

Research organizations follow closely with 951 participations and a 22.1% budget share. SME participation within the whole portfolio is about 20%, with the highest share being among private companies. The distribution across different legal entities indicates educational institutions and private companies are similarly represented in the portfolio. This linked with the average large average size of the projects in terms of size and budget, indicate that large cross-cutting and possibly multidisciplinary projects are more likely to deliver impact in relation to the specific objectives of the Mission.

Member States dominate with 86% of total participations and 2 727 unique participants, capturing a significant portion of the funding—over EUR 1.73 billion, or 93% of the total Net EU Contribution. Of this, EUR 321.9 million is specifically allocated to SMEs. In contrast, Associated Countries have 482 participations and 334 unique participants, receiving a Net EU Contribution of EUR 120.6 million (6% of total funding). Non-Associated Third Countries are represented in 92 signed grants with 220 participations, securing a Net EU Contribution of EUR 20.6 million, or just 1.1% of the overall budget. Non-widening countries, which represent 64% of total participation, receive EUR 1.39 billion (74% of the Net EU Contribution). Meanwhile, widening countries account for 23% of participation and receive 18% of total funding, amounting to EUR 338.7 million.

4.3. Mission Climate Adaptation

The Mission **Adaptation to Climate Change: support at least 150 European regions and communities to become climate resilient by 2030** is designed to address the pressing challenge of adapting to climate change by supporting innovative projects.

The Mission was developed as an implementation mechanism of the EU Adaptation Strategy, with its goal of a climate resilient Europe by 2050. It supports reaching its own and the strategy's objective by helping regions and local authorities better understand the climate risks they are and will be exposed to, define pathways to climate resilience for at least 150 regions, and build resilience with at least 75 large scale demonstrations.

Regional and local authorities engage with the Mission by participating in Horizon Europe projects and signing the Mission Charter. Currently, over 50 regions are involved in EU Missions projects, while 311 authorities from 29 EU Member States and Associated Countries have signed the Mission Charter, committing to climate resilience by 2030. Additionally, and 63 other organizations, including research institutions and businesses, support the Mission as Friends of the Mission, contributing to its Community of Practice.

Regions and Local authorities that signed the Mission Charter

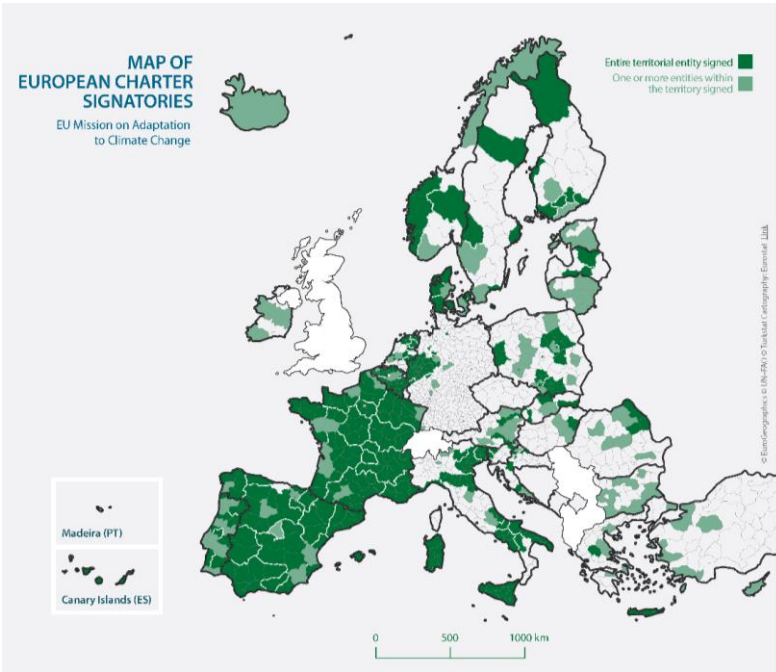


Figure 16: Regions and Local authorities that signed the Mission Charter. Source: Meet the Regions and Local authorities Factsheet, 05 December 2023

Programme activities related to the Mission calls so far illustrates geographical spread, although with limited participation from Widening countries and concentration of activities in certain areas that areas, such as the Mediterranean, which is a hotspot for climate risks.

4.3.1. Mission-specific calls – funding and participation

The Net EU contribution to the Mission Climate Adaptation amounts to **EUR 348 million**,²³ through **38 signed grants** comprising **973** participations from **796 unique participants**. There have been **150** participations from **SMEs**. This represents approximately 21% of the total net EU contribution in Missions and accounts for 17% of the signed grants.



Calls and Proposals

A total of 7 calls covering 18 topics have been launched in relation to Climate Adaptation mission. Of these, four were specific calls for proposals under the Mission-specific Work



²³ The budget does not include Joint Actions calls - those projects shared across all Missions. For Joint Thematic calls, participants and participations are counted for each mission separately, while funding for these calls is split between missions according to a weighting

Program only and three were joint thematic calls with other EU Missions, specifically Ocean, Cities and Soil.

A total of 156 proposals were submitted, with 130 deemed eligible, and 33 ultimately retained, resulting in a proposal success rate of 25% and an application success rate of 29%.

Beneficiaries

Public bodies and private companies hold the highest number of participations, with respectively 238 (25%) and 211 (22%), while securing 18% and 21% of total funding. Research centres and higher education institutions are the main beneficiaries in terms of funding, each securing EUR 81 million, or 47% of the total funding combined. Among the private companies, SMEs represent around half of participations (41%) and of funding (52%), securing in total EUR 31 million. Other types of stakeholders received the remaining 14% of funding, representing 18% of participations.

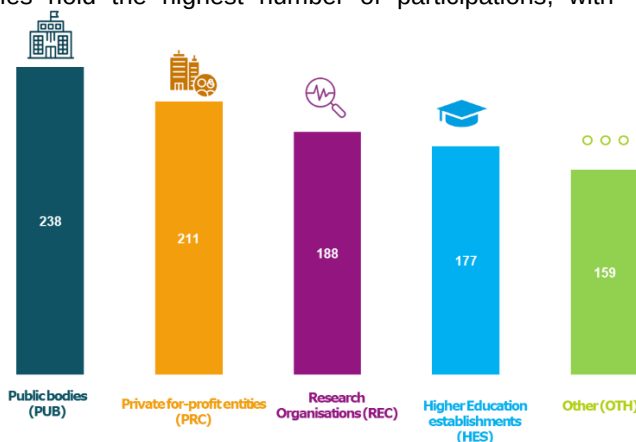


Figure 17: Participation by legal entities Climate Mission. Source: HE Dashboard, cut-off date 01/07/2024

Newcomers

Returning participants make up 66.8% of unique participants and receive 79.8% of total funding, which is slightly less than the results for all the Missions, indicating a slightly higher share of newcomers in the Climate Adaptation Mission. Newcomers are defined as those who did not participate in the previous Framework Programme and represent around a third of unique participants (33.2%), but securing only a limited share of the total funding (20.2%) and 28.0% of total participations. This indicates that first-time participants tend to struggle securing budgets as important as their experienced counterparts. The fact that the number of participations (272) is similar to the number of participants (264) indicates that newcomers are less likely to engage in multiple projects.

Projects dynamics

Innovation Actions, which focuses on applied research, stands out as the most significant in terms of funding and participation by a large extent. With EUR 254 million in funding across 22 grants, this action supports the highest number of beneficiaries, 72% of all participations (620 unique participants). Research and Innovation Actions, which cover fundamental research is also represented, with 28% of total funding, or EUR 94 million, spread over 16 grants. The top ten projects in terms of EU funding (eight IA and two RIA) collectively account for 56% of the overall EU funding for the Mission. This indicates that a significant portion of the budget is concentrated in a select group of projects.

The share of funding across beneficiary types remains relatively even in the case of Innovation Actions, while for Research and Innovation Actions, private companies receive the highest share.

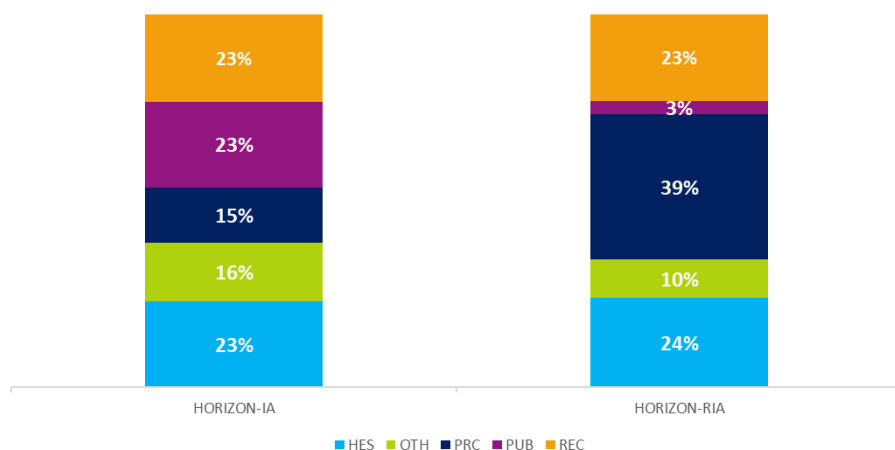


Figure 18: Funding share by type of beneficiary and type of action. Source: HE Dashboard, cut-off date 01/07/2024

Country participation

Member States, and in particular non-Widening countries, receive the bulk of the funding. The main recipients by country are Spain²⁴ (EUR 59 million, 29 grants signed), Netherlands (EUR 46 million, 21 grants signed), Italy (EUR 33 million, 27 grants signed), Greece immediately (EUR 24 million and 27 projects). With regards to Associated Countries Norway is by far the main funding recipient, receiving EUR 9 million for 6 grants. Further country representation is covered within cascade grants²⁵.

4.3.2. Projects and Results Portfolio – Key figures

The Horizon Europe component of the Missions Climate project portfolio contains **225 projects** with a total net EU contribution of **EUR 1.33 billion**.²⁶ The average grant size is approximately EUR 5.9 million and there are in average 17 participants per project. Almost a third of the projects included in the portfolio are missions-specific projects.²⁷ Finally, a majority of the projects are collaborative (91.6%).



EUR 1.33 billion



225 Projects



**3871
Participations**



**2392
Participants**

²⁴ amounts for Spain and the Netherlands include cascade funding of EUR 11 million (CLIMAAX) and EUR 21 million (P2R), respectively that is money to be redistributed to regions and local authorities.

²⁵ CLIMAAX: a RIA project developing a standardised Client Risk Assessment framework, Climaax provides financial, analytical and practical support to regional authorities, communities and civil protection agencies in at least 50 regions.

²⁶ The portfolio was last updated in July 2024.

²⁷ On top of the joint Missions (Clima-Cities, Clima-Ocean-Soil and Neb), several projects directly stemming from Mission Cities and Ocean are also included in the portfolio.

Pillar II Global Challenges and European Industrial Competitiveness is the most prominent, with 181 signed grants, representing 80% of the projects included in the portfolio and 94% of all funding. Within Pillar II, the most projects validated as relevant to the Missions pertain to Cluster 5 Climate, Energy and Mobility (79 projects), and Cluster 6 Food, Bioeconomy Natural Resources, Agriculture and Environment (64). Pillar I- followed by MCSA Actions (21 projects).

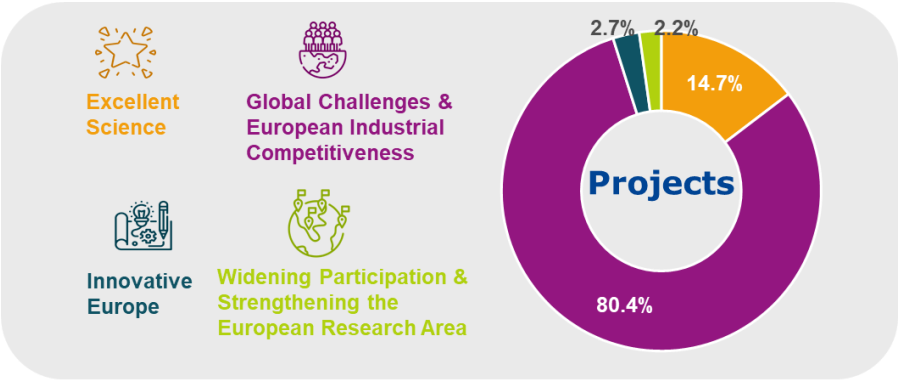


Figure 19: Funding distribution of the portfolio across programme part, by number of projects. *Source: HE Dashboard, cut-off date 01/07/2024*

The distribution across legal entities indicates significant involvement from educational institutions and private companies. Higher education establishments stand out with 982 participations in 206 signed grants, representing 26.7% of the total funding. Research organisations follow suit with 982 participations and a higher percentage share of funding received (30.8%). Private-for-profit companies include the highest percentage share of SME participants (52%).

The portfolio has a broader scope in terms of type of actions financed. The largest share of net EU contributions went to RIA and IA, accounting for 42% and 29% of funding respectively, with 96 RIA projects and 66 IA. Twenty-three projects in the portfolio are CSAs and account for 10% of the financial contribution.

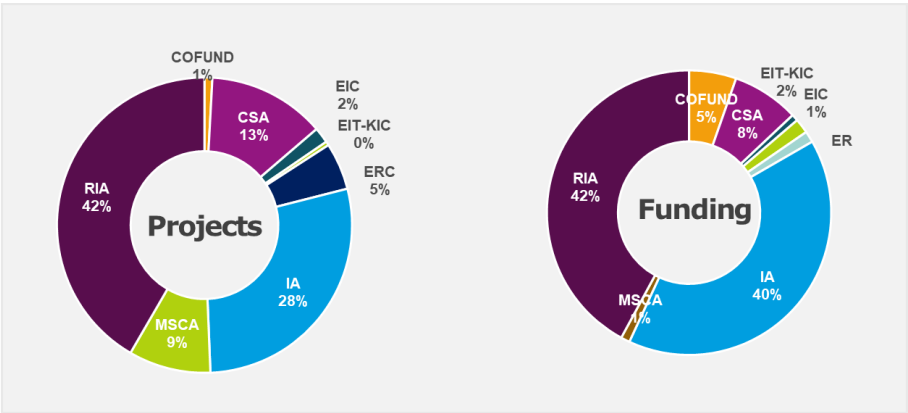


Figure 20: Percentage share of Projects and Funding by type of action financed. *Source: HE Dashboard, cut-off date 01/07/2024*

Beneficiaries from Member States represent 86% of the total participations (3 432). They also receive the highest budget share (96%). Associated Countries, with 412 participations and 56 unique participants are represented in 10% of all grants in the portfolio while third country in 4%. Non-widening countries represent 60% of total participation and receive

EUR 974 million, or 72% of the Net EU Contribution while Widening countries comprise 26% of participation and receive 21% of total funding, amounting to EUR 282 million.

4.4. Mission Ocean & Waters

The Mission Restore **our Ocean and Waters by 2030** (hereafter Mission Ocean and Waters) aims to foster a sustainable marine and freshwater environment by aligning its goals with EU strategies on ecosystem restoration, pollution reduction, and sustainable economic practices. With a focus on measurable outcomes, it seeks to drive significant improvement across Europe's waters. To achieve this, Horizon Europe's budget and targeted project funding play a crucial role.

To guide progress, the Mission has established four key regional "lighthouses," which act as demonstration sites: the Atlantic-Arctic, the Danube River basin, the Mediterranean Sea and the Baltic and North Sea.

By May 2024, 120 regions are actively participating, either leading (67 regions) or following (53 regions) demonstration projects, with the goal to expand to 220 regions by the end of 2024.

4.4.1. Mission-specific calls – funding and participation

The Net EU contribution to Mission Ocean and Waters beneficiaries totals EUR **343 million**,²⁸ distributed across **66 projects** that support **1 194 participations** from **828** unique participants. Among these, 260 are SMEs.



**EUR 343
million**



66 Projects



1194 Participations



828 Participants

Calls and Proposals

The Ocean and Waters Mission launched a total of nine calls for proposals dedicated solely to this Mission. In addition, three joint thematic calls were launched with Mission Climate



39%

Proposal success rate

For Ocean Mission-specific calls
and thematic joint calls related to
the Mission

Adaptation and Soil.²⁹ Therefore, a total of 12 thematic calls were launched covering 39 topics. Ocean and Waters Mission Ocean calls attracted a total of 171 proposals, of which only six were deemed ineligible and for one of the joint thematic actions no proposals³⁰ were submitted.

In terms of success rates, Mission Ocean and Waters consistently registers higher metrics than Horizon Europe and Pillar II averages, including proposals, funding, and participation success rates. The Mission achieves a 39% success

²⁸ The budget does not include Joint Actions calls - those projects shared across all Missions. For Joint Thematic calls, participants and participations are counted for each mission separately, while funding for these calls is split between missions according to a weighting defined by the EC. The total net EU funding without the EC split is equal to EUR 361 million.

²⁹ There are three thematic Joint Mission calls between Ocean, Climate and Soil: HORIZON-MISS-2022-OCEANCLIMA-01 HORIZON-MISS-2023-CLIMA-OCEAN-SOIL-01, HORIZON-MISS-2023-OCEAN-SOIL-01

rate in proposals, 42% in applications, and 42% for EU contributions. Additionally, the Mission maintains a notably low rate of ineligible and inadmissible proposals—3% for Mission-specific calls. By comparison, Cluster 6 averages a 26% success rate on applications, 23% on proposals, and 25% on EU contributions. Consequently, Mission Ocean and Waters applicants had a significantly higher likelihood of securing EU funding.

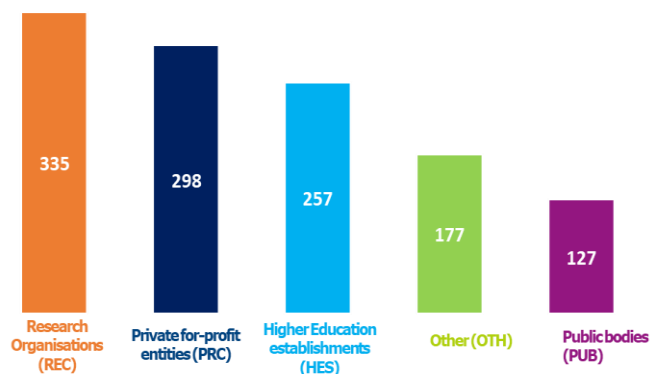


Figure 21: Participations by legal entity type Mission Ocean. Source: HE Dashboard, cut-off date 01/07/2024

Beneficiaries

Public bodies represent the smallest share of both participation (11%) and funding (6%) while research organisations dominate in terms of total funding secured (37%), followed by higher education establishments (26%) and private for-profit companies (19%). The latter have the highest SME involvement, making up 82% of SME participation in the Mission. The amount of funding secured per grants by research institutions amounts to EUR 1.94 million, while higher education institutions secure on average EUR 1.6 million per grant. Research organisations represent the highest proportion of project coordinators in Mission Ocean and Waters projects (32 grants), followed by higher education establishments (20).

Newcomers

Returning participants account for 65.1% of participants and 73.5% of total participations, receiving 82.7% of the funding, which amounts to approximately EUR 298 million. Newcomers represent a smaller portion of the participant base at 34.9% and have significantly fewer participations (26.5%) and funding (17.3%, totalling around EUR 62 million).

Projects dynamics

Innovation actions are by far the largest type of instrument in use for the Mission, they amount to EUR 302 million or 83% of the total net EU contribution. Coordination and Support Actions account for EUR 41 million (12%), and Research & Innovation Actions for EUR 17 million (5%). Participation levels mirror this funding split, with Innovation actions comprising 900 participations, representing 75% of the total, and 670 unique participants. Coordination and Support Actions register 19% of participations (195 participants), whereas Innovation Actions account for 5% of participations (60 participants).

The involvement of SMEs varies significantly across the types of action. Innovation Actions include 170 SMEs, more than three quarter of all SMEs. In contrast, Coordination and Support Actions include 41 SMEs (22%), and Innovation Actions only 12 SMEs (5%).

Country participation

Member States, in particular non-Widening countries, receive most of the funding. The main beneficiaries are from Germany (EUR 39.7 million, 52 grants signed), Spain (EUR 35.6 million in 39 grants), Italy (EUR 26.9 million in 38 grants), and Belgium (EUR 23.4 million in 35 grants).

4.4.2. Projects and Results Portfolio – Key figures

The Horizon Europe component of the portfolio contains a total of **398 signed grants**, participation by 4 803 entities and 2 588 unique participants and a net EU contribution of

approximately EUR 1.57 billion.^{31,32} **Seventy-one projects, or 18% of the portfolio,** are mission-specific projects, mainly related to the Ocean and Climate Adaptation Missions. Multi-beneficiary projects make up 80% of the portfolio, for an estimated 96% of the total net EU contribution, averaging around **EUR 5.77 million per grant**. In contrast, mono-beneficiary projects, while comprising 20% of the total signed grants, account for 4% of the net EU contribution, with an average grant size of EUR 1 million.



Pillar I Excellent Science accounts for 33.4% of the signed grants and 13.2% of the net EU contribution. The ERC is represented by 32 projects and MSCA by 119 (8% and 29.9% of grants respectively). Half of all projects in the portfolio (196, 50%) pertain to Pillar II Global Challenges and European Industrial Competitiveness, capturing 83.2% of the estimated net EU contribution in the portfolio. Project stemming from Pillar III Innovative Europe comprise 3.5% of signed grants and 1.3% of the net EU contribution.

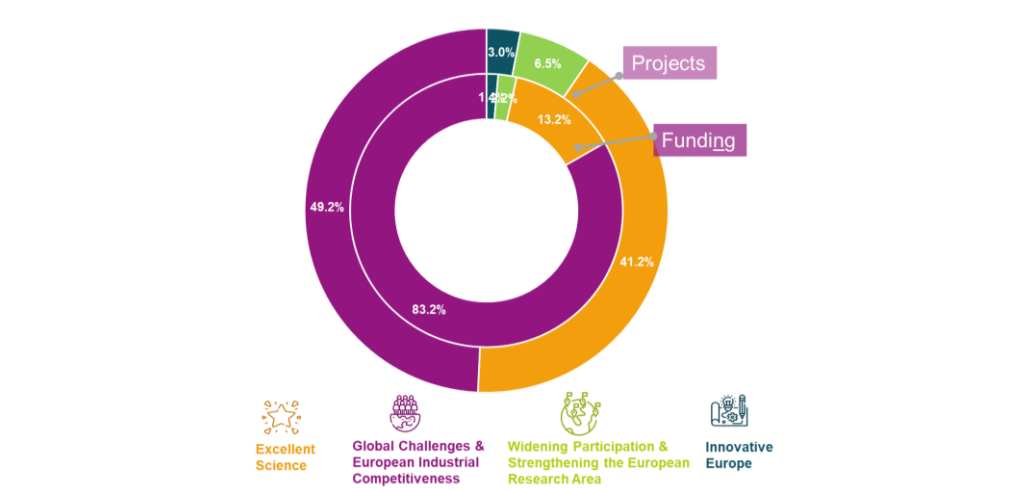


Figure 22: Funding distribution across Horizon Europe programme parts, by Net EU contribution share (funding) and projects number. Source: HE Dashboard, cut-off date 01/07/2024

Research organizations are part of 298 grants, accounting for 25.6% of total participation and 38.7% of net EU contribution. Public bodies are present in 112 grants, representing 9.6% of the net contribution. Private for-profit entities received 20% of the funding through 233 grants. The portfolio demonstrates strong engagement from SMEs, with 782 participations accounting for 14.2% of the net EU contribution.

³¹ A complete overview of the Portfolio, including non-Horizon Europe projects, is publicly available via the [Mission Ocean Portfolio Dashboard](#).
³² The portfolio data were last validated in September 2023, Missions specific calls projects initiated post-validation and up until 1st July 2024 have been incorporated manually.

4.5. Mission Soil

The Mission "A Soil Deal for Europe" (hereafter Mission Soil) aims to improve soil health across the EU and Associated Countries by establishing 100 living labs and lighthouses by 2030, to lead the transition to healthy by 2050. The Mission outlines eight specific objectives targeting various aspects of soil health, from reducing desertification and pollution to enhancing soil biodiversity and soil literacy. It emphasises sustainable soil management through research and innovation, societal engagement, and creating synergies with other EU Missions.

The Mission Soil implementation is structured into three overlapping phases to build capacity, generate and test innovations, and scale up successful practices. This approach allows for adaptability and mainstreaming of soil health considerations into different regional and sectoral policies. The Mission's success hinges on its integrated and participatory strategy, which seeks to involve a broad range of stakeholders in the journey towards sustainable soil management across Europe and beyond.

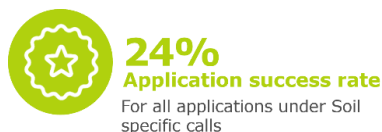
4.5.1. Mission-specific calls – funding and participation

The net EU contribution to Mission Soil calls amounts to **EUR 255 million**³³ through **43 signed grants**, supporting **603 participants** and a total of **843 participations**, including **162 SMEs**.



Calls and Proposals

As of July 2024, A total of **seven calls covering 31 topics** have been launched under the Mission Soil's Work Programme. This includes five Mission-specific calls focused on soil, and two joint calls conducted in collaboration with the Ocean and Climate Adaptation Missions. There were 251 proposals submitted, of which 221 deemed eligible, and 48 ultimately retained. These proposals involved 4 129 eligible applicants, of which 995 were retained resulting in proposal and application success rates of 24%.



Beneficiaries

Higher education establishments lead in both funding and participation, securing 37% of the total funding and representing 30% of participations. Research organisations register similar shares, with 27% of overall participation and 31% of funding. Private for-profit

³³ The budget does not include Joint Actions calls - those projects shared across all Missions. For Joint Thematic calls, participants and participations are counted for each mission separately, while funding for these calls is split between missions according to a weighting defined by the EC. The total net EU funding without the EC split is equal to EUR 273 million.

entities represent 23% of participants and receive 17% of overall funding. Public bodies show low involvement in this Mission, with 3% of funding and 5% of participants.

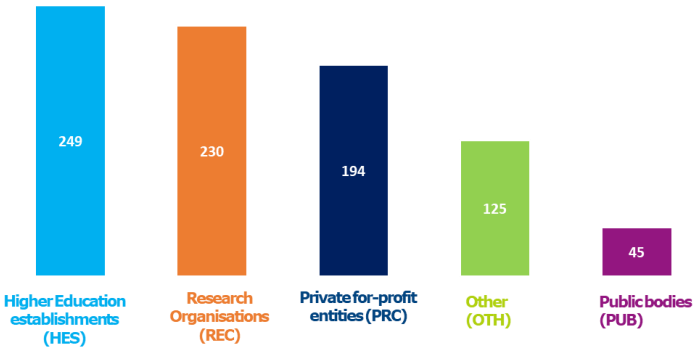


Figure 23: Figure 22: Participations by legal entity type Mission Soil. Source: HE Dashboard, cut-off date 01/07/2024

Newcomers

Returning participants make up 74.5% of total participants and receive 86.4% of total funding, similar to the findings for all Missions. Newcomers make up a smaller fraction of both participants (25.5%) and participations (19.1%). Their funding share is notably lower, representing only about 13.6% of the total funding. This indicates that first-time participants face challenges in not only joining but also in successfully securing funding compared to their experienced counterparts. The small difference between the number of participations (161) and the number of unique participants (154) indicates that newcomers do not usually engage in multiple projects.

Projects dynamics

Research and Innovation Actions register most of the funding and participation, with EUR 168 million in funding across 24 grants. This type of action supports the highest number of beneficiaries with 57% of all participations (370 unique participants). Innovation Actions are represented by 12 signed projects (23% of total funding, 26% participations). The top 10 projects in terms of EU funding (7 RIA and 3 IA) collectively account for 32% of the overall EU funding for the Mission. When comparing it to other Missions, this indicates that although the largest projects secure a significant portion of the budget, most of the total funding is spread across smaller projects and various beneficiaries.



EUR 6.0 million
Average project size



19
Average number of participants per project

Country participation

Member States, in particular non-widening countries, receive the bulk of the funding. The main recipients by country are Spain (EUR 41 million in 38 grants), Italy (EUR 30.2 million in 40 grants), Germany (EUR 25.35 million in 34 grants), and France (EUR 24.97 million in 33 grants). Among Widening Member States, Greece (EUR 19.5 million) is a leading participant to the Mission, with 28 grants signed and 7.8% of net EU funding. Portugal (EUR 11.01 million) and Poland (EUR 8.66 million) have also received notable funding, with Portugal participating in 16 projects (50 participations) and Poland in 22 (32 participations). With regards to Associated Countries Norway (EUR 5.29 million) is the largest funding recipient within the group, receiving funding through 12 signed grants and 24 participations.

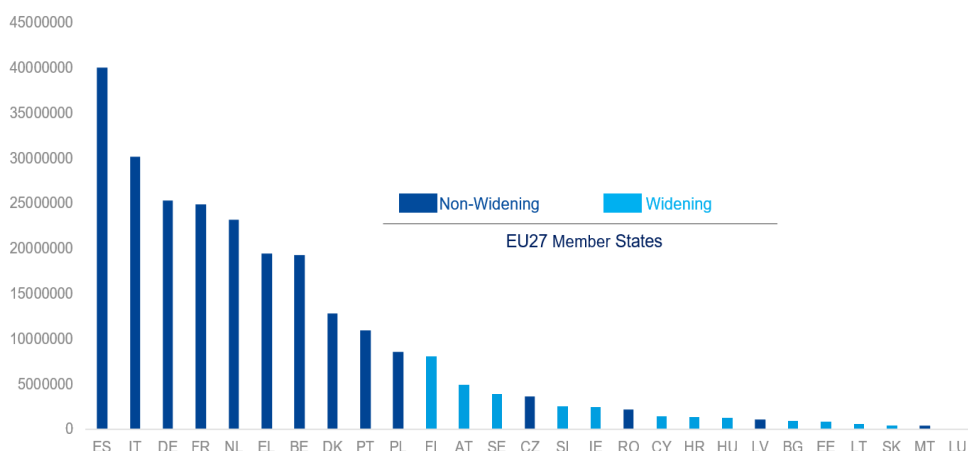


Figure 24: Mission Soil country participation. Source: HE Dashboard, cut-off date 01/07/2024

4.5.2. Projects and Results Portfolio – Key figures

The Horizon Europe component of the portfolio contains a total of 148 signed grants, participation by 2 004 entities and 1 280 unique participants. It sums up to a net EU contribution of EUR 646 million.³⁴ Each project has an average of sixteen participants. 44 projects, or 30% of the portfolio, are mission-specific projects, mainly related to the Soil, Ocean and Climate Adaptation Missions.


EUR 646 million


148 Projects


**2004
Participations**


**1281
Participants**

Pillar I Excellent Science accounts for 31% of the signed grants and 8% of the net EU contribution. The ERC is represented by 21 projects and MSCA by 29 (10% and 19% of grants respectively). More than half of all projects in the portfolio (56%) pertain to Pillar II Global Challenges and European Industrial Competitiveness, amounting to 78% of the net EU contribution in the portfolio. Project stemming from Pillar III Innovative Europe comprise 3% of signed grants and 1% of the net EU contribution.

³⁴ The portfolio data were last validated in September 2023, Missions specific calls projects initiated post-validation and up until 1st July 2024 have been incorporated manually.

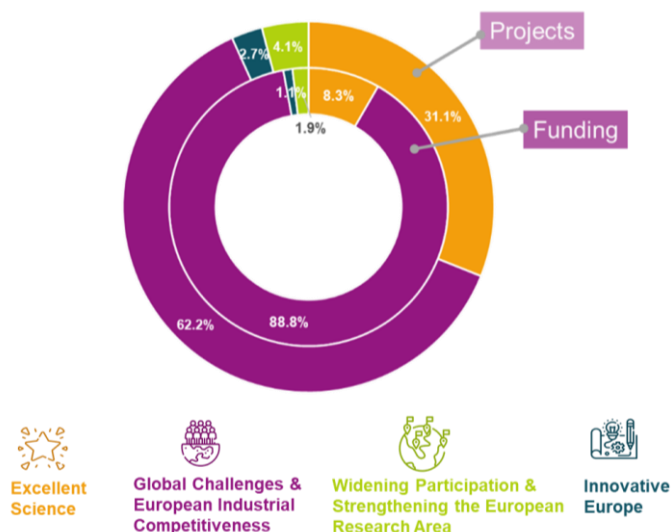


Figure 25: Funding distribution across Horizon Europe programme parts, by Net EU contribution share (funding) and projects number. Source: HE Dashboard, cut-off date 01/07/2024

The portfolio features a wide range of actions founded by Horizon Europe. The largest share is attributed to the Research and Innovation Actions, with 53 signed grants and 1 025 participations, followed by Maria Skłodowska-Curie Actions (28 grants and 104 participations). Coordination and Support Actions accounted for 25 grants and 334 participations, while Innovation Actions contributed 22 grants and 442 participations. Actions under the European Research Council resulted in 16 grants and 21 participations. The smallest share of grants was linked to the European Innovation Council (3 grants, 5 participations) and COFUND actions (1 grant, 73 participations).

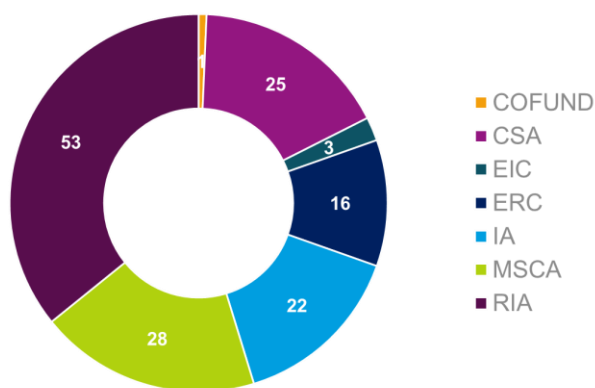


Figure 26: Number of projects in the Soil portfolios classified according to the Horizon Europe type of action financed. Source: HE Dashboard, cut-off date 01/07/2024

A diverse array of scientific fields is encompassed by the Soil Mission portfolio. Most projects, 115, are linked to Natural Sciences, in accordance with the EuroSciVoc taxonomy. A significant number of projects, 68, is associated with the field of Social Sciences. 61 projects represent the Agricultural Sciences and 49 Engineering and Technology. The smallest share of projects is linked to the field of Medical and Health Sciences and the field of Humanities, 12 and 3 respectively.

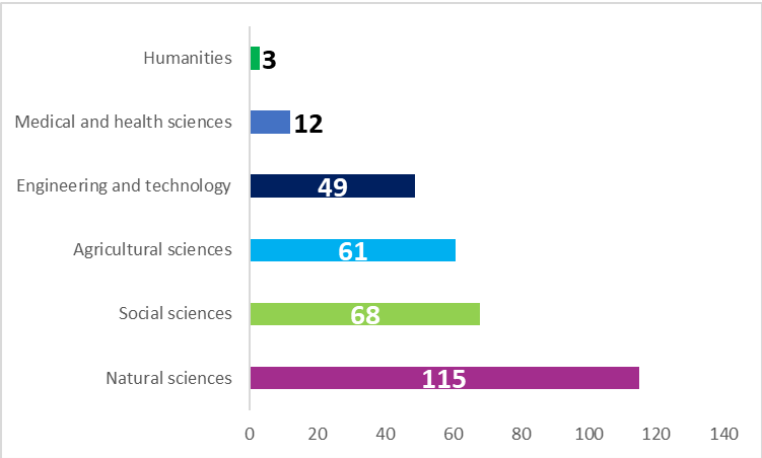


Figure 27: Number of projects by field of science. *Source: HE Dashboard, cut-off date 01/07/2024*

ANNEX I PROJECT PORTFOLIO APPROACH

Methodological Approach to Portfolio Analysis in Horizon Europe Missions

To systematically assess the contribution of Horizon Europe-funded projects to the European Missions, a structured portfolio approach is applied. This methodology combines text-mining technology with expert validation to categorize and evaluate a large set of Horizon Europe projects³⁵ based on each Mission's objectives and criteria.

At the core of this approach is **CORTEX**, the European Commission's text-mining tool, which is used alongside internal and expert analysis to validate the selection of projects. The process begins with the identification of **Mission-specific keywords**, carefully chosen to reflect the core themes and priorities of each Mission. These keywords guide the initial search, after which projects are assigned a **relevance score** based on their potential contribution to Mission objectives. The results are then reviewed by Commission staff and domain experts to ensure accuracy and relevance. The final outcome is a curated portfolio of projects that have undergone both automated and expert-driven validation, ensuring a comprehensive selection aligned with the Mission's goals.

Strengths and Benefits of the Approach

This portfolio-based methodology offers several advantages:

- **Greater Coverage:** It provides a holistic view of how Horizon Europe contributes to the Missions, helping to identify synergies, overlaps, and gaps across initiatives.
- **Resource Optimization:** By mapping relevant projects to each Mission, existing knowledge, technologies, and methodologies can be leveraged, reducing duplication and improving efficiency in the use of programme funds.
- **Enhanced Synergies:** A broad portfolio view enables better coordination between projects and programs, fostering collaboration, knowledge sharing, and maximizing impact.

5. Challenges and Limitations

Despite its benefits, the approach also has some limitations:

- **Potential Gaps in Project Selection:** The reliance on keyword-based text mining means that some relevant projects may be missed if they do not align perfectly with predefined search terms.
- **Subjectivity in Validation:** The expert review process introduces a risk of bias, as individual interpretations may vary, potentially affecting the consistency of project selection.

Nevertheless, this methodology provides a robust framework for understanding and mapping the funding landscape related to the Missions within Horizon Europe and beyond, offering valuable insights for future monitoring of the Missions impact.

³⁵ Mission portfolios may encompass programs and projects beyond Horizon Europe; however, for the purposes of this analysis, only Horizon Europe projects are considered.

ANNEX II – GLOSSARY OF TERMS

Term	Meaning or definition
Above threshold proposals	An eligible proposal (see below) whose final evaluation status is either "MAIN" (the proposal will be invited for grant preparation), "RESERVE" (the proposal may be invited for grant preparation if sufficient budget is made available after all the main list proposals finalise their grant preparation phase), or, "NO_MONEY" (despite the proposal having passed all the thresholds, it cannot be funded in view of the limited budget available for the call)
Above threshold applications	The involvement of a legal entity in an above threshold proposal.
Above threshold rate (of proposals)	Ratio of the above threshold proposals to the total number of eligible proposals (see below) received.
Above threshold rate (of applications)	Ratio of the above threshold applications to the total number of eligible applications (see below) received.
Administrative data	Data collected by government entities and agencies in the course of their regular activity for administrative purposes, such as to keep track of project payments.
Applicant	Legal entity submitting an application to a call for proposals.
Application	The involvement of a legal entity in a proposal. A single applicant can make several applications in different proposals. A single proposal can include several organisations and, therefore, several applications.
Application or Applicants success rate	$\frac{\text{(Number of retained applications in single-stage calls + Number of retained applications in the 2nd stage of two-stage calls)}}{\text{(Number of evaluated eligible applications in single-stage calls + Number of evaluated eligible applications in the 2nd stage of two-stage calls)}} \times 100$ This definition is applied when measuring the success rates of countries or organisation types.
Associated countries	Entities from associated countries can participate in Horizon 2020 (Horizon 2020 Regulation Art. 7) and Horizon Europe (Horizon Europe Regulation 2021/695) under the same conditions as those from EU countries. A country becomes associated through an international

	agreement. Associated countries and territories in Horizon 2020 were³⁶: Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia, Turkey, Iceland, Norway, Switzerland, Armenia, Georgia, Israel, Moldova, Tunisia, Ukraine, and the Faroe Islands. Associated countries and territories in Horizon Europe are³⁷: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Kosovo*, Moldova, Montenegro, North Macedonia, Norway, Serbia, Turkey, Tunisia, Ukraine, New Zealand³⁸. * This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ opinion on Kosovo Declaration of Independence.
Beneficiary	Legal entity (see below), other than the European Commission, who is a funded party in the grant agreement. The beneficiaries are the participants signing the grant agreement and therefore eligible to receive EU contributions.
CORDA and eCORDA	CORDA stands for Common Research Datawarehouse. It is the internal repository of Research & Innovation data gathered from EU research and innovation Framework Programmes. eCORDA stands for External Common Research Datawarehouse. It contains data on projects and proposals.
Coordination and support action (CSA)	An action consisting primarily of accompanying measures such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, including design studies for new infrastructures. This may also include complementary networking and coordination activities between programmes in different countries.
Correlation	Association between two variables. The establishment of a reasonable correlation between variables does not imply the establishment of a causal effect.
Direct leverage	Difference between a project's total eligible costs and the EU contribution (see below) given to the project.
Direct leverage factor	Ratio of the direct leverage and the EU contribution. It is related to the 'Funding rate' (see the definition below) via the following formula: $\text{Direct leverage factor} = \frac{1}{\text{Funding rate}} - 1$

³⁶ https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

³⁷ https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon-euratom_en.pdf

³⁸ Until association agreements with Morocco and the United Kingdom start producing legal effects (1 January 2024 for the UK), these countries are considered Third Countries for Horizon Europe in this analysis.

Eligible proposals	Statistics on "eligible proposals" in standard reports take the "overall eligibility" into account, not just the result of the eligibility check in the evaluation process. In that context, an "eligible proposal" will therefore refer to a proposal which final evaluation status is neither "INELIGIBLE" (failed at eligibility step), nor "INADMISSIBLE" (failed at admissibility step), nor "DUPLICATE", nor "WITHDRAWN", nor null (proposal not fully evaluated yet).
European Research Council (ERC)	The European Research Council is a European funding organisation for excellent frontier research which offers different grant schemes: starting grants , consolidator grants , advanced grants , synergy grants and proof of concept. The ERC is led by an independent governing body, the Scientific Council .
EU Contribution	Amount of money by way of direct subsidy or donation, from the EU budget in order to finance an action intended to help achieve an EU policy objective or the functioning of a body, which pursues an aim of general EU interest or has an objective forming part of, and supporting, an EU policy. The sum of the EU contributions of all participants in a project is equal to the grant amount.
Excellent proposals	See above threshold proposals.
Funding rate	Ratio of the EU contribution to a project and project's total costs.
High quality proposal	See above threshold proposals.
Innovation action	An action primarily consisting of activities directly aimed at producing plans and arrangements or designs for new, altered or improved products, processes or services.
Legal Entity	Organisation applying/participating to the Framework Programme for Research and Innovation.
Oversubscription	Share of above threshold proposals (see above) that were not retained due to budget constraints, out of all eligible proposals evaluated by experts with a score above the quality threshold.
Participant	Same as beneficiary, but also including entities involved in the projects that do not receive directly funding from the EU (associated partners, third parties).
Participation	The act of involvement of a legal entity in a Project. A single participant can be involved in multiple projects.
Project	A contract concluded between the European Commission (representing the European Union) and the beneficiary (or beneficiaries) under which the parties receive the rights and obligations e.g. the right of the EU financial contribution and the obligation to carry out the research and development work.

Retained proposals	A proposal selected for funding (evaluation status "MAIN"). Note that the total number of projects (see above) might not be the same as the total number of retained proposals (for instance if some proposals from the Reserve list (see above) were eventually funded)
Reimbursement rate	See funding rate.
Research and innovation action (RIA)	A type of action (see below) primarily consisting of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution. It may include basic and applied research, technology development and integration, or testing and validation on a small-scale prototype in a laboratory or simulated environment.
Seal of excellence	A certificate declaring that the proposals are of high quality and meriting funding. The Seal of Excellence (in Horizon 2020) was awarded to: • SME Instrument • Marie Skłodowska-Curie actions (MSCA) individual fellowships • Special COVID19 Seal of excellence The SME instrument Seal of Excellence is awarded to all high quality proposals submitted to the Horizon 2020 SME Instrument either in Phase 1 or in Phase 2, which are above the quality threshold, but cannot be funded under the available call budget. "Above quality threshold" means an evaluation score of 13 points or more (out of 15). In reporting terms, a proposal is tagged as Seal of Excellence if the evaluation process is positive, but the proposal was not financed due to budgetary constraints, i.e. the evaluation result code is NO_MONEY. The MSCA individual fellowships Seal of Excellence is awarded to MSCA-IF proposals, starting with the 2016 call, that obtained a score of 85% or more and that are not main-listed. A special COVID19 Response Seal of Excellence has been awarded to COVID19 relevant proposals submitted to the March 2020 EIC Accelerator cut-off which passed the thresholds, but were not funded. The proposals awarded with a Seal of Excellence might be funded in a further call after re-submission or receive additional funding if they are in the RESERVE list. By default, the dashboards show only the ones which at the moment of the data extraction appear still unfunded.
SME	Small and medium-sized enterprise. According to the EU definition, to count as an SME, the organisation must be engaged in an economic activity, it must have fewer than 250 employees and an annual turnover of no more than €50 million and/or a balance sheet of no more than €43 million (EU recommendation 2003/361).

SME instrument	The SME instrument (Horizon 2020) targeted all types of innovative SMEs that showed a strong ambition to develop, grow and internationalise. It provided support at different stages of the entire innovation cycle, in three phases, complemented by a mentoring and coaching service. • Phase 1: Feasibility study verifying the technological/practical as well as economic viability of an innovation idea. • Phase 2: Innovation projects that demonstrate high potential in terms of company competitiveness and growth underpinned by a strategic business plan. • Phase 3: Support to commercialisation.
Societal Challenges	Priorities identified in the Europe 2020 strategy aiming at stimulating research and innovation to achieve the EU's policy goals: 1. Health, demographic change and wellbeing 2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy 3. Secure, clean and efficient energy 4. Smart, green and integrated transport 5. Climate action, environment, resource efficiency and raw materials 6. Europe in a changing world: inclusive, innovative and reflective societies 7. Secure societies: protecting freedom and security of Europe and its citizens.
Success rate (of proposals)	The percentage of proposals that are retained for funding out of the total number of eligible proposals expressed as a percentage (Funded proposals/Eligible proposals*100)).
Success rate (of applications)	The percentage of applications that are retained for funding out of the total number of eligible applications expressed as a percentage (Funded proposals/Eligible proposals*100)).
Topic	A topic defines a specific research and innovation subject or area for which applicants are invited to submit proposals. The description of a topic comprises its specific thematic scope and expected impact of the funded projects.
Total cost	The total cost is an amount of money (in EUR) invested in the project in total or by participating body – project participant. The total cost includes EU contribution as well as other project costs not covered by EU funding.
Type of action	Funding scheme inside a programme with common features.

(ToA)	The type of action specifies: • the scope of what is funded • the reimbursement rate • specific evaluation criteria to qualify for funding • the use of simplified forms of costs like lump sums
Technology Readiness Levels (TRL)	Technology Readiness Levels indicate the maturity level of particular technologies through a common understanding of technology status and addresses the entire innovation chain. TRL 1 – basic principles observed; TRL 2 – technology concept formulated; TRL 3 – experimental proof of concept; TRL 4 – technology validated in the lab; TRL 5 – technology validated in a suitable environment; TRL 6 – technology demonstrated in a suitable environment; TRL 7 – system prototype demonstration in an operational environment; TRL 8 – system complete and qualified; TRL 9 – actual system proven in an operational environment.
Widening Member States	Countries and territories identified as ‘low-performing’ in research and innovation, and thus eligible to apply for actions dedicated to spreading excellence and widening participation. In Horizon 2020, these were³⁹: Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia and Slovenia (EU Member States) and Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Tunisia, Turkey and Ukraine (associated countries). In Horizon Europe, these are⁴⁰: Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia (EU Member States) and Albania, Armenia, Bosnia & Herzegovina, Faroe Islands, Georgia, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia, Tunisia, Türkiye, Ukraine, and once associated Morocco (Associated Countries) as well as the Outermost Regions (defined in Art. 349 TFEU).

³⁹ https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-sewp_en.pdf

⁴⁰ wp-11-widening-participation-and-strengthening-the-european-research-area_horizon-2023-2024_en.pdf (europa.eu).

ACKNOWLEDGEMENTS

Sincere thanks go to the Mission sector in Unit G4 ('Common Missions & Partnerships Service') of DG Research and Innovation, and to the Mission Secretariats' colleagues for their important input to this report.

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This report offers a snapshot of Horizon Europe's contribution to the five EU Missions: Adaptation to Climate Change, Cancer, Climate-Neutral and Smart Cities, Ocean and Waters, and Soil. It draws from project data across both Mission-specific calls and broader research portfolios, highlighting how each Mission is being supported through targeted and complementary R&I efforts.

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