



European
Commission

SME participation in Horizon Europe

Key figures
(and key issues)
in the first
three years



MONITORING &
EVALUATION REPORT

Research and
Innovation

SME participation in Horizon Europe Key figures (and key issues) in the first three years

European Commission
Directorate-General for Research and Innovation
Directorate G — Common Policy Centre
Unit G2 - Common Programme Analysis & Regulatory Reform
Contact Ann-Sofie Rönnlund
Email RTD-G2-SUPPORT@ec.europa.eu
RTD-PUBLICATIONS@ec.europa.eu

European Commission
B-1049 Brussels

Manuscript completed in July 2024

The European Commission shall not be liable for any consequence stemming from the reuse.

PDF	ISBN 978-92-68-18899-6	doi:10.2777/576670	KI-02-24-751-EN-N
-----	------------------------	--------------------	-------------------

Luxembourg: Publications Office of the European Union, 2024

© European Union, 2024



The Commission's reuse policy is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39, ELI: <http://data.europa.eu/eli/dec/2011/833/oj>).

Unless otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed, provided appropriate credit is given and any changes are indicated.

For any use or reproduction of elements that are not owned by the European Union, permission may need to be sought directly from the respective rightholders. The European Union does not own the copyright in relation to the following elements:

— cover: © toonsteb # 279375161 © Юлия Прыкина # 455547508 © VectorMine # 303873962, 2022. Source: stock.adobe.com,

SME participation in Horizon Europe

Key figures
(and key issues)
in the first three years

R&I Monitoring flash

Roberto Volpe (RTD G2)

TABLE OF CONTENTS

1. Introduction	3
2. Key facts on SME participation	4
2.1. More EU funding is going to SMEs (grants and equity)	4
2.2. Patterns of SME participation have changed	7
2.3. SMEs in Horizon Europe get more funding per project	10
2.4. Participation of “newcomer” SMEs	11
2.5. Success rates and quality of proposals	13
3. How does SME participation vary across Horizon Europe?	15
3.1. Total SME funding by programme part	15
3.2. Share of SME funding by programme part	20
3.3. SME participation by type of action	23
3.4. SME co-funding of projects	25
4. Did funding from <i>NextGenerationEU</i> make a difference?	26
5. How does SME participation vary by country?	28
5.1. Number of SME participants by country	29
5.2. EU funding to SMEs by country	32
5.3. SME success rates and quality of applications by country	34
5.4. Use of the Seal of Excellence for unsuccessful SME proposals	35
6. What are the characteristics of Horizon Europe SMEs?	36
6.1. Distribution by economic sector	37
6.2. Distribution by category of SMEs	39
6.3. Horizon Europe and “start-ups”	42
7. What is the role of SMEs in projects?	45
8. What data are we still missing? Some evidence from indirectly managed actions	47
8.1. EIT Knowledge and Innovation Communities	47
8.2. Co-funded partnership on Innovative SMEs	48
8.3. Financial support to third parties	50
9. Conclusions and next steps	51
Appendix	53

1. Introduction

Small and medium-sized enterprises (SMEs) play a fundamental role in the European economy. They provide **two out of three jobs**, account for **over half of Europe's GDP**, and are embedded in all levels of supply chains – as well as in local economy and social fabrics.¹ SMEs are central to any policy that has the ambition to foster competitiveness and economic growth, as well as tackling the most pressing global challenges, such as combating climate change and all Sustainable Development Goals.

Adoption of innovative solutions by all types of industry players, and particularly by SMEs, is key to research and innovation policy aiming to have a transformative impact, such as the Framework Programmes for research and innovation of the European Union (“R&I FP”, or just “FP”). SME uptake of innovative solutions is one of the specific objectives of Horizon Europe (Horizon Europe regulation², Article 3(2)).

Moreover, while most SMEs – particularly the smallest micro-enterprises, which are the overwhelming majority of SMEs in Europe – have neither potential nor interest to innovate, many SMEs are R&I practitioners too. An estimated 23.1% of SMEs in the EU with at least 10 employees – approximately 162 700 companies – carry out research and development activities³. Moreover, at least 240 000 European SMEs are estimated to have developed some kind of product or process innovation⁴.

SME participation is mentioned among areas to measure by the monitoring and reporting system of the programme (Article 50(b) of the regulation). For this reason, information about compliance of participant entities with the EU definition of SMEs⁵ is collected for most applications for Research and innovation (R&I) EU projects.

While there is no general target for SME participation in Horizon Europe, the programme's legislators expect that it reaches **“levels at least commensurate”** with those under the previous framework programme for R&I, Horizon 2020⁶. This basic expectation becomes particularly important to monitor once it is considered that instruments to support SMEs have evolved in Horizon Europe compared to the past.

There is a new “SME-centric” programme Pillar, **“Innovative Europe”** (Pillar III), whose objective is to promote all forms of innovation in view of market deployment. Within this Pillar, the **European Innovation Council (EIC)** puts a particular focus on deep-tech and potentially market-changing technological innovation. Uniquely in the Framework

¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: “An SME Strategy for a sustainable and digital Europe”, COM/2020/103 final

² REGULATION (EU) 2021/695 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013

³ Eurostat, Enterprises with research and development (R&D) activities during 2018 and 2020 by NACE Rev. 2 activity and size class [inn_cis12_inrd], 2020.

⁴ Eurostat, Enterprises, employed persons and turnover by innovation profile, NACE Rev. 2 activity and size class [inn_cis12_pf_ba], 2020.

⁵ Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises.

⁶ Recital (26) in Horizon Europe regulation

Programme, it may provide successful applicants with direct investments beyond traditional “grant-only” support, through a fully EU-supported equity facility, the **EIC Fund**.

SME participation in Horizon Europe extends well beyond the EIC. SME participants are often partners in **collaborative projects** – which in Horizon Europe are mostly grouped under the “Global Challenges and European Industrial Competitiveness” **Pillar II**. Unlike in Horizon 2020, in the current FP there are no preferential conditions for applications that involve SMEs, nor quantitative objectives for SME participation in research consortia. However, as shown in this report, SMEs remain an important presence in these programme parts too.

2. Key facts on SME participation

Main findings:

- In the first three years of Horizon Europe, SMEs received **€6.6 billion** in EU contributions, over **20%** of all programme funding. This is a large increase compared to the previous programme, Horizon 2020. Equity investments for SMEs through the **EIC Fund (€1.26 billion)** play a key role.
- While there are still many SMEs in Horizon Europe (**7474, 34%** of all participants), their number is not increasing. **A change in strategy for the Framework Programme** – support fewer but more innovative SMEs with more capital for growth – is the main driver of this trend.
- **More than half of Horizon Europe SMEs are new to EU R&I programmes (“newcomers”)**.
- **Success rates** of SME applications have strongly improved (**19.9%** today from 12% in Horizon 2020), also driven by a very strong increase in the **quality of proposals** throughout the programme.

2.1. More EU funding is going to SMEs (grants and equity)

Between April 2021 and December 2023, small and medium enterprises participating in Horizon Europe projects received *at least*⁷ **€6.6 billion** in financial contributions. This is equivalent to **20.6%** of the approximately €32 billion allocated from the EU budget under the current R&I Framework Programme for Research and Innovation at the reference date (**1 January 2024**). The figure includes **€5.33 billion** in grants (17.3% of all grants), the “traditional” primary source of funding for R&I programmes’ beneficiaries. Some Horizon Europe SMEs also benefitted from **€1.26 billion in direct investments** (acquisition of ownership shares, “equity”) through the **EIC Fund**.

⁷ Exact sum for SME funding in Horizon Europe as of 1 January 2024: **€6 598 314 301**. The figure does not include some programme parts with decentralised management that, at the reference date, were not yet fully integrated in central programme monitoring systems. These are co-funded European partnerships, the European Partnership for Metrology, the activities of the Knowledge and Innovation Communities of the European Institute for Innovation and Technology (EIT KICs), and Financial support to third parties’ schemes (“FSTP”).

The figure should therefore be considered a “lower bound” for Horizon Europe SME funding. Some insights on total EU funding channelled through these schemes is presented in Section 8.

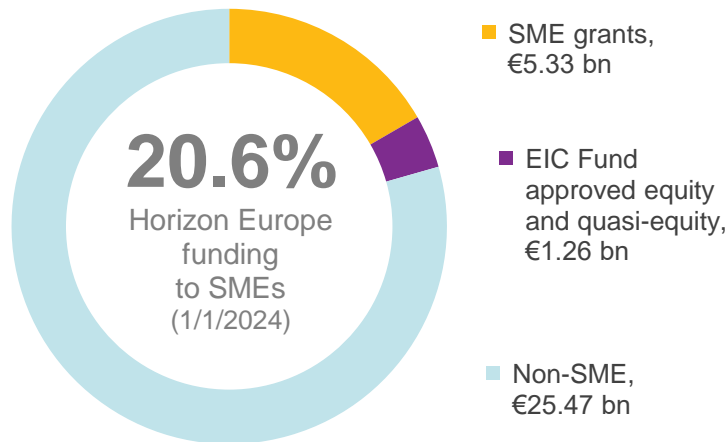


Figure 1: Share of funding to SMEs in Horizon Europe, grants and (approved) equity, 2021-2023 R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

Financial support for SMEs has increased in Horizon Europe compared to its predecessor Framework Programme for research and innovation, Horizon 2020 (2014-2020). SMEs funded under Horizon 2020 received around €11.7 billion in grants throughout 7 years, 17% of all programme funding⁸.

Horizon Europe has until now passed the *symbolic* threshold of 20% of R&I programme funding going to SMEs. This target used to be enshrined into law in Horizon 2020, but only for two specific programme parts: the Leadership in Enabling and Industrial Technologies programmes under “Pillar II – Industrial Leadership” and “Pillar III – Societal challenges”, together roughly equivalent to the “Global challenges” Pillar II in Horizon Europe. Even if legal targets for SME participation (in terms of financial contributions) no longer exist in *almost* any part of Horizon Europe, higher SME funding levels are built in the programme design.

The extent of the increase in SME support is better understood if programme data is disaggregated by the 2- or 3-year programming periods used by the Commission to schedule calls for proposals (“work programmes”, WP⁹). If only the funding from projects in the 1st work programme of Horizon Europe (2021-2022 calls) is counted, total funding to SMEs reaches €5.43 billion. This means that **nominal SME funding has doubled in comparison to the first WP of Horizon 2020** (2014-2015, +97%), and a considerable increase is also visible over the 2015-2016 period (+85%).

⁸ The share of SME funding in Horizon 2020 increases to 17.7% when equity investments to beneficiaries of the 2018-2020 EIC pilot (€0.63 bn) are included in the total for H2020.

⁹ For simplicity, programme parts that define their own work programmes (e.g. the European Innovation Council, the European Research Council, Joint Undertakings), which may follow different timelines than the “core” Commission work programme, are treated as part of the main WP. The calendar is 2014-2015, 2016-17, 2018-20 for Horizon 2020; and 2021-2022, 2023-25, 2026-27 for Horizon Europe.

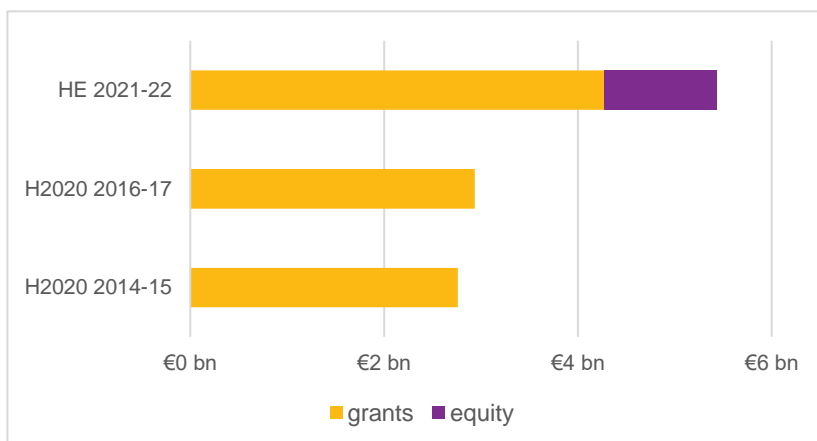


Figure 2: Total funding to SMEs in Horizon 2020 and Europe, grants and (approved) equity, by Commission work programme (2-year period).

Note: only 2-year work programme periods are considered.

R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

EIC equity investments (€1.1 bn approved for SME beneficiaries of 2021 and 2022 EIC Accelerator calls), which were not foreseen in the first two WPs of Horizon 2020, play a key role in boosting total SME support.

The increase in the grant component over the first part of Horizon Europe is also substantial – around 50% over both the 1st and the 2nd Horizon 2020 WPs. As Horizon Europe has a larger budget (€95.5 billion by 2027¹⁰, against €75.6 billion in Horizon 2020¹¹), a nominal increase in SME funding (also in light of sustained price inflation since 2020) was to be expected.

In relative terms, the increase is less pronounced: if we exclude equity investments, the share of funding *in grant form* to SMEs in Horizon Europe is just 0.3 percentage points above Horizon 2020 levels, and is essentially on par with the later years of Horizon 2020. In other words, even if much more funding has been made available since Horizon 2020, the distribution of *grants* has not drastically changed; the stronger SME orientation in Horizon Europe budget allocations is mostly due to the role of the new equity fund.

¹⁰ Figure from here: https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/horizon-europe_en

¹¹ As referenced in REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL Ex post evaluation of Horizon 2020, the EU framework programme for research and innovation, COM/2024/49 final

2.2. Patterns of SME participation have changed

2.2.1. General participation trends

Horizon Europe projects involve *at least 7474 SME participants*, as either (funded) beneficiaries, (unfunded) associated partners, and third parties (receiving EU funding through another Horizon Europe beneficiary). Each SME participant joined 1.9 projects on average.¹²

Around one-third of all Horizon Europe (33.9%) participants are classified as SMEs. While still a high share, it is significantly lower than in Horizon 2020, where over 4 participants in 10 were SMEs (41.1%¹³).

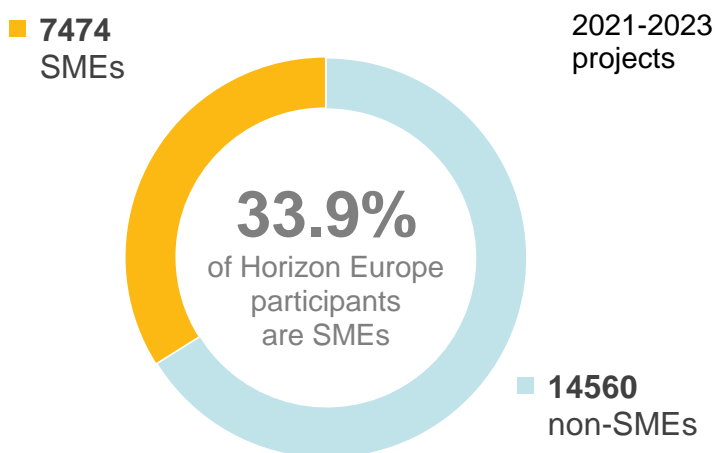


Figure 3: Share of SME participants in Horizon Europe. 2021-2023 R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024. Figure does not include SMEs in EIT KICs, co-funded partnerships, and FSTP schemes.

The difference is visible not only in proportion, but also in the number of participants. Indeed, the absolute tally of SME participants in the first Horizon Europe work programme (6477) is almost identical as in the 2014-2015 period under Horizon 2020 (6426).

It might appear surprising that, in a programme that increased in size – as well as in its ambition to involve innovative companies – the number of SME beneficiaries is not growing. However, this was an expected consequence of the changes in governance and programme structure between Horizon 2020 and Horizon Europe.

A key design difference between the two programmes lies in actions aimed at single SMEs (“mono-beneficiary” actions). As shown in Figure 4, all the difference in absolute levels of

¹² This is equivalent to 13 893 *participations* in projects, i.e. the number of participants multiplied per how many projects they joined. SMEs represent 19.2% of these “participations”.

¹³ The figure for Horizon 2020 does not include SME participants in EIT KICs and public-to-public (“art. 185”) European partnerships. For these actions, central Commission monitoring systems have structured data about participation, but not yet about EU funding received. About 3000 of these entities are classified as SMEs, which are relatively overrepresented in these actions (particularly EIT KICs and the Eurostars2 partnership, predecessor of the Innovative SMEs co-funded partnership in Horizon Europe). The share of SME participants in Horizon 2020 as a whole is 43.2%.

participation between the two programmes is explained by only one part of Horizon 2020: the SME instrument, and its “phase 1” in particular.

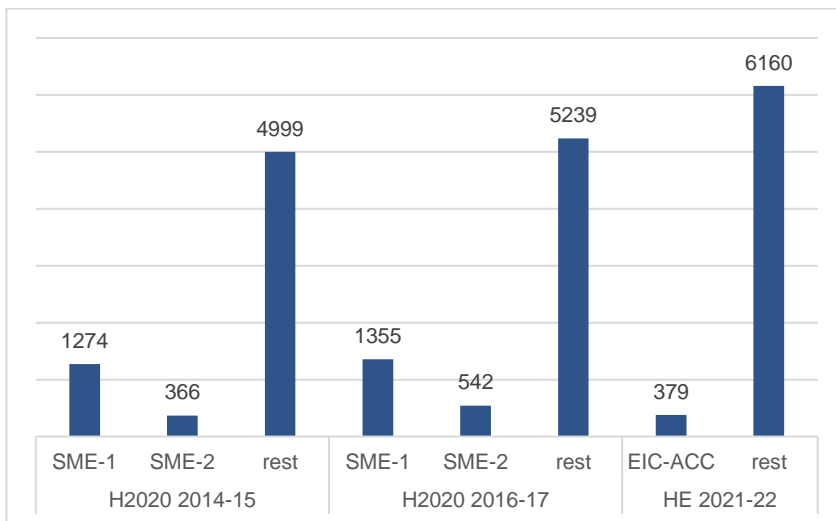


Figure 4: Number of SME participants in Horizon 2020 SME instrument (phase 1 and phase 2), Horizon Europe EIC accelerator, and other actions, by work programme (2-year WPs only). R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024. Figure does not include Art. 185 partnerships, co-funded partnerships, and EIT KICs.

The distribution of SME participation between SME-only and “general access” actions in the Framework programme has changed significantly between Horizon 2020 and Horizon Europe. In the former programme, around 31% of SME participants were involved in the SME instrument – in 80% of all cases, they did not participate in any general access action. In Horizon Europe, instead, EIC Accelerator beneficiaries – who also rarely join projects in the rest of the programme - represent only 6% of all SME participants in the programme.

When SME-only actions are excluded, there are more SME participants in Horizon Europe than in Horizon 2020. This is coherent with the increase in financial resources available across the programme: Horizon Europe as a whole has a higher capacity to involve SMEs. However, in relative terms, the share of SME participants in non-SME-only actions has remained constant between Horizon 2020 and Horizon Europe: slightly less than one third of all participants are SMEs.

However, non-SME-exclusive actions show a small increase in the share of funding (from around 13.5% to 14.4%) going to SMEs also in relative terms. As the share of SME participants in these actions has not increased, this implies that SMEs in Horizon Europe are getting larger grants than in the past. This trend is shown more systematically in section 2.3.

Work programme	% SME participants (non-SME-exclusive actions)	% SME grants (non-SME-exclusive actions)
Horizon 2020 2014-15	32.4	13.2
Horizon 2020 2016-17	31.2	13.1
Horizon 2020 2018-20	32.5	13.6
Horizon Europe 2021-22	32.5	14.4

Table 1: Main statistics on participation of SMEs in action that are not SME-exclusive, Horizon 2020 and Horizon Europe work programmes. R&I programmes' monitoring system (CORDA), reference date 1 January 2024. Art. 185 partnerships, EIT KICs and co-funded partnerships are not included.

2.2.2. How did SME-specific actions change between Horizon 2020 and Horizon Europe?

The SME instrument¹⁴ was a strong driver of SME participation in Horizon 2020. This was especially the case for the “phase 1”, with over 4400 SMEs (one quarter of all SMEs in Horizon 2020) obtaining a €50 000 grant – which is much smaller than the average grant in the rest of the programme. Only around 15% of these SMEs progressed to a “phase 2” of the instrument¹⁵, which could offer a much more substantial EU contribution (up to €2.5 million per applicant).

In the last Horizon 2020 work programme the SME instrument was heavily modified, by discontinuing its “phase 1” – and reorganising its “phase 2” around a pilot version of the European Innovation Council (**EIC pilot**). The EIC Accelerator in Horizon Europe should be considered the successor of the SME instrument phase 2 only. As shown in the graph above, the number of beneficiaries of the EIC Accelerator is overall similar to the performance of its predecessor, representing less than 10% of all SMEs supported by the programme. The SME instrument phase 1, instead, does not have a successor in Horizon Europe.

Box #1: Why was the SME instrument phase 1 discontinued and not replaced?

The decision to discontinue the SME instrument phase 1 was made in the final set of Horizon 2020 calls, under the EIC Pilot. In practice, EU R&I framework programmes stopped offering low-value grant options aimed specifically at SMEs, preferring to focus on more generous and different tools – such as the “blended finance” approach of the EIC Accelerator (which no longer has a “phase 1” as intended in the SME instrument).

This decision is supported by several efficiency and effectiveness considerations. Among these:

- Phase 1 grants were small compared to the average Horizon 2020 grant, especially in light of the direct and indirect costs they involved for applicants.
- Just a minority of “phase 1” beneficiaries made it to the “phase 2”, and thus could benefit from a bigger scale-up grant.

¹⁴ For an overview of the SME instrument, see the relevant section in the Horizon 2020 online manual: https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/sme_en.htm

¹⁵ While the phase 1 and the phase 2 of the Horizon 2020 SME instrument were conceived to operate in sequence, the majority of SME instrument phase 2 beneficiaries (62%) were not funded under phase 1.

- Phase 1 was a strong magnet for newcomers (90% of all its participants were new to the FP), but very few beneficiaries were also involved in other programme parts. Moreover, very few Phase 1-only participants are participating in projects under the following Framework Programme, Horizon Europe.
- According to a report of the European Court of Auditors¹⁶, the Phase 1 of the SME instrument imposed disproportionately high administrative costs on the Commission, particularly caused by resubmission of unsuccessful proposals.
- Various studies, reported in the ex-post evaluation of the programme¹⁷, found a causal impact of SME instrument participation on several company metrics (turnover, propensity to innovate, fundraising). However, support studies also observed that benefits could be identified only for **Phase 2 recipients**, while participation in phase 1 only had no measurable impact.

Under Horizon Europe, the EIC Accelerator explicitly no longer aims to maximise SME participation. The EIC Pilot Board Vision statement declares: “The number of awards should be limited to focus on the highest potential innovators across Europe and with the ability to follow investments as companies scale.”

2.3. SMEs in Horizon Europe get more funding per project

A key difference between Horizon 2020 and Horizon Europe is the amount of funding each SME receives per project participation. Essentially, while the number of SMEs involved has not strongly increased, the funding each SME receives has increased substantially.

The average Horizon Europe SME receives around €475 000 per project, while in Horizon 2020 this average was lower by over one third (€344 700, -37.7%).

The headline figure is of course influenced by the change in structure of the programme. Small SME instrument phase 1 grants contributed to lower the average Horizon 2020 grant substantially. Equity investments under the EIC Accelerator, which can be as large as €15 million per company, also play a significant part in increasing average contribution per SME, especially in Horizon Europe.

Nonetheless, as shown in Table 2, there is an increase in funding per SME project also in other parts of the programme. Once the SME instrument (both phases) is excluded from the Horizon 2020 total and the EIC Accelerator from Horizon Europe, average funding per project increases from approximately €300 000 per project to €328 000 (+9%).

Funding scheme	Horizon 2020	Horizon Europe
Average (all SMEs in programme)	€344 712	€474 938
H2020 SME instrument – phase 1	€47 863	NA
H2020 SME inst. – phase 2 / HE EIC Accelerator	€1 823 646	€3 492 320

¹⁶ European Court of Auditors, Special Report 02/2020: The SME Instrument in action: an effective and innovative programme facing challenges, recommendations 129, 135. Full report: https://www.eca.europa.eu/Lists/ECADocuments/SR20_02/SR_Innovation_SMEs_EN.pdf

¹⁷ European Commission Staff Working Document. Ex-post evaluation of Horizon 2020, the EU Framework Programme for Research and Innovation SWD/2024/29 final. Link: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2024%3A49%3AFIN&%3Bqid=1706527941657>

(incl. EIC Fund)		
Rest of the programme (SMEs only)	€301 315	€328 032

Table 2: Average funding per project, Horizon 2020 and Horizon Europe, main SME schemes and rest of the programme R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

2.4. Participation of “newcomer” SMEs

More than half (3888, 52.1%) of SMEs in Horizon Europe projects are “newcomers” – meaning, they are new participants in EU R&I programmes. Conventionally, the European Commission calls newcomers those entities with no participation (funded or unfunded) in projects of the previous 7-year framework programme (i.e, for Horizon Europe, it means that they did not participate in Horizon 2020). In the vast majority of cases (>95%), these newcomers have *never* participated in any EU-funded R&I projects since a system of unique legal entity identifiers¹⁸ was introduced (Sixth Framework Programme – FP6, 2002).

As of 1 January 2024, newcomer SMEs were allocated €2.7 billion in EU funding (41.4% of all SME funding) – €0.81 billion of which are investments from the EIC Fund. Over two thirds of all equity funding approved at the reference date went to SMEs that have not participated in the R&I FPs before.

While **Horizon Europe** has high newcomer participation – especially among SMEs – up to now the programme is attracting fewer new participants than Horizon 2020. Three-quarters of SME participants in Horizon 2020 were new to R&I programmes and well over half of SME funding in Horizon 2020 went to programme newcomers (58.1%, €7.2 billion).

The number of SME newcomers in Horizon Europe is expected to increase over time. The participants at the beginning of a new framework programme are disproportionately “returning” ones: larger organisations that know R&I FPs well and join many projects over the duration of the programme. The share of new participants over all participating entities will therefore become higher throughout a framework programme.

In addition, the Horizon 2020 SME instrument played a major role: around 4000 of the 4400 firms (~90%) funded under the phase 1 of the instrument were newcomers. **The EIC Accelerator does not add as many new participants to Horizon Europe.** While most of them are newcomers, the share is around 70%, which is substantially lower than the SME instrument (both phases) used to achieve.

While the SME instrument was very important to attract *more* newcomers to Horizon 2020, its importance to increase total financial contributions should not be overstated. In fact, the €50 000 grants issued in phase 1 of the SME instrument are only a small fraction of the EU funding received by SME newcomers in Horizon 2020. The decline in the share of funding going to SME newcomers compared to the previous FP is not explained by the trends shown in this section.

Newcomer SMEs only	Horizon 2020 (7 years)	Horizon Europe (3 years)
newcomer SMEs	13 490 (76.2%)	3888 (52.1%)
avg. projects per newcomer	1.6 (returning SMEs: 3.5)	1.2 (returning SMEs: 2.5)
EU funding to newcomer SME (incl. EIC Fund)	€ 7.16 billion (58.1% SME funding)	€ 2.7 billion (41.4%)

¹⁸ The identifier is called “Participant Identification Code”, “PIC”

of which: equity	€ 598 million (96% to newcomers)	€ 806.7 million (67.8% to newcomers)
avg. funding per newcomer (by project)	€ 530 758	€ 558 810

Table 3: Main statistics on SME newcomers in Horizon 2020 and Horizon Europe (first 3 years). R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

All newcomers	Horizon 2020 (7 years)	Horizon Europe (3 years)
newcomers (all)	29 918 (71.5%) ¹⁹	10 425 (47.6%)
avg. projects per newcomer	1.7 (returning: 10.8)	1.2 (returning: 5.2)
EU funding to newcomers (incl. EIC Fund)	€ 13.8 billion (19.9% all funding)	€4.4 billion (13.7%)
avg. funding per newcomer (by project)	EUR 273 398	EUR 348 163

Table 4: Main statistics on newcomers in Horizon 2020 and Horizon Europe (first 3 years), all participants. R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

While newcomers and SMEs are linked concepts – e.g. participation of newcomers is highest in SME-oriented actions – there is not a full overlap. **Newcomers (SMEs and not) have a low degree of attachment to the framework programme:** they participate in few projects throughout the 7 years of an FP, typically just one or two projects only. Returning participants instead tend to participate in many more projects.

This is relevant for policy. Unlike other SMEs, newcomers have a strong propensity to participate in only one or two projects per Framework Programme. This has been the case for the SME instrument in Horizon 2020. In fact, 70% of SME instrument phase 1 beneficiaries only received funding under that specific channel, not even progressing to phase 2.

Around 10% of SME instrument beneficiaries are “returning” to Horizon Europe, and currently participate in a Horizon Europe project. Most of those are however phase 2 participants. If only those that received phase 1 grants are considered, just 121 of 3183 did, for a very low “retention” share of 3.8%. In other words, even if the SME instrument (phase 1) was a strong factor of attraction for new participants, it did not create lasting attachment to the framework programme.

¹⁹ If only *funded* beneficiaries are considered, the ratio of newcomers over all Horizon 2020 participants is around 69%. For statistics and analysis on newcomer beneficiaries in Horizon 2020, see European Commission, Directorate-General for Research and Innovation, *Newcomers in EU R&I programmes – Main trends in Horizon 2020, first evidence from Horizon Europe*, Publications Office of the European Union, 2023, <https://data.europa.eu/doi/10.2777/911220>

2.5. Success rates and quality of proposals

There have been *at least*²⁰ 21 586 SMEs submitting a proposal under Horizon Europe by now, of which one third (i.e., *at least* 7474) have signed a grant agreement. This underlines how competitive the programme is: despite the large budget available, only a minority of applicants can be funded. SMEs are involved in over 23 700 project proposals, which also means that one third of all Horizon Europe proposals involve at least one SME.

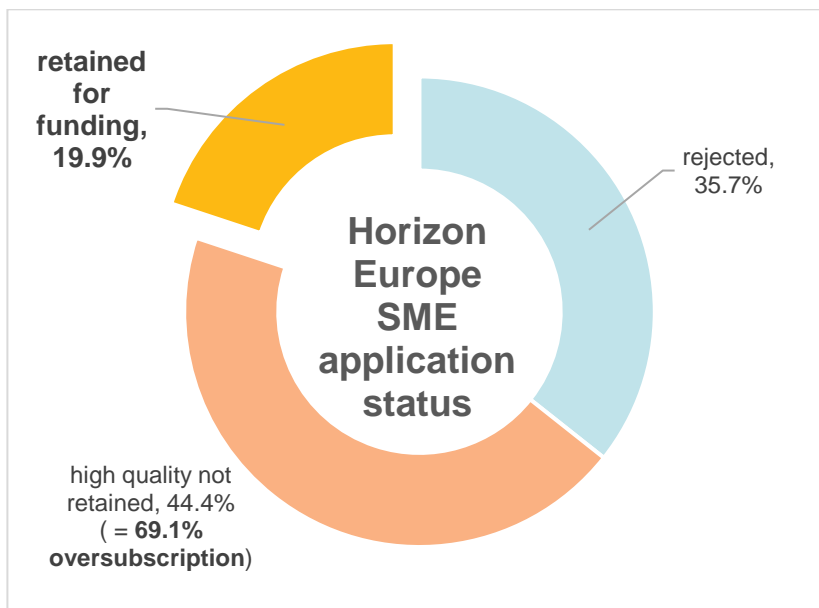


Figure 5: Funding status of SME applications in Horizon Europe. R&I programmes' monitoring system (CORDA), reference date 1 January 2024.

The success rate of SME applications in Horizon Europe is 19.9%, slightly lower than the average for the whole programme (21.6%). **It has improved considerably since Horizon 2020**, where just 12% of SME applications were successful. While an improvement in success rates is expected in the context of a larger programme, an 8-percent increase is symptomatic of deeper changes – and, even more so, it is an increase of 20 percentage points in the rate of applications in high-quality proposals that passed the evaluation threshold to be considered for funding. Now 64.3% of SME applications are in high quality proposals, close to programme average, against just 44.6% in Horizon 2020.

SME application patterns expose, in an amplified way, the same trends that are seen for projects; the funding is focussed on fewer SMEs. Over 41% of applicants to Horizon 2020 were SMEs. At the end of the programme, over 144 000 proposals involved at least one SME, which is half of all proposals under Horizon 2020.

This is primarily due to the impact the SME instrument, and its phase 1 in particular, had on SME application patterns. The SME instrument attracted over 88 000 proposals and 37 200 distinct applicants of which just a bit more than 6000 were actually selected for funding.

²⁰ There is a margin of uncertainty on the exact number: some parts of the programme have not yet reported, and the flagging system for SMEs is slightly less reliable at application level than it is at project level (for instance, not all EIC Accelerator successful applicants are flagged as SMEs, while this is a necessary condition for funding, and thoroughly verified at that stage)

Success rates for the SME instrument were comparatively low (6.4%, half of the general SME success rate), especially in its phase 2 (around 4.5%). The share of high-quality proposals was also very low by programme standards. However, **even after removing SME instrument applications, in Horizon Europe there is a strong general increase in quality of SME applications** (about 10 percentage points).

As a result of the increase in the quality of proposals, SMEs still have a high *oversubscription rate* – the share of proposals meeting evaluation thresholds that are not funded. **Around 69% of high-quality SME applications in Horizon Europe are not selected for funding**, which is only a marginal improvement over the past.

The EIC Accelerator has a very different application system than the SME instrument, which influences the volume and the quality of applications it receives (see Box #2 below). However, even accounting for these changes, **the EIC Accelerator remains a highly selective programme**. Between 2021 and 2023, the success rate of proposals has been 7.9%. If each submission, including resubmissions, is taken into account, the success rates would be even lower²¹. However, the vast majority of EIC Accelerator rejected proposals (more than 75%) still have not exhausted all attempts for resubmission, which means that the ratio will improve as these are reassessed. Indeed, early Accelerator calls have better success rates of proposals than more recent ones.

Box #2: How does the EIC Accelerator application system work? And how does it influence Horizon Europe application patterns?

Drawing lessons from the SME instrument, the EIC Accelerator has introduced a revamped application system. Its procedure is unique in the context of R&I Framework programmes in three ways:

- It allows to submit a short “pre-application”, of just 4 pages, for a preliminary assessment of eligibility. This submission is not a formal project proposal and as such is not recorded in central Commission monitoring systems.
- It has a selection process with multiple steps, with two evaluation panels and a final interview. Proposals that are rejected at any of these steps can be resubmitted, maximum once per step, including to future Accelerator calls.
- Only proposals that pass all steps and get to the final jury stage can be considered of “high quality”. This is a much stricter definition than in the rest of the programme, and results in a lower share of “high-quality proposals” than average.²²

The pre-screening plays an important part in reducing the volume of applications to the Accelerator, at least compared to the phase 2 of the SME instrument. Data from the implementing executive agency (EISMEA) indicate that 40% of proposals are rejected already at this first stage. In the last three years of Horizon Europe, the SME instrument phase 2 (by then already part of the EIC pilot) received around 11 400 proposals, around 50% more those received by the Accelerator in 2 years and 9 months (5528).

²¹ At the reference date, EIC resubmissions were not classified as separate proposals (unique case in the Framework Programme), which makes comparability of success rates with the rest of the FP (and with previous FPs) more difficult. However, the EIC public reports normally take into account all submissions for each call cut-off, including resubmissions.

²² A similar approach (only proposals that get to the last evaluation step can be considered high-quality) is followed also in certain calls of the European Research Council, which has a comparatively low rate of high-quality proposals too.

3. How does SME participation vary across Horizon Europe?

Main findings:

- Most Horizon Europe SME funding is allocated to participants in collaborative projects under the **Pillar II** of the programme (**€3.5 billion**). The SME-focused **Pillar III** follows closely with **€2.8 billion**, most of which come from the European Innovation Council.
- SME participation is significant throughout the programme, including in some academia-oriented actions. Still, most funding to SMEs comes from a few programme parts – the SME-only EIC Accelerator, plus consortia under “Cluster 4” and “Cluster 5”.
- **More than 70% of EIC funding goes to SMEs**, meeting programme targets.
- SME participation is high in both applied research (EIC, “Innovation actions”) and in more fundamental research projects (“Research and Innovation actions”).
- Horizon Europe leveraged **€1.9 billion in private co-funding from SMEs** (0.39 euro per every euro in public funding).

3.1. Total SME funding by programme part

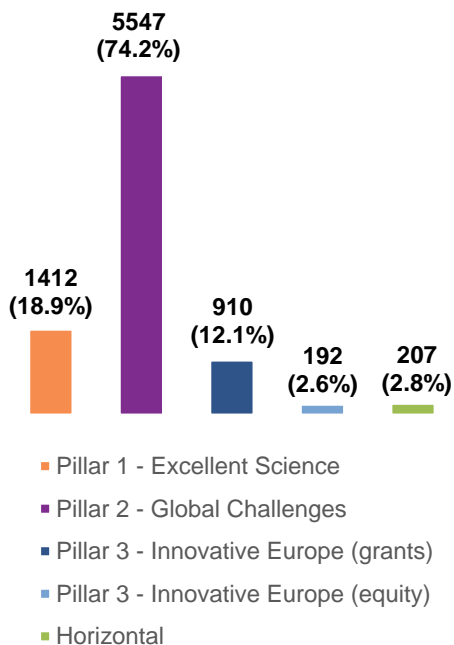
With few exceptions, participation of SMEs is significant throughout Horizon Europe pillars, even in areas that are not regularly associated with corporate R&I.

The “collaborative research” pillar II, which is also the largest part of Horizon Europe by funding, has the largest share of SME participation. Three-quarters of SMEs in Horizon Europe participate in Pillar II projects, and a majority of EU contributions are also channelled through this pillar (€3.5 billion). In terms of funding, Pillar III (“Innovative Europe”) follows closely with €2.8 billion. The €1.26 billion in equity encompasses slightly less than 20% of all funding to SMEs up to now. The other two pillars, whose beneficiaries are primarily research organisations and universities, play a residual role.

Pillar I, “Excellent Science”, is centred on academia (and academics) by design. The European Research Council (ERC) is the archetypal programme in this sense: coordinators – i.e., host organisations for Principal Investigators – are almost always major universities and research organisations. Nonetheless, there are a few funded SMEs even in ERC, mostly under the ERC Proof of Concept scheme, which has the objective of exploring the commercial exploitation potential of previously funded ERC frontier research.

SMEs play a substantial part in Marie Skłodowska-Curie actions (MSCA): with 1251 SME participants, they are effectively one of the programme parts attracting the most SMEs. However, EU financial contributions received by these organisations are minimal: in almost two thirds of all cases the SME participation is not funded. In around half such instances, the SME is an associated partner in MSCA Doctoral Networks – a scheme training PhD candidates who wish to develop their skills and step outside academia, in industry in particular.

SME participants (tot = 7474)



EU funding to SMEs

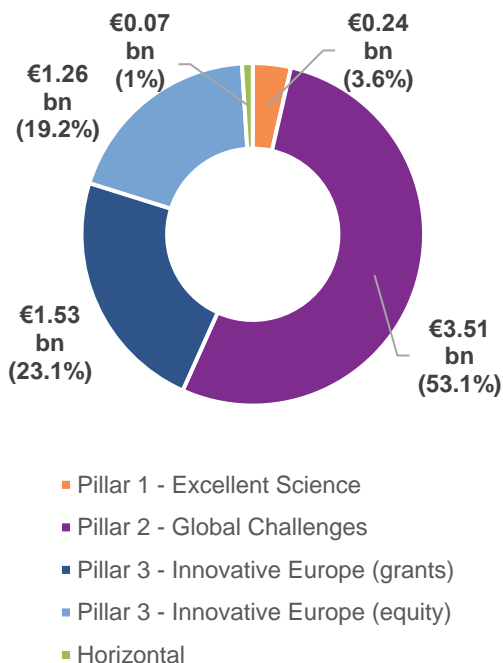


Figure 6a-b: Participation of SMEs by Horizon Europe pillars. Pillar III does not include the number of participants in EIT KICs and in the Innovative SMEs partnership. R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

The bulk of SME participation is under Pillar II collaborative projects. Calls and topics under Cluster 4 (“Digital, Industry and Space”) and Cluster 5 (“Climate, Energy and Mobility”) allocated over €1 billion in grants each to SMEs between 2021 and 2023, which is more than any other programme part; they also involve more SMEs than any other programme part. These two Clusters include several industry-focused European partnerships, which have a large budget and in some cases high SME participation too. **Put together, Cluster 4 and Cluster 5 calls financed SMEs with over €2.3 billion**, which is around one third of all SME funding in Horizon Europe.

It could appear surprising that Pillar III is not the part of the programme involving most SMEs. The figures for the EIC Accelerator may be particularly unexpected. In the Commission records there are 462 grants signed by SMEs between 2021 and December 2023, just 6.2% of all SME participants. Up to now, 192 of them also received equity investments via the EIC Fund – just 2.6% of all Horizon Europe SMEs. Nonetheless, this small pool of participants collected over one third of all SME EU contributions in the programme (€2.23 billion), almost half of which is in the form of EIC Fund approved investments.

Said that, the number of SME participants in Pillar III actions is higher than it currently appears. The Pillar III figure presented in this section does not include SMEs in indirectly managed actions such as the partnership on Innovative SMEs and the Knowledge and Innovation Communities of the European Institute for Innovation and Technology (see section 8).

What really stands out in how Pillar III actions – and particularly the EIC Accelerator – involve SMEs is the amount of financial support they receive. The very selected innovative

SMEs chosen under the Accelerator receive by far the highest average contribution per project across the programme. The EIC Fund plays a decisive role in increasing this mass even further. Comparatively, average grants in collaborative projects in Pillar II are relatively small, which reflect the role these SMEs play in projects: consortium members that do not play a leading role, and receiving thus only a fraction of all project funding.

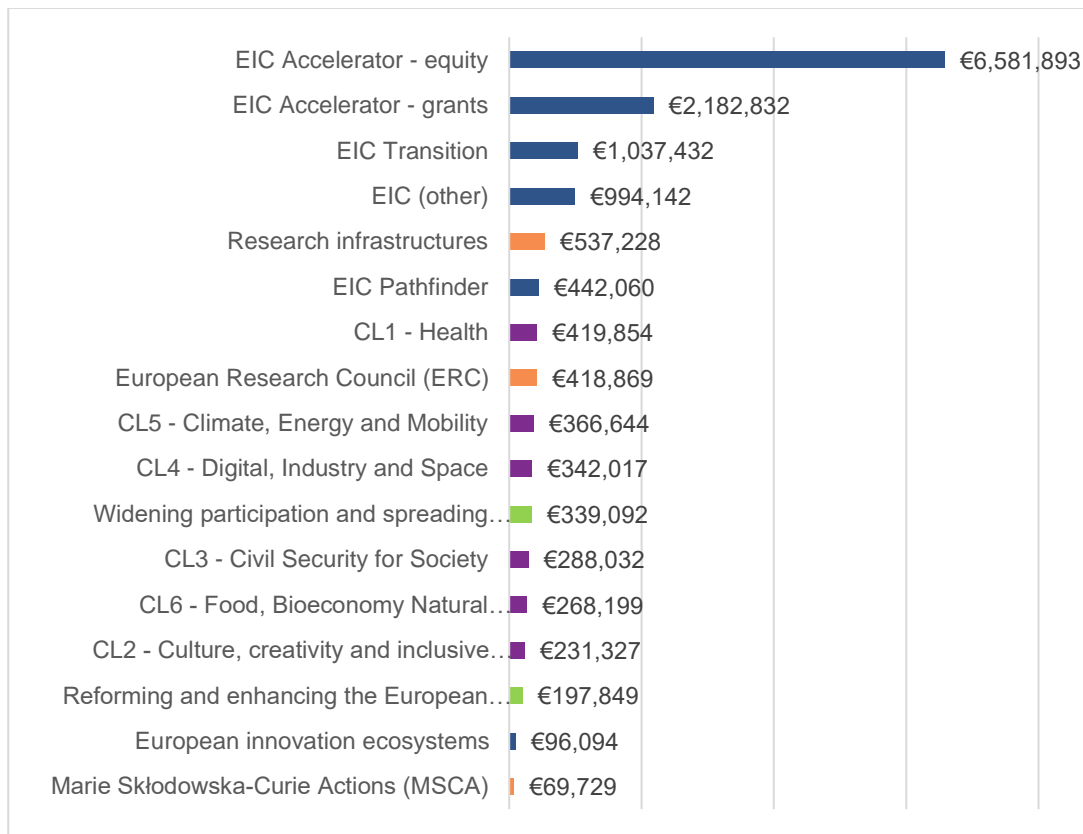


Figure 7: Average EU funding to SMEs per project, main Horizon Europe programme parts, 2021-2023 R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

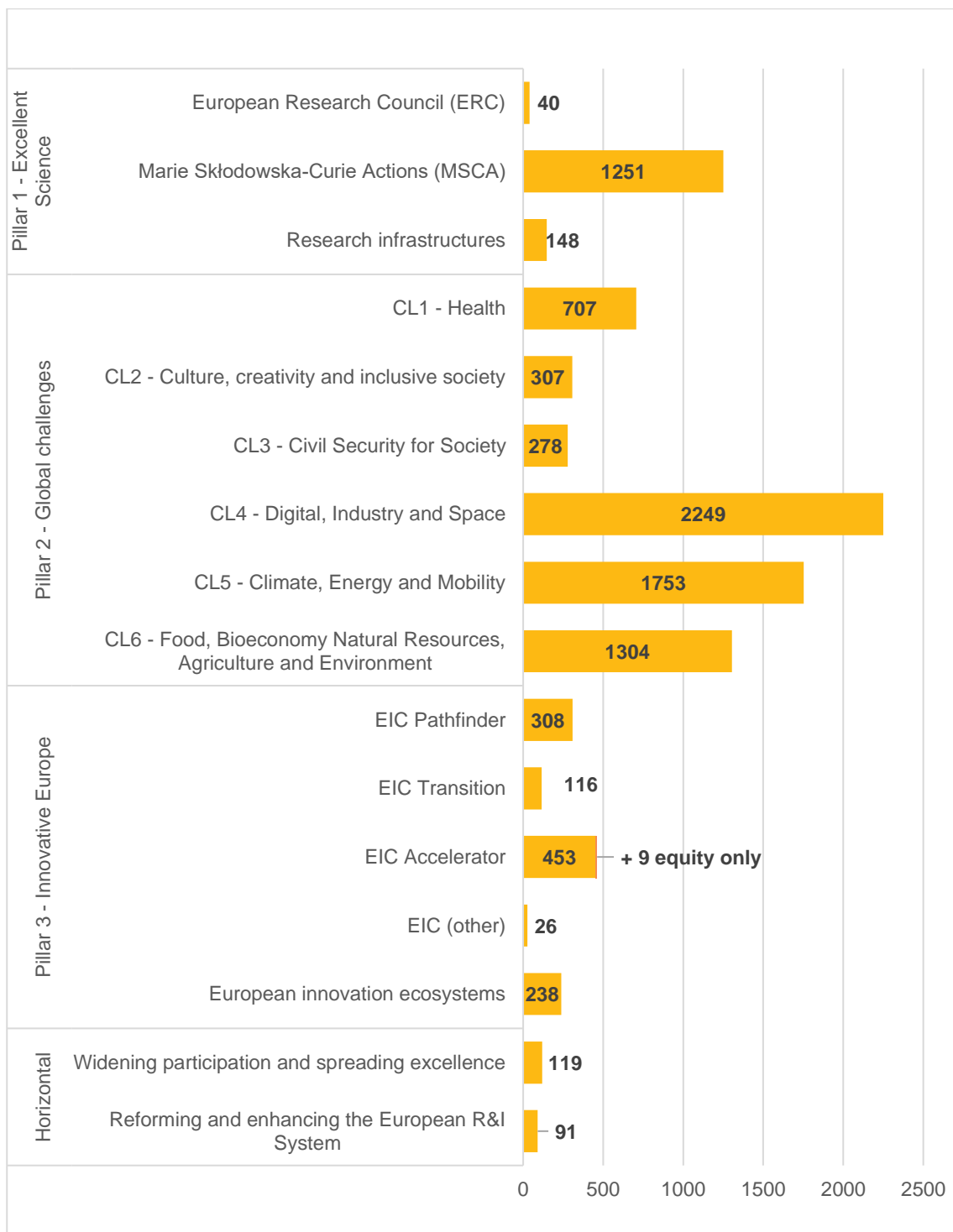


Figure 8: Number of SMEs in Horizon Europe by programme part
R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

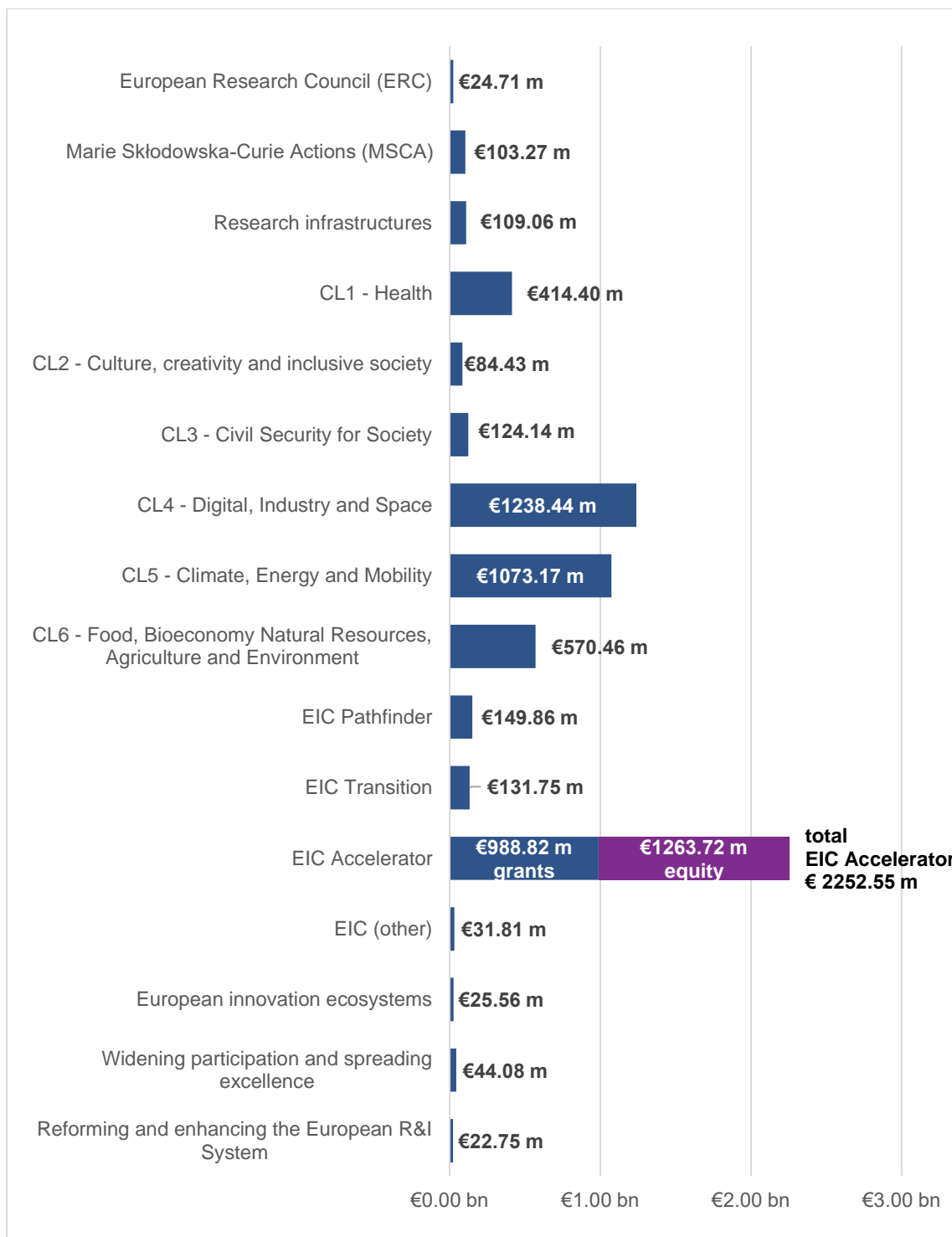


Figure 9: Total EU funding (incl. equity investment) to SMEs in Horizon Europe by programme part R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

3.2. Share of SME funding by programme part

The variation in SME participation by programme part is also influenced by their capacity, in terms of financial resources available and number of projects launched. The share of SMEs participating, and the share of total funding they receive (or “**intensity**” of participation), are better indicators of the extent to which a programme part (or a call for proposals, or a research topic) is SME-oriented.

Unlike in Horizon 2020²³, in Horizon Europe a target exists only for the European Innovation Council, which is to dedicate at least 70% of its *budget* to SMEs²⁴. **The EIC is on track with this target**, allocating well above 70% of its resources to SMEs. The EIC Fund is decisive for the EIC to reach the objective. If only grants are considered, just around 60% of EIC financial contributions go to SMEs.

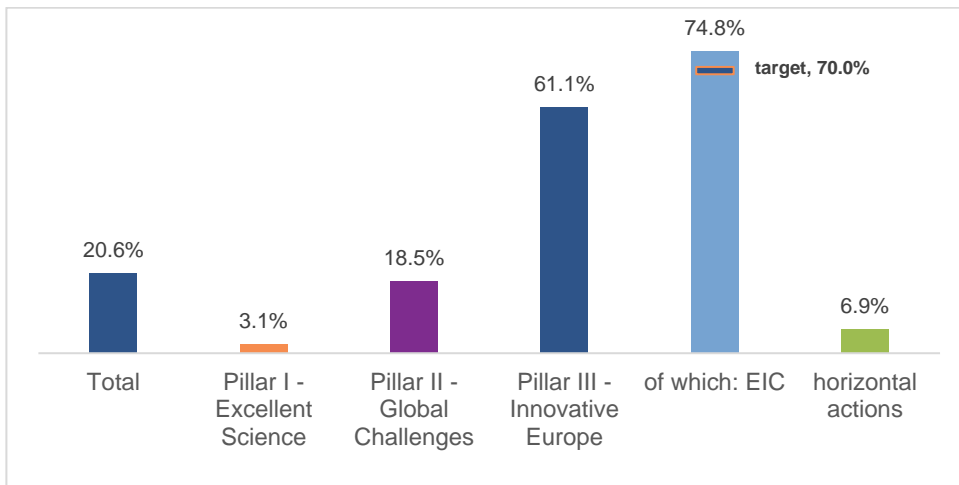


Figure 10: Share of funding to SMEs in Horizon Europe pillars. The figure for EIC includes only the part of its budget targeting Horizon Europe beneficiaries (EIC Fund investments for Horizon 2020 beneficiaries, which are also part of the EIC budget, are not included) R&I programmes’ monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

SME participation intensity varies considerably within pillars, especially Horizon Europe clusters and the EIC. Cluster 3 (“Civil Security for Society”) stands out, with 29% of its funding going to SMEs (€124 million). Most funding to industry participants in Cluster 3 goes in fact to SMEs.

In Pillar III, **relative SME participation varies greatly between programme parts**. In the EIC Pathfinder, which targets more fundamental research, the structure of participation is somewhat more similar to Pillar II clusters, with an important role for research organisations and universities. Beyond the EIC, the figure for the European innovation ecosystems programme is also not fully representative. This programme part encompasses the Innovative SMEs co-funded partnership. At the reference date, in central Commission

²³ As already mentioned in section 1.1, Horizon 2020 had a target of 20% of SME funding in the “Leadership in enabling and industrial technologies” (“LEIT”) objectives under the “Industrial Leadership pillar and in the whole “Societal Challenges” pillar. Final figures on SME funding intensity for relevant Horizon 2020 parts are presented in Appendix C.

²⁴ Horizon Europe regulation, article 9(2), “The European Innovation Council”

monitoring systems, only the recipients of the “envelope” grant supporting the partnership were recorded: these are mostly public organisations. In fact, most of the funding under this partnership is supposed to ultimately reach innovative SMEs (see section 8.2).

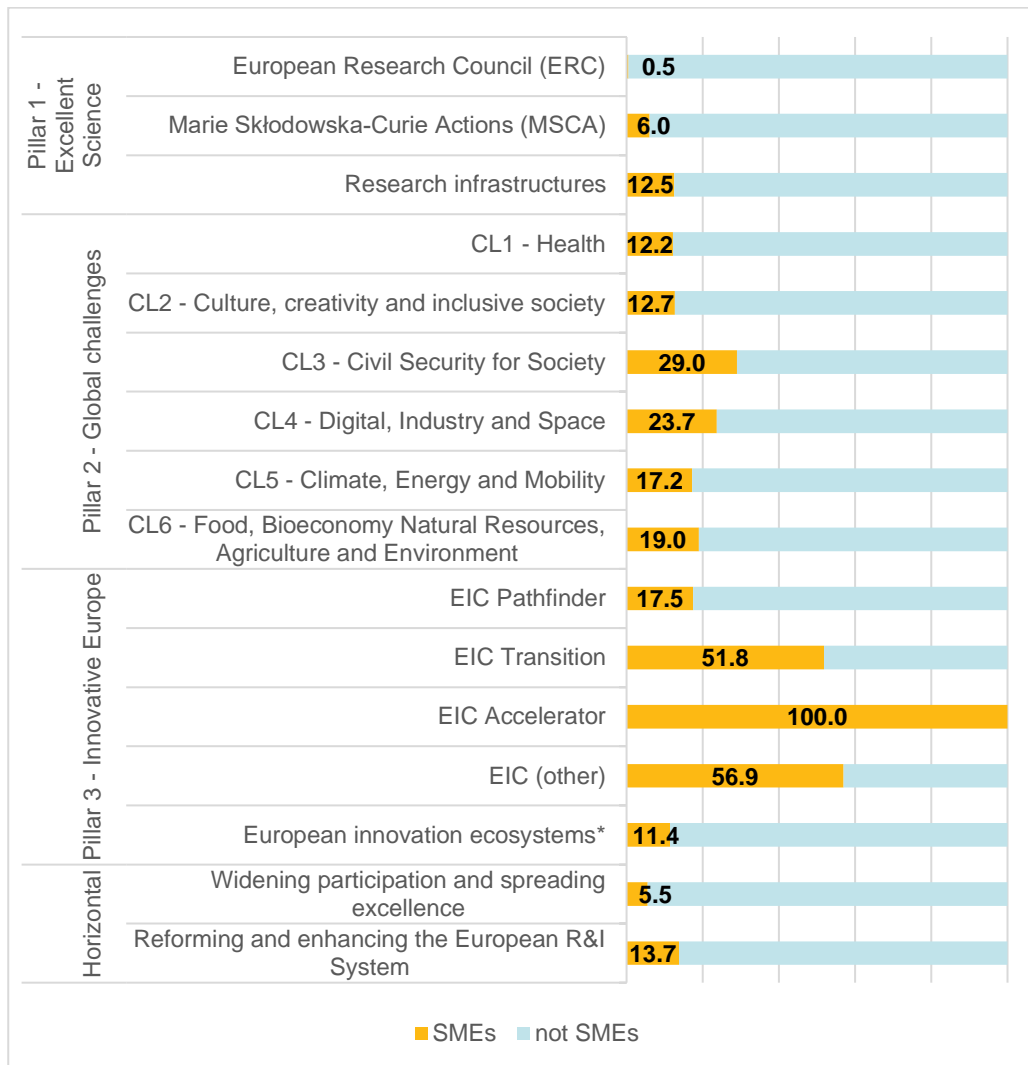


Figure 11: Share of funding to SMEs in Horizon Europe programme parts.
EIT KICs are not included.

European innovation ecosystems* does not include SME participation in the Innovative SMEs partnership.
R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024.

Calls for proposals that target SMEs specifically are rare. Most calls, particularly in Pillar II, cluster around 30% of SME participants and 25% of EU funding to SMEs, i.e. are similar to the programme average.

Even at a lower level, if the EIC Accelerator is excluded, few research topics have relative SME participation above 50%, either in terms of number of entities in funded projects or overall funding granted. However, a few cases of SME-majority topics can be identified. Table 5 shows the top-10 R&I topics per SME participation intensity. Many of these are launched by European partnerships, and specifically Joint Undertakings.

Pillar	Programme part	Topic code	Topic description	SME participation intensity (funding)
Pillar I	Research infrastructures	HORIZON-INFRA-2021-NET-01-SGA-2	SGA for investments on International connectivity and collaboration	99.2% (€14.8 m)
Pillar II	Food, Bioeconomy Natural Resources, Agriculture and Environment	HORIZON-JU-CBE-2022-IAFlag-01	Maximum valorisation of sustainably sourced bio-based feedstock in multi-product, zero-waste, zero-pollution biorefinery (CBE JU)	89.1% (€12.4 m)
Pillar II	Digital, Industry and Space	HORIZON-JU-SNS-2023-STREAM-CSA-01	SNS Societal Challenges (SNS JU)	88.4% (€0.8 m)
Pillar II	Digital, Industry and Space	HORIZON-CL4-2021-RESILIENCE-01-31	European Technological and Social Innovation Factory (RIA)	88.2% (€4.4 m)
Pillar II	Digital, Industry and Space	HORIZON-CL4-2021-HUMAN-01-08	NGI International Collaboration - Transatlantic fellowship programme (CSA)	88.0% (€1.7 m)
Pillar III	European innovation ecosystems	HORIZON-EIE-2021-SCALEUP-01-03	Women TechEU	88.0% (€3.3 m)
Pillar II	Food, Bioeconomy Natural Resources, Agriculture and Environment	HORIZON-JU-CBE-2022-IAFlag-02	Alternative sources for high added value food and/or feed ingredients (CBE JU)	87.1% (€12.1 m)
Pillar II	Climate, Energy and Mobility	HORIZON-CL5-2022-D2-01-11	CIVITAS 2030 – Coordination and support for EU funded urban mobility innovation	83.6% (€4.2 m)
Pillar II	Digital, Industry and Space	HORIZON-CL4-2021-RESILIENCE-01-27	Innovation Radar, Tech Due Diligence and Venture Building for strategic digital technologies (CSA)	82.3% (€3.3 m)
Pillar II	Climate, Energy and Mobility	HORIZON-CL5-2021-D3-02-01	Demonstration of wave energy devices to increase experience in real sea condition	82.2% (€7.9 m)

Table 5: Top-10 Horizon Europe R&I topics by share of funding to SMEs (EIC and EIT excluded). R&I programmes' monitoring system (CORDA), reference date 1 January 2024.

3.3. SME participation by type of action

EU R&I framework programmes offer different funding schemes. Called “**types of action**” in technical terms, these are differentiated for the scope of activities that are funded, as well as their reimbursement rate. Some **collaborative actions**, like **Research and Innovation actions** (RIA), aim at relatively more fundamental, exploratory research, with lower technology readiness levels (TRL). The majority of Horizon Europe projects are RIAs. They also receive most funding and the EU covers in principle 100% of project costs for these actions. There are then **Innovation actions** (IA), which are more applied and market-oriented, for which the EU normally only covers up to 70% of project costs. The same 70% funding rate is applied for EIC Accelerator grants, meaning that participants must contribute at least 30% of project costs with their own resources.

The main source of SME grants in Horizon Europe – €1.9 billion – are Research and Innovation actions. This means that many SMEs join projects that have relatively low TRL, i.e. they are not immediately oriented towards market adoption. Moreover, they also do not require the participant to cover their costs with own resources, which is certainly attractive for young enterprises with little revenues and sales volume.

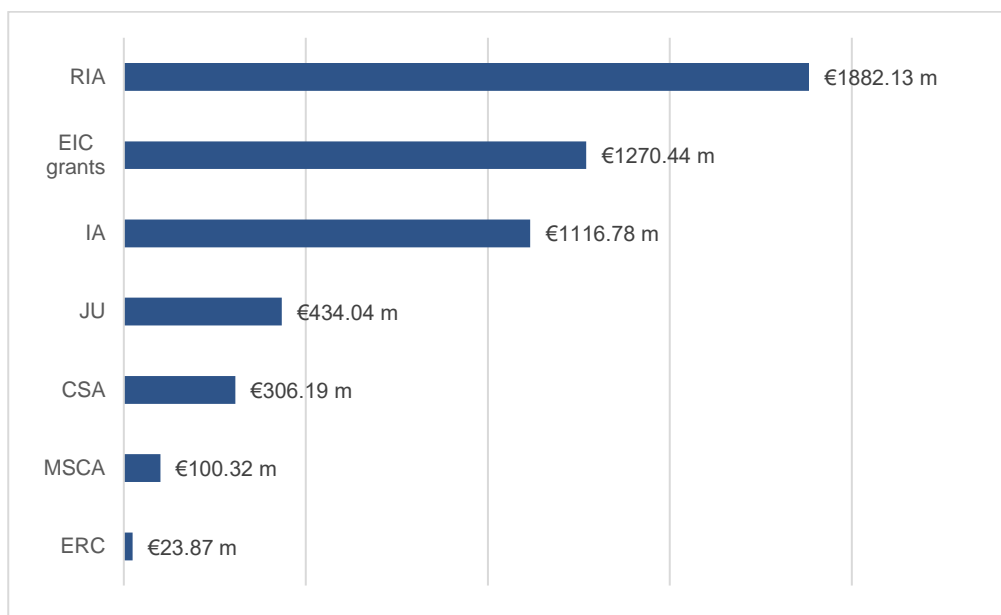


Figure 12: Funding to SMEs by main Horizon Europe type of action. R&I programmes' monitoring system (CORDA), reference date 1 January 2024. EIC Fund (100% SMEs, 1.26 bn) not included.

On the other hand, SME participation *intensity* is the highest in the EIC (60.2% of all *grants*, equity part excluded). IAs follow with 22.5% of funding allocated to SMEs. The difference with RIAs is however relatively small (5 percentage points), which suggest that the composition of research consortia is similar between RIAs and IAs.

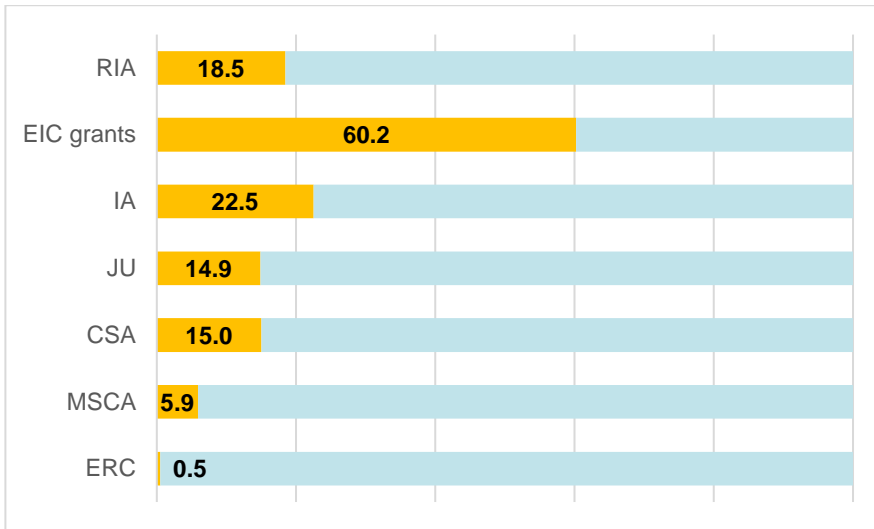


Figure 13: Share of funding to SMEs by main Horizon Europe type of action. R&I programmes' monitoring system (CORDA), reference date 1 January 2024. EIC Fund (100% SMEs) not included.

Approximately 15% of all EU funding in **Joint Undertakings** went to SMEs (€434 million). This may appear low for public-private partnerships. However, JUs have very different participant profiles and as such diverging rates of SME participation. Some, like the Circular Bio-based Enterprises JU, have very high SME participation. Others are instead dominated by large industries, or by research organisations, and have thus lower or even negligible SME participation.

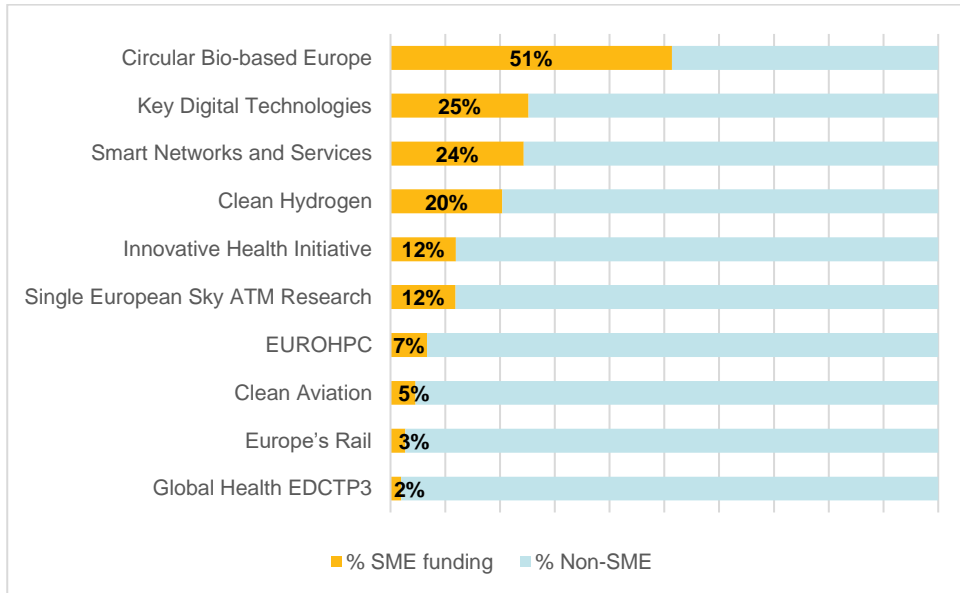


Figure 14: Share of funding to SMEs in Horizon Europe Joint Undertakings. R&I programmes' monitoring system (CORDA), reference date 1 January 2024.

3.4. SME co-funding of projects

Overall, Horizon Europe leveraged at least €1.9 billion in SME own resources. This means that, thanks to the direct contribution of SMEs, Horizon Europe research projects have a significantly increased budget. This is equivalent, up to now, to a **leverage ratio** (co-funding divided by total EU contributions) of around **0.38**, meaning that SMEs bring to projects at least 38 cents for every euro in EU funds they receive. Much of this funding comes from EIC projects, whose SMEs contributed with almost €1 billion up to now. Leverage ratios are the highest in Joint Undertakings, where the in-cash contribution of SMEs is around 50 cents per euro.

Type of action	SME own contribution	Average funding rate	Leverage factor
EIC	€960.0 m	57%	0.43
IA	€435.1 m	71%	0.29
JU	€423.1 m	50%	0.50
RIA	€50.2 m	97%	0.03
COFUND	€2.9 m	40%	0.60
CSA	€6.4 m	97%	0.03
ERC	€0.6 m	97%	0.03
Total	€1.9 billion	62%	0.38

Table 6: Funding leveraged by SMEs in Horizon Europe by main type of action. R&I programmes' monitoring system (CORDA), reference date 1 January 2024.

Some actions not included due to data gaps (MSCA, EIT, procurement, prizes), and EIC Fund due to different definition used for "leverage".

This figure on leverage is partial and expected to increase – it does not include hundreds of projects for which the data is not yet available in central Commission monitoring systems (e.g. on third-country participants and MSCA actions). It also does not take into account the additional **venture capital funding** collected in finalised EIC Fund investment rounds – which can be finalised only once private actors have invested in the company at least as much as the EU, i.e. they have matched the EU investment one-to-one.

4. Did funding from *NextGenerationEU* make a difference?

Main findings:

- Between 2021 and 2023, the Horizon Europe budget was supplemented with €5.5 billion from the NextGenerationEU investment programme for post-pandemic recovery.
- At 1 January 2024, more than one quarter (**€1.43 billion**) of all grants to SMEs in Horizon Europe **can be traced to the NGEU budget top-up**.
- **There is evidence that topics with NGEU support have prioritised SME involvement**, particularly in the EIC and in some collaborative actions.

For its first three years only (2021-2023), the Horizon Europe budget has been supplemented with €5 billion (around €5.5 billion in 2023 prices) from the emergency NextGenerationEU (NGEU) instrument, the major EU investment programme (over €800 billion) aimed at driving Europe's recovery from the COVID-19 pandemic. Article 13(2) of the Horizon Europe regulation states that NGEU resources should be allocated as a priority to innovative SMEs, and that special attention should be paid to their integration in collaborative projects under Pillar II.

This financial top-up has been allocated to four parts of the programme: three clusters of Pillar II, Cluster 1 (Health), Cluster 4 (Digital, Industry and Space), and Cluster 5 (Climate, Energy and Mobility), and the European Innovation Council, specifically the EIC Transition and EIC Accelerator schemes (grant component only). These four programme parts are the most relevant for SME participants: together, they encompass over 75% of all SME financial contributions in Horizon Europe.

As of 1 January 2024, we can estimate²⁵ that, out of the total €5.5 billion available, €4.46 billion have already been allocated to signed grant agreements (with many more grants still in preparation at the reference date). SMEs received approximately €1.43 billion, i.e. slightly less than one third (32.1%) of the NGEU funding available. From a different perspective, 26.8% of all the grants SMEs received in Horizon Europe up to now are from NGEU. If we include equity funding as well, the share of NGEU funding over all SME funds from the programme is 21.7%.

The majority of NGEU funding in Horizon Europe has been channelled via the EIC (€679 million), where NGEU resources make up for an estimated 50% of all SME grants. The role in Pillar II clusters is less pronounced, but quite significant in Cluster 1, where over 40% of all SME funding can be reconducted to NGEU support.

²⁵ There is no explicit correspondence between NGEU resources and specific funded projects, meaning that it is not possible to tell precisely how much NGEU funding were assigned to specific projects and participants. This can however be estimated by multiplying (i) the share of budget for each topic coming from NGEU and (ii) the amount of EU funding within each topic that was received by the group of beneficiaries of interest.

Programme part	NGEU grants (all entities, estimate)	NGEU grants to SMEs	% grants to SMEs (total)	% grants to SMEs (NGEU-funded actions)	% NGEU over all SME grants
Cluster 1 - Health	€1,328,726,696	€176,624,424	12.2%	13.3% (+1.1 pp)	42.6%
Cluster 4 - Digital, Industry and Space	€1,149,590,923	€286,656,752	23.7%	24.9% (+1.2 pp)	23.1%
Cluster 5 - Climate, Energy and Mobility	€1,258,194,888	€288,024,712	17.2%	22.9% (+5.7 pp)	26.8%
European Innovation Council	€725,192,369	€679,799,816	60.2%	93.7% (+30.5 pp)	52.2%
Total (NGEU-supported programme parts)	€4,461,704,876	€1,431,105,704	23.6%	32.1% (+9.5 pp)	35.5%

Total SME grants (Horizon Europe)	€5,334,590,843	17.3%	26.8% (21.7% incl. EIC equity)
--	-----------------------	--------------	---------------------------------------

Table 7: NextGenerationEU funding to SMEs in Horizon Europe.

European Commission own estimation, from R&I programmes' monitoring system (CORDA and Call Preparation System) and EIC Work Programmes 2021-2023. Reference date 1 January 2024.

As shown in Table 7, the share of NGEU funding to SMEs is higher than overall “SME intensity” of funding (as per Section 3.2) in all programme parts supported, and especially so in Cluster 5. **There is evidence that NGEU resources have been strategically targeted to R&I topics that have higher SME participation.** This programme design choice is clear in the EIC, where NGEU supplements only Accelerator calls and to a lesser extent the Transition scheme – these have exclusive or majoritarian SME participation.

Demonstrating the same within Pillar II is less straightforward. However, when comparing similar types of actions (NGEU-supported and not), there is enough evidence to say that topics with NGEU support have funded SMEs more. In proportion, innovation actions under both Cluster 4 and (especially) Cluster 5 involve and fund SMEs much more when NGEU resources are available. The same effect however is not visible in all types of actions: it is small in less innovation-oriented RIAs, and it is completely missing in non-research Coordination and Support Actions.

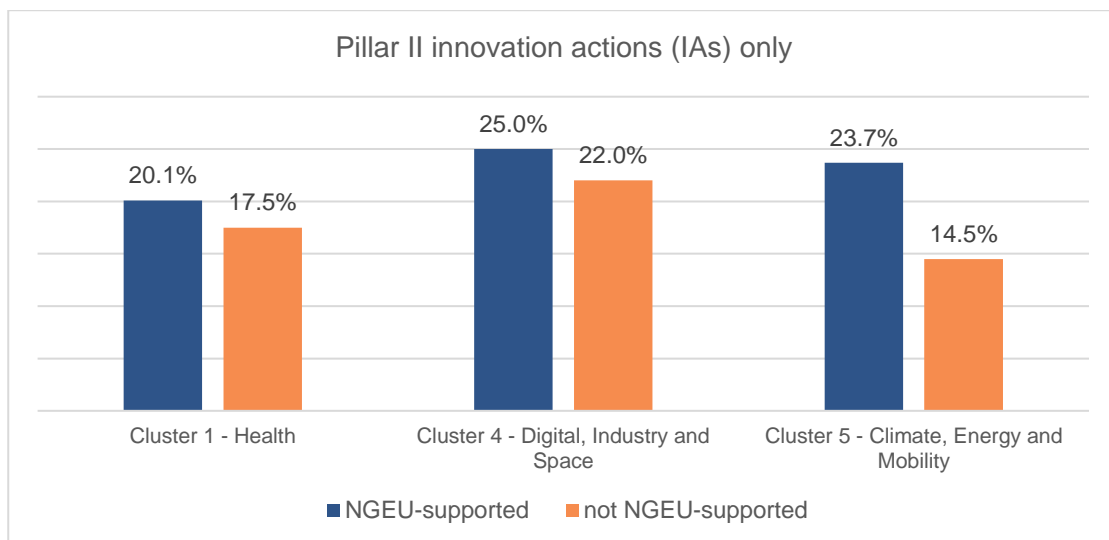


Figure 15: Intensity of SME participation (% EU contributions to SMEs) in Horizon Europe innovation actions is higher when there was financial support from NextGeneration EU.
European Commission own estimation, from R&I programmes' monitoring system (CORDA).
Reference date 1 January 2024.

The impact on SME involvement of the phasing out of the NGEU top-up from 2024 onwards will need close attention in the second part of Horizon Europe. The EIC, where some topics at the beginning of the programme were entirely NGEU-funded, has already steadily diminished in more recent calls the proportion of NGEU resources that it uses, but the rate of support for Accelerator grants was still around 30% in 2023.

5. How does SME participation vary by country?

Main findings:

- **Every 2 out of 10 000 SMEs in Europe participate in a Horizon Europe project.** This ratio is higher in countries with higher performance in R&I (2.34) than in the 15 Widening countries (1.31).
- The **country distribution of EIC Fund investments mirrors the size of the venture capital market in Europe**, with a large gap between frontrunners and other countries.
- **Success rates of applications are increasing everywhere**, with some countries having an exceptional improvement.
- **900 SMEs** that submitted a high-quality proposal for EIC Accelerator but were not funded received a **Seal of Excellence**.

This section offers a brief overview of main metrics for country participation in Horizon Europe. A full table with participation indicators used in this report is added in appendix A.

5.1. Number of SME participants by country

5.1.1. Absolute figures

Obviously, the largest EU economies have more Horizon Europe SME participants. On 1 January 2024, the top 5 countries – Germany, Spain, Italy, France, and the Netherlands, in this order – have more than 500 SME participants each, and encompass slightly less than half (49.1%) of all SMEs in Horizon Europe.

Overall, two-thirds of SMEs in Horizon Europe (67.8%) come from the 12 EU Member States that are considered high-performing in R&I. The remaining **Widening countries** – i.e. the 13 EU Member States that joined in the last 20 years, plus Greece and Portugal – are home to just 18.2% of all programme SMEs. The two best performing countries in this group are specifically Greece (367) and Portugal (176), while more populated central and eastern European Member States such as Poland (115) and Romania (69) lag further behind. Nonetheless, in Widening countries, beneficiary SMEs generally represent a higher *share* over all participants than in other EU countries.

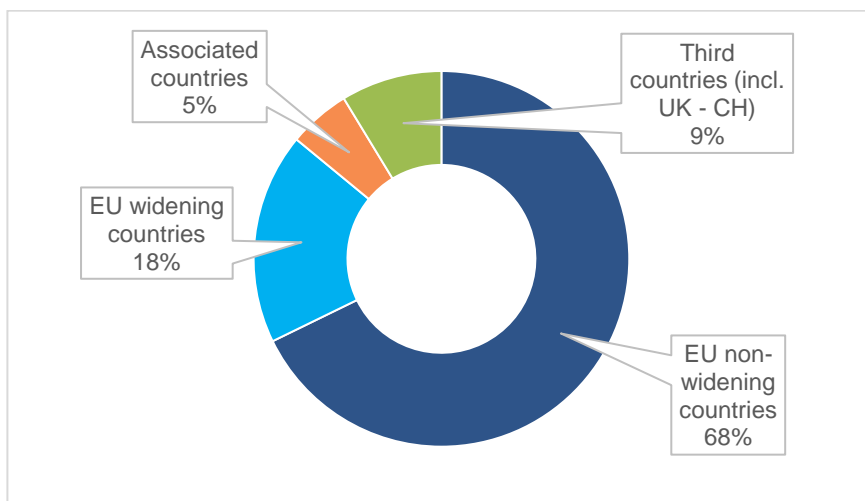


Figure 16: Share of SME participants in Horizon Europe by main country groups. R&I programmes' monitoring system (CORDA). Reference date 1 January 2024.

Among Horizon Europe associated countries²⁶, more than 60% of SME participants come from only two countries, Norway (166) and Israel (82). These two (and Iceland) are the only ones of the 17 associated countries at the reference date where SMEs represent a high share of programme participants (in line with or above FP average). In other associated countries, research institutions and universities tend to dominate, and SME participation is uncommon.

²⁶ Associated countries are non-EU countries which, based on an agreement with the Commission, can participate under equivalent conditions as legal entities from EU Member States.

As of 31/12/2023, these were: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Kosovo*, Moldova, Montenegro, New Zealand (for Pillar II only), North Macedonia, Norway, Serbia, Tunisia, Türkiye, Ukraine. The United Kingdom has become associated from 1 January 2024 and falls therefore just outside the scope of this analysis.

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Almost 9% (650) of SME participants come from non-associated third countries. This high share is due to the fact that two major countries that were earlier full participants, the United Kingdom and Switzerland, were not associated to the programme in its first three years.²⁷ These make up 85% of all participants from countries that were not EU Member States nor associated to the programme. As per participation rules for third countries, most UK and Swiss SMEs are not funded by the EU. Even if general participation has decreased in the UK and in Switzerland compared to Horizon 2020, SME involvement has remained high, with more SMEs involved in projects than in any associated country. Both countries have in place guarantee schemes²⁸ to ensure financial support for entities joining research consortia, which apparently have proved useful for SMEs and have helped maintain reasonably high levels of participation.

5.1.2. Relative share of SME participants in EU Member States

While absolute SME participation numbers by country give useful hints, their level is mostly determined by the size of each country's economy. A better measure to understand relative levels of SME participation is a ratio between total Horizon Europe participants and the number of SMEs that are based in a given country.

The number of SMEs in each country and economic sector, with SME status approximated by use of employment class only, is collected by Eurostat²⁹. For most EU countries, data is available for 2022 at latest.

EU SMEs participating in Horizon Europe are 0.02% of the approximately 31.4 million SMEs in the 27 EU Member States, **or 2.01 per 10 000 enterprises**. The ratio is significantly higher in the 12 high-performing R&I Member States (2.34) than in the 15 Widening countries (1.31), which indicates that participation in these countries is low compared to their population of active enterprises.

Of course, the comparison with the total number of SMEs is rough: it would be better to use as reference the total population of research-performing SMEs, or even better of innovative SMEs. While estimates of the size of this population exist (see Introduction), they exclude microenterprises, which – as Section 6.2 will show – are a substantial fraction of Horizon Europe participants.

Country-level variation is large, and does not fit neatly the Widening/non-Widening country dichotomy. Two small Widening countries, Cyprus and Estonia – as well as the smallest non-Widening one, Luxembourg – occupy the top spots in the ranking. Cyprus has an exceptionally high share, with above 0.1% of the country's SMEs being a Horizon Europe participant. This trend is not specific of Horizon Europe, as it was also visible in Horizon 2020³⁰. Participation of SMEs from Cyprus is very highly concentrated in

²⁷ The UK is associated to Horizon Europe since 1 January 2024.

²⁸ UK scheme: <https://www.ukri.org/publications/horizon-europe-guarantee-scheme-ukri-guidance/>
Swiss scheme: <https://www.sbf.admin.ch/sbf/en/home/research-and-innovation/international-cooperation-r-and-i/eu-framework-programmes-for-research/horizon-europe/transitional-measures.html>

²⁹ Enterprise statistics by size class and NACE Rev.2 activity (from 2021 onwards) [sbs_sc_owv]. For simplicity, we use as denominator the entire population of SMEs in a country, even if most Horizon Europe SMEs fall only in certain knowledge-intensive economic sectors – see section 6 for more details.

³⁰ See share of participants per 1000 scientists and engineers and by country R&D expenditures, COMMISSION STAFF WORKING DOCUMENT EVALUATION Accompanying the document REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL Ex-post evaluation of Horizon 2020, the EU Framework Programme for Research and Innovation, SWD/2024/29 final, p. 20, p. 33 and Annex VI (especially fig. 59).

collaborative actions under pillar II, typically in Greece-led research consortia – the two countries have very similar SME participation patterns, indicating a high specialisation to win grants under collaborative actions.

The bottom of the ranking is also occupied by **Widening countries**, and specifically by central and eastern European Member States (Poland, Slovakia, Romania, Czechia, Hungary), which **all have ratios of less than 1 SME participant per 10 000 SMEs**. There are also some non-Widening countries in the bottom half of the ranking, particularly Italy (1.5 SMEs per 10 000) and France (1.38). The difference between Italy and Spain (1.5 against 2.6) or between France and Germany (1.38 against 2.77) is a clear indication of different propensity of SMEs in either country to become involved in R&I framework programmes.

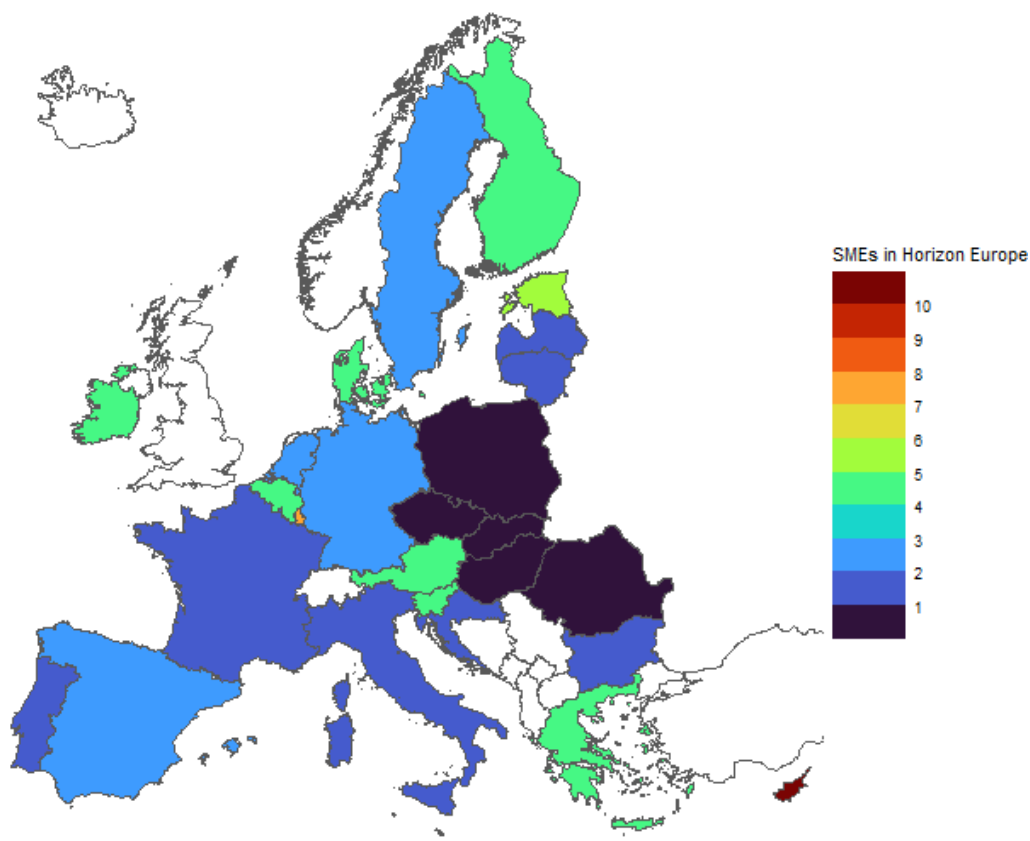


Figure 17: SME participants in Horizon Europe per 10 000 SMEs in EU countries. R&I programmes' monitoring system (CORDA) and Eurostat (sbs_sc_ovw). Reference date 1 January 2024 (for SMEs in Horizon Europe), 2022 (for Eurostat)

In broad terms, more Horizon Europe SME participants come from countries that have a better R&I performance. If the 27 EU Member States are classified according to the performance groups of the European Innovation Scoreboard (last edition: 2023³¹), a significant correlation emerges between the share of SMEs and being, on one end, an “Innovation leader” and, on the other end, a “moderate” or “emerging” innovator country.

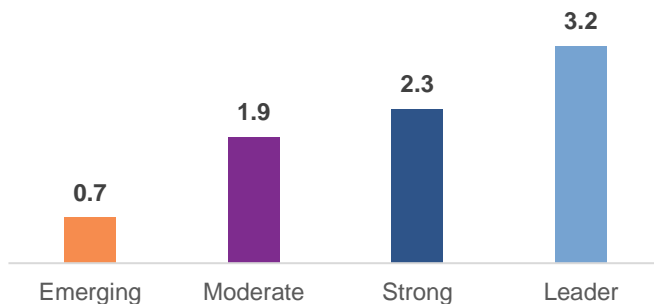


Figure 18: Share of SMEs in Horizon Europe per 10 000 participants by European Innovation Scoreboard performance group. R&I programmes’ monitoring system (CORDA), Eurostat (sbs_sc_ovw), and European Innovation Scoreboard 2023

While it works at aggregate level, the country Innovation score itself is not a very good predictor in many cases – Estonia and Czechia have very similar Innovation scores but are almost at the opposite ends of SME participation rankings. The ratio of SMEs in FP projects in each EU Member State correlates more strongly with one of the sub-indicators that compose the EIS, the presence of “**Innovative SMEs collaborating with others**”. It has a much weaker correlation instead with other SME-specific sub-indicators, namely self-reported propensity to introduce product or process innovations (see appendix).

5.2. EU funding to SMEs by country

The ranking for Horizon Europe funding allocated to SMEs by country is not the same as the one for participants. The most funded countries are France, Spain, and Germany, in this order, with the Netherlands significantly ahead of Italy. In this case, **the first four countries encompass almost 50% of programme funding.**

³¹ European Commission, Directorate-General for Research and Innovation, Hollanders, H., *European Innovation Scoreboard 2023*, Publications Office of the European Union, 2023, <https://data.europa.eu/doi/10.2777/119961>

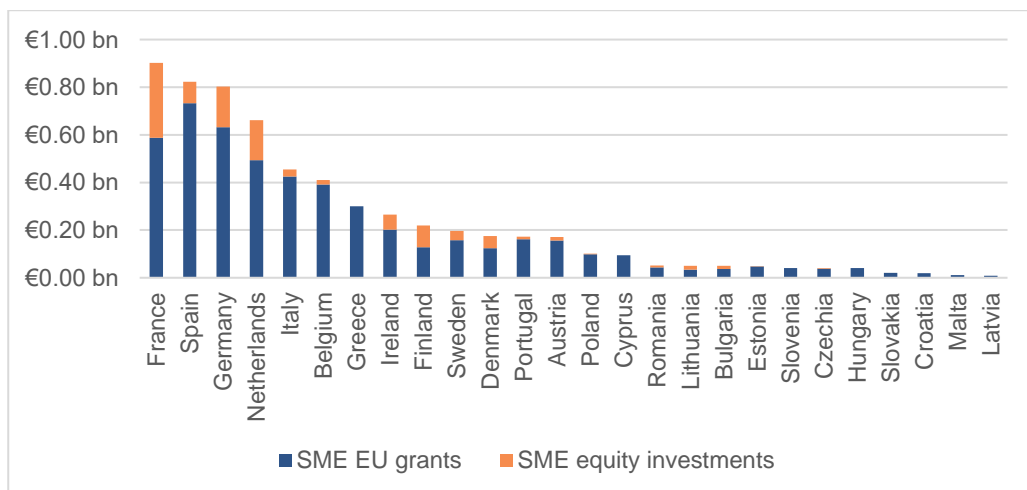


Figure 19: Horizon Europe funding to SMEs, 2021-2023, EU countries. R&I programmes' monitoring system (CORDA) and EIC Fund monitoring system. Reference date 1 January 2024.

Under this metric, varying success under the **EIC Fund** really makes a difference. French entities received over €310 million in equity investments, almost double than any other country. This is enough to overtake in the overall ranking Spain (first by grant funding, but only sixth for equity) and Germany (ranking second in both respects).

It is clear that the stronger concentration and innovation orientation of Horizon Europe funding is benefiting SMEs from some Member States more than others. Italian SMEs received just €29 million in EIC Fund investments, which is less than many smaller countries, like the Nordics (Sweden, Denmark, Finland, non-EU member Norway), Ireland, or associated country Israel. Greece, which has over 360 SME participating in Horizon Europe, has not yet received any EU equity investments.

The EIC Fund ranking replicates quite closely the distribution of VC investment by country in the EU³², with France and Germany clearly ahead of the others, the Nordics playing an outsized role, and some Member States such as Italy having a relatively small market. The VC ecosystem is particularly small in widening countries, and this is also visible in EIC Fund data: SMEs in these 15 countries obtained less than 5% of all EIC Fund investments in the programme.

If we consider instead the intensity of SME funding – how much of the total funding received by beneficiaries from a country goes to SMEs – this is higher in Widening countries than in non-Widening ones, as 25% of all EU funding to Widening countries goes indeed to SMEs (against 20.2% for the other 12 EU Member States). This demonstrates how this indicator is only meaningful when shown together with the *volume* of funding that goes to these countries.

The fact that a higher proportion of EU funds is allocated to SMEs does not mean higher SME participation: it may mean instead that participation of larger entities – and, especially, the number of coordinators – is lower in these countries, and hence SMEs make up a larger percentage of the funds received. For example, Czechia, the country with the lowest SME funding intensity among EU Member States, has a relatively high share of coordinators over total FP participants.

³² <https://dealroom.co/uploaded/2023/10/Dealroom-Funding-Venture-Conference.pdf?x67760>

5.3. SME success rates and quality of applications by country

Success rates of SME applications are much improved compared to the past throughout Horizon Europe, and this can easily be seen at country level too. The share of successful applications improved in all countries, to similar rates between widening (from 10% to 18.3%) and non-widening countries (from 12.7% to 21%).

The extent of the variation is not homogeneous between countries and country groups. Slovenia, which used to have one of the lowest SME success rates in Horizon 2020, now boasts the second best one (almost 15 percentage points increase), just behind Belgium, which was topping the ranking in Horizon 2020 too. The second largest increase is observed in Finland (+13.9 pp). Today, all countries towards the bottom of the ranking are widening countries, while this was not the case in the previous programme.

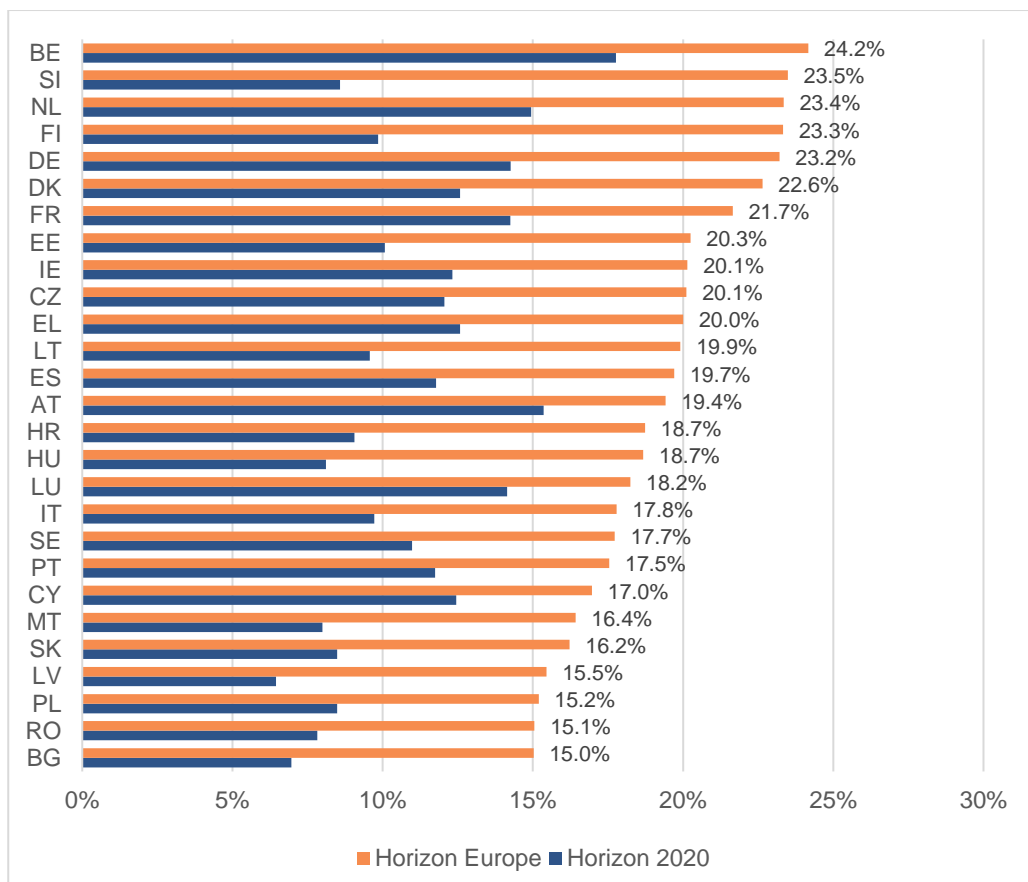


Figure 20: Success rate of SME applications in Horizon 2020 and Horizon Europe, EU countries. R&I programmes' monitoring system (CORDA). Reference date 1 January 2024.

The improvement in SME success rates goes hand in hand with the **increase in the quality of proposals involving SMEs**, which as earlier observed is one of the clearest discontinuities between the two programmes – in mono-beneficiary and consortium-based actions alike. The unintended effect of this is high oversubscription rates in all EU countries: in many Member States at least two thirds, if not three-quarters, of all high-quality proposals remain unfunded.

5.4. Use of the Seal of Excellence for unsuccessful SME proposals

Horizon Europe remains a highly selective programme where only a minority of high-quality proposals can be funded. The **Seal of Excellence (SoE)**³³ quality label, first introduced in Horizon 2020, is awarded to some excellent project proposals that could not be funded due to budgetary constraints. Its intent is specifically to encourage other funding organisations – especially at national level, e.g. with European regional development funds – to take these proposals onboard, exploiting the fact that they have already undergone a rigorous selection process. Under Horizon Europe, the Seal of Excellence is awarded under certain Marie Skłodowska-Curie actions, Widening actions (teaming), the Mission on Adaptation to Climate Change, and some schemes under ERC³⁴ and the EIC.

The most relevant scheme for SMEs where the Seal of Excellence is awarded is the EIC Accelerator. By 2024, 964 Accelerator proposals received a Seal of Excellence. These involve **900 distinct SMEs**, which are around 18% of all distinct applicants for the Accelerator. These SMEs requested EU funding for around €7 billion – approximately two thirds in equity investments, the rest in grants.³⁵ This is more than three times the total financial contributions issued to EIC Accelerator successful proposals.

The country distribution of Seal of Excellence recipients under the Accelerator is similar to the distribution of funding: it is somewhat unbalanced in favour of the countries that have a more dynamic and well-funded start-up ecosystem. Just 8% of awarded entities come from EU widening countries – less than associated country Israel only, which makes up for over 10% of all SoEs under the scheme (third-highest share, behind Germany and France).

Since the number of SoE beneficiaries under the EIC Accelerator is by now considerable, it is essential to find ways to monitor “uptake” of the instrument – i.e., how many firms have eventually received funding for SoE-awarded proposals – at national and local level, from either public or private funding schemes. While **there is no legal obligation for Member States and beneficiaries to report progress on SoE uptake**, evidence has been collected through the Seal of Excellence Community of Practice. More than 30 support schemes for EIC at both regional and/or national level have been implemented in 18 countries.³⁶ Moreover, several Member States (such as Spain³⁷) have exploited the opportunity of creating synergies between Horizon Europe and the Recovery and Resilience Facility (RRF).

³³ For more information: https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/seal-excellence_en

³⁴ Seals of Excellence are used in the ERC Proof of Concept (PoC) scheme. Out of 113 entities awarded with a Seal of Excellence under ERC PoC, 5 of them are classified as SMEs.

³⁵ According to EISMEA implementation data.

³⁶ An example from the Brussels Capital Region, Belgium: <https://innoviris.brussels/program/seal-excellence-0>

³⁷ “Spain awards funding to 19 EIC Seal of Excellence awardees”, europa.eu, 24 May 2023: https://eic.ec.europa.eu/news/spain-awards-funding-19-eic-seal-excellence-awardees-2023-05-24_en

6. What are the characteristics of Horizon Europe SMEs?

Main findings:

- Horizon Europe SMEs are concentrated in **knowledge-intensive sectors** such as scientific and technical activities, manufacturing, and ICT. Compared to the past, the **share of manufacturing participants is declining**.
- At least one third of participant SMEs are specifically “micro-enterprises” (less than 10 employees or €2 million turnover). The EIC mostly funds somewhat larger enterprises.
- **27% of participant SMEs have been incorporated for less than five years**. The share of young companies increases to 50% in the EIC Accelerator. However, **the average Horizon Europe SME is not a start-up**, and is significantly older than in Horizon 2020 (13.1 years against 10.7).

Most corporate beneficiaries of Horizon Europe are SMEs. As shown in Figure 21 below, SMEs represent a majority of all private (for-profit) entities participating in Horizon Europe (53.1%). They receive also over half of all grants allocated by the programme (50.3%), and an even bigger share (approx. 64%) once the EIC Fund investments are included.

In the R&I Framework Programmes’ taxonomy, not all SMEs are classified as “private for-profit” companies. When other dimensions for classification are more relevant – e.g. the entity is a research centre incorporated in company form, or a non-profit – this will be captured by the monitoring system. However, an SME flag will be still applied if the company meets the criteria of the EU definition, in terms of corporate form, independence, staff headcount and balance sheet metrics.

This offers already a first intuition about the diversity of activity of SMEs in the programme. In practice, around 12% of SME participants are not “private for-profit entities”. Around 4% are research centres, and 7% are classified as “other”, a grouping that encompasses civil society organisations and the non-profit world. Indeed, in this group, 17% of all participants are SMEs.

The distinction between for-profit and non-for-profit SMEs is sometimes useful for a better understanding of the role that SMEs play in projects (see section 7), but it does not tell much on the characteristics of their economic activity. This information is not collected systematically across the Framework Programme, but it can be obtained by matching company data with external data sources.

% SME participants

% funding to SMEs (grants only)

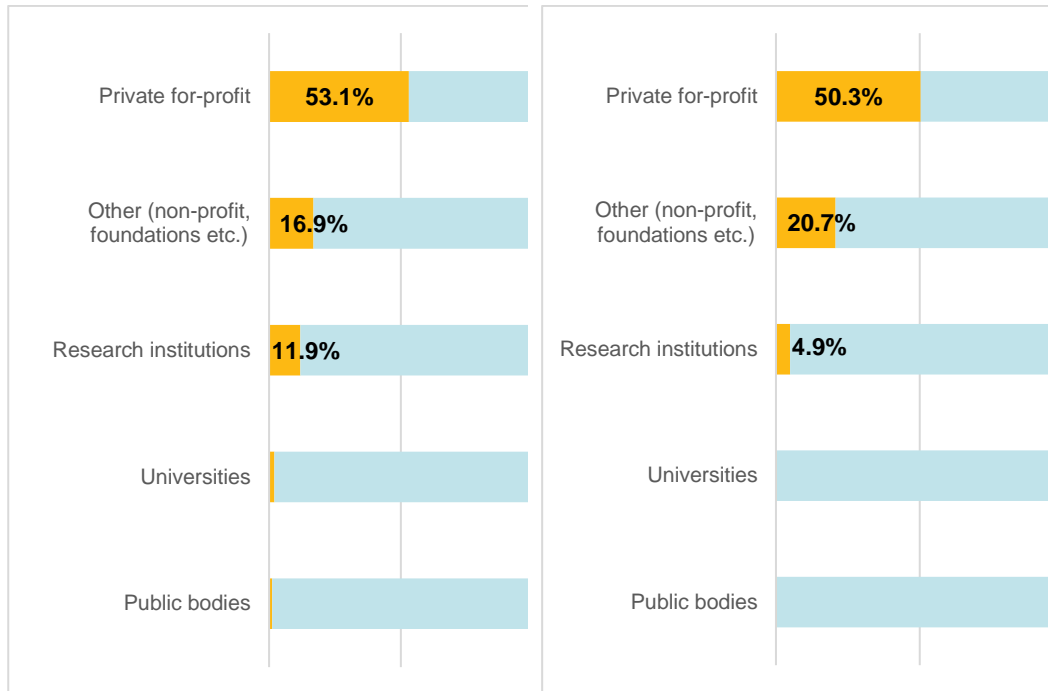


Figure 21 a-b: Share of SME participants and SME grants in Horizon Europe by the programme's legal entity taxonomy European R&I programmes' monitoring system (CORDA). Reference date 1 January 2024.

6.1. Distribution by economic sector

A first impression of the activity of SMEs can be obtained by looking at **NACE codes**³⁸, a common classification of economic activity in the European Union. The most reliable data on economic activity can be obtained through matching with external databases³⁹.

Enterprise participation in the R&I Framework Programme is concentrated in three economic sectors: "Professional, scientific and technical activities" (NACE "M" section), Manufacturing (NACE "C" section) and Information and Communication technology ("ICT", NACE "J" section). Over 80% of Horizon Europe SMEs are grouped under these three economic sectors, and this was the case also under Horizon 2020.

Horizon Europe SMEs represent a specific subset of the EU's SME population. The three dominant sectors in the programme represent, combined, just around 28% of all companies with less than 250 employees in the EU. Low-tech sectors that are dominant – in terms of number of enterprises – in the European economy, such as retail trade and construction, have very limited representation in Horizon Europe, compared to the more tech-intensive sectors that make up most FP participants.

³⁸ Specifically, NACE revision 2 main section codes, 2008 version. For an overview, see <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>

³⁹ Orbis, from Moody's Analytics: <https://www.moody.com/web/en/us/capabilities/company-reference-data/orbis.html>. NACE codes are available for three-quarters (75.4%) of Horizon Europe SMEs. For Horizon 2020 coverage is higher (93.1%).

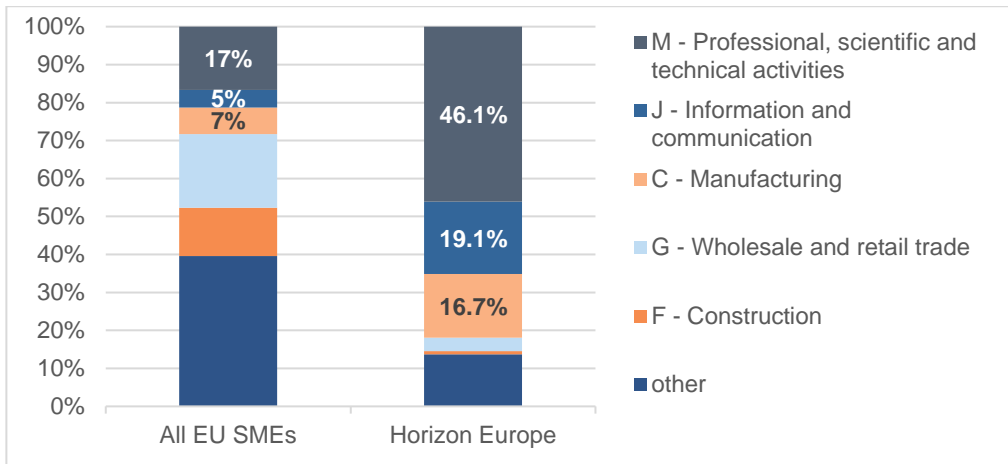


Figure 22: Share of SMEs by NACE main section, all EU SMEs (2022) and Horizon Europe participants
European Commission own calculation. Sources: Eurostat (sbs_sc_ovw – only entities with less than 250 employees), R&I programmes' monitoring system (CORDA), and Orbis.

While the share of participation for the three dominant sectors has remained constant between Horizon 2020 and Horizon Europe, there is compositional difference between the two programmes. In Horizon Europe we observe a **generalised decline in the share of manufacturing participants** (around 4.5 percentage points) and a further increase in the “Professional, scientific and technical activities” sector, that now encompasses almost half of all participants. A slight decline can also be observed in the ICT sector.

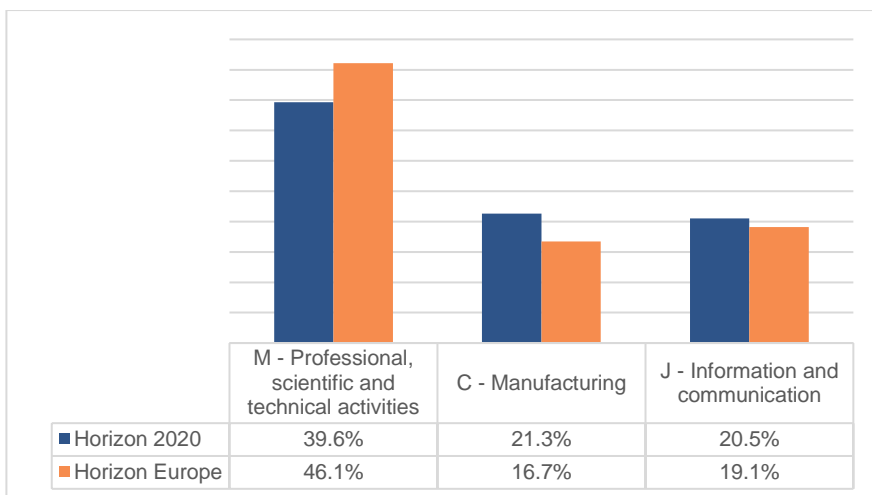


Figure 23: Share of SMEs by NACE main section, top 3 classes, Horizon 2020 and Horizon Europe.
European Commission own calculation. R&I programmes' monitoring system (CORDA), and Orbis.

The relative fall in the numbers of manufacturing participants, and the increase of entities from the “M” class of scientific and technical activities, is particularly influenced by the transition between the Horizon 2020 SME instrument and the EIC Accelerator. **Participation of manufacturing SMEs is much lower in the EIC Accelerator compared to the SME instrument, its phase 2 especially.** Most participants in the Accelerator fall under the “M” class, while this was much less the case for its predecessor.

NACE Rev. 2 main section	M - Professional, scientific and technical activities	C - Manufacturing	J - Information and communication
EIC Accelerator	50.2%	20.3%	20.3%
SME instrument phase 1	35.5%	26.6%	20.9%
SME instrument phase 2	35.6%	29.3%	19.0%
rest Horizon 2020	46.8%	13.6%	19.2%
rest Horizon Europe	47.5%	11.9%	18.4%

Table 8: Share of SMEs by NACE main section, top 3 classes, SME-oriented actions in Horizon 2020 and Horizon Europe. European Commission own calculation. R&I programmes' monitoring system (CORDA), and Orbis.

6.2. Distribution by category of SMEs

The European definition of SMEs identifies three sub-categories of enterprises, also identified on the basis of their staff headcount, turnover, and balance sheet total:

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

The distribution of R&I FP participants between SME sub-classes is not systematically monitored by the European Commission. There are, in fact, no special conditions for participation associated to SME sub-classes, which makes reporting obligations in that sense unnecessary for grant management purposes. Information on the size class of Horizon Europe SMEs can be obtained via external databases, even though considerable data gaps exist. Valid SME type is available for around 3400 SME participants, i.e. 46% of all SMEs in Horizon Europe.⁴⁰

Over three-quarters of SME participants in Horizon Europe are specifically micro and small enterprises. These received around 70% of funding available, whether grants or equity. A majority of EIC Accelerator successful applicants are “small” enterprises, i.e. they have either more than 10 employees or more than 2 million in yearly turnover. These are particularly common among companies supported by the EIC Fund, where they are around two-thirds of supported entities.

“Small” and “medium-sized” enterprises show patterns somewhat similar to those seen for non-SMEs. They participate in a relatively high number of projects and obtain high average grants. The funding value for specifically small enterprises is particularly boosted by the contribution of the EIC Fund.

⁴⁰ This figure will underestimate the number of the smallest enterprises, as it excludes very new entities that never filed their accounts: for these, no SME status can be calculated.

SME category	% SMEs	% SME funding	avg. projects per SME	avg. funding per project
Micro company	35.1%	24.0%	1.8	€380,153
Small company	42.1%	47.6%	2.2	€514,944
Medium company	22.8%	28.5%	2.4	€525,972

*Table 9: Share of SMEs by SME category (as per EU definition) and main descriptive statistics
European Commission own calculation. R&I programmes' monitoring system (CORDA), EIC Fund data, and Orbis.
Reference date 1 January 2024. Figure available for 46% of Horizon Europe SMEs.*

At programme part level (see Figure 24), some interesting deviations from average are the high share of micro-enterprises participating in the European innovation ecosystems programme (over half), as well as in the Transition scheme under the EIC. In Pillar II clusters, Cluster 3 ("Civil security for society") is dominated by micro and small enterprises. Medium-sized companies are relatively more common in the EIC Pathfinder and in certain Pillar II programme part, such as Cluster 4 and 5, which have more industry-oriented and have (as seen in Chapter 2) the highest number of SME participants.

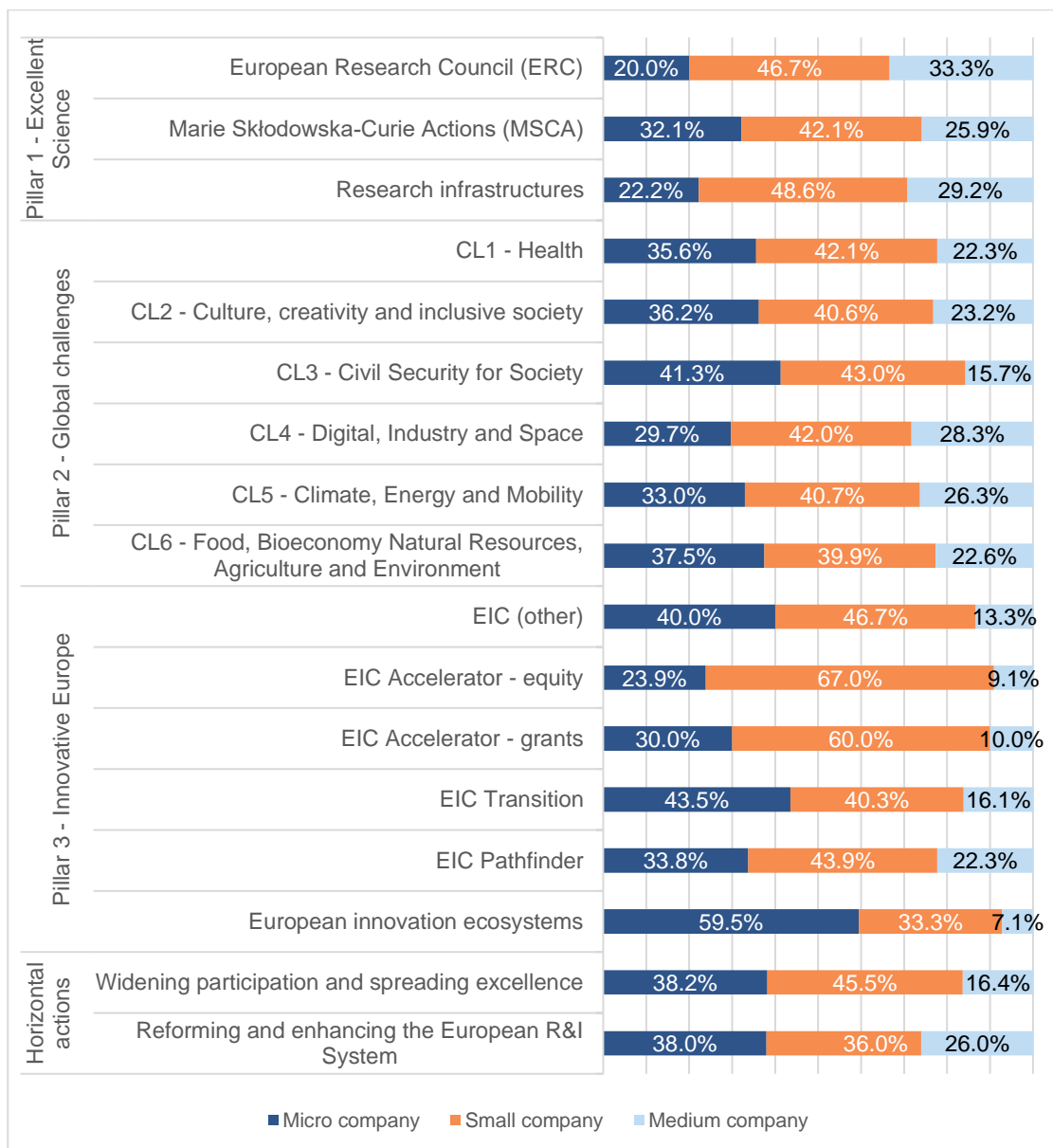


Figure 24: Share of Horizon Europe participants by SME category, main programme parts. European Commission own calculation. R&I programmes' monitoring system (CORDA), EIC Fund data, and Orbis. Reference date 1 January 2024. Figure available for 46% of Horizon Europe SMEs.

6.3. Horizon Europe and “start-ups”

In R&I programmes, SMEs are often conflated with the concept of start-up. While SMEs are precisely defined in EU law, no EU-wide definition exists for “start-up”⁴¹. **The Horizon Europe regulation uses a simple operational definition of start-up:** “an SME in the early stage of its life cycle, including spin-offs, which aims to find innovative solutions and scalable business models, and which is autonomous”⁴².

In this report, a company is considered young if it has been incorporated for less than 5 years, which is in line with the definition used in EU Member States that have a start-up definition, such as Italy⁴³.

According to this definition, Horizon Europe involved *at least* **2017** start-ups, or **27%** of all SMEs in the programme. They received **€2.15 billion**⁴⁴ (32.9% of all SME contributions) – €1.6 billion in grants, the remaining €530 million as equity investments.

Most SMEs in Horizon Europe are mature companies: at time of signing its first grant agreement, the average Horizon Europe SME was **13.1 years old**. This is two years and a half more than in Horizon 2020 (10.7 years). Median age also suggests that Horizon Europe SMEs are on average somewhat older than in the previous programme (nine years old against seven). Horizon 2020 had more start-up participants over all SMEs, but start-ups in Horizon Europe are receiving more funding than in the past.

Overall, Horizon Europe attracts a more “mature” public of SMEs than its predecessor. The transition between the SME instrument and the EIC Accelerator has only a partial influence on this metric. The average Horizon Europe SME is an older company than the average Horizon 2020 SME also if the mono-beneficiary SME programmes are excluded. Moreover, EIC Accelerator participants are actually younger than in the SME instrument, and the median age is very similar across these programmes.

50% of the EIC Accelerator beneficiaries are less than 5 years old, with blended finance participants being slightly older overall. This is still much younger than in most other programme parts. Indeed, average age and startup rate are much lower in all Pillar III parts – the EIC, but also the European innovation ecosystems programme – than in the rest of the programme. As shown in Figure 25, Pillar II clusters mostly attract SMEs that are over 10 years old.

The finding above on EIC Accelerator participants means that 50% of entities in the Commission’s “start-up programme” are not start-ups according to the definition used in this report. Still, the fact that half of EIC Accelerator beneficiaries are not very young companies does not tell much on their potential to innovate and grow: some older companies can be innovative too. While the share of young companies is a useful indicator to monitor, it is not the only factor that matters to identify innovative companies.

⁴¹ There is consensus that a start-up is a young company, operating in technologically innovative sectors – or introducing technological innovation in traditional economic sectors - with high potential for growth. These three elements have been codified by legislators in different ways, with some definitions excluding one or more of these criteria. For an overview, see European Commission, Directorate-General for Research and Innovation, Vandresse, B., Costa Cardoso, J., Attorr, R., et al., *European startup scoreboard : feasibility study*, Publications Office of the European Union, 2023, <https://data.europa.eu/doi/10.2777/254834>

⁴² Definition found in recital (47) to the Horizon Europe regulation.

⁴³ For more information on the Italian “innovative start-up” legal definition, see <https://www.mimit.gov.it/it/impresa/competitivita-e-nuove-imprese/start-up-innovative>

⁴⁴ If grants provided to EIT KICs are excluded, total funding to young SMEs is around €2 billion.

Programme (part)	Mean age SMEs	Median age SMEs	% start-up participants	% EU funding to start-ups
All Horizon Europe	13.1	9	27.0%	32.9%
EIC Accelerator	5.7	4.5	50%	48.5%
Rest Horizon Europe	13.5	10	26.3%	26.1%
All Horizon 2020	10.7	7	38.5%	29.4%
SME instrument phase 1	7.7	4	54.2%	54.1%
SME instrument phase 2	8.3	5	44.4%	45.6%
Rest Horizon 2020	11.9	8	32.0%	22.1%

Table 10: Statistics on age of SMEs in Horizon 2020 and Horizon Europe, including share of participants less than five years old ("start-ups"), SME programmes highlighted.

European Commission own calculation. R&I programmes' monitoring system (CORDA), EIC Fund data. Reference date 1 January 2024.

Main programme part	mean age	median age
EIC Accelerator	5.7	4.5
European innovation ecosystems	7.3	3
EIC Transition	7.9	5
EIC Pathfinder	10.3	7
EIC (other)	12.0	5.5
CL1 - Health	12.2	10
CL3 - Civil Security for Society	12.3	10
CL4 - Digital, Industry and Space	14.0	10
Widening participation and spreading excellence	14.2	13
Reforming and enhancing the European R&I System	14.4	11
Marie Skłodowska-Curie Actions (MSCA)	14.4	11
CL5 - Climate, Energy and Mobility	15.1	11
European Research Council (ERC)	15.2	9
CL2 - Culture, creativity and inclusive society	16.7	12
CL6 - Food, Bioeconomy Natural Resources, Agriculture and Environment	17.5	14
Research infrastructures	17.9	15

Table 11: Horizon Europe SMEs by age at first participation (mean and median), main programme parts Commission own calculation. R&I programmes' monitoring system (CORDA). Reference date 1 January 2024.

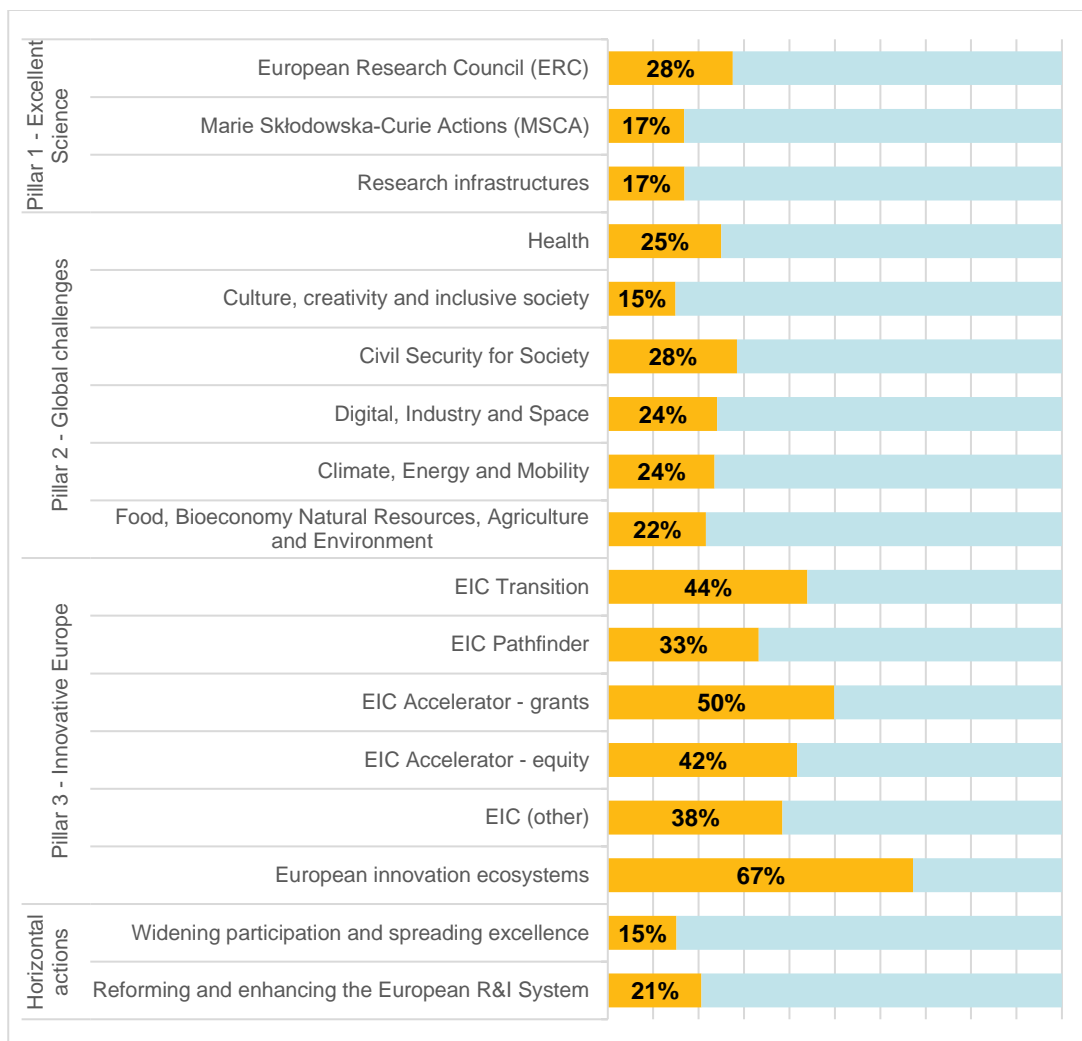


Figure 25: Share of Horizon Europe SMEs less than 5 years old, main programme parts. European Commission own calculation. R&I programmes' monitoring system (CORDA), EIC Fund data. Reference date 1 January 2024.

7. What is the role of SMEs in projects?

Main findings:

- With the exception of the EIC Accelerator, most Horizon Europe SMEs are partners in project consortia coordinated by larger organisations.
- The most distinctive role of SMEs in Pillar II collaborative projects is **technology developer**. SMEs also have a higher propensity to **perform research directly** than larger companies, as well as to engage in **patenting** activities.
- **SMEs are less likely to provide own infrastructure** to the project – however, they do so in **33% of all cases**.

The overwhelming majority of SMEs in Horizon Europe (87.4%) are partners in research consortia coordinated by another entity – typically a university, a research organisation, or a large company. **SMEs rarely coordinate projects**: they take up this role in around 8% of all projects they participate in. This includes the EIC Accelerator, where SMEs are the only focal point. In collaborative projects under Pillar II, the percentage falls below 3.5%.

Since SMEs are rarely leading projects, it is important to develop monitoring tools capturing what is their role in research consortia⁴⁵.

The most distinctive role of private for-profit⁴⁶ SMEs in Pillar II collaborative projects is that of **technology developer** (57% of all project participations): this share is higher than any other type of entity in the programme, and around 8 percentage points more common than for large companies. SMEs tend also to perform research directly more often than bigger companies. A typical role of companies in Horizon Europe for which, instead, large corporates are more dominant is testing and validation of new ideas. Prototyping and demonstration, and co-definition of research, also see larger representation of big enterprises.

Compared to research institutions, private for-profit participants are less likely to provide their own technology infrastructure. SMEs are particularly less likely to provide infrastructural support, but it is remarkable that they still do so in one third of all cases. This suggests that many SMEs in the programme have enough fixed capital to act to provide tools, machinery and spaces to projects – while conventional wisdom would expect that they have to rely on larger partners to do so. Relative to other entities, and large corporates in particular, SMEs report higher propensity to engage in exploitation activities, namely IPR management.

The vast majority of SMEs in Pillar II projects combine roles with a clear research and innovation component with a more generalist role. While virtually all SME participants declare at least one “R&I role” (97%), 70% of SMEs also declare at least one “non-R&I” function⁴⁷. As most Horizon Europe applicants, SMEs often plan to perform

⁴⁵ In Horizon Europe, applicants may indicate in their application form the role each participating organisation plays within the consortium. The form lists 17 possible roles, and applicants can select multiple ones (with no limit). This information is available in reporting for virtually all successful applicants, with the exception of ERC and EIC Accelerator.

⁴⁶ For this analysis it is useful to make a distinction between SMEs that are classified as private for-profit entities and those that are not, e.g. research centres or civil society organisations, as these have a distinctly different role in projects (see table in Appendix B).

⁴⁷ For the purpose of the analysis, the following roles are described as “non-R&I”: communication, project management, policy-maker, private buyer, public procurer, civil society representative, finance provider, other role.

communication, dissemination and engagement activities: this is particularly true of SMEs that are not classified as private for-profit, many of which are educational bodies or civil society representatives.

Just one quarter of SME project participations in Pillar II are for project management duties. In fact, statistics from these reporting questions suggest that this role is primarily performed by the coordinators of project consortia, and therefore rarely assigned to SMEs.

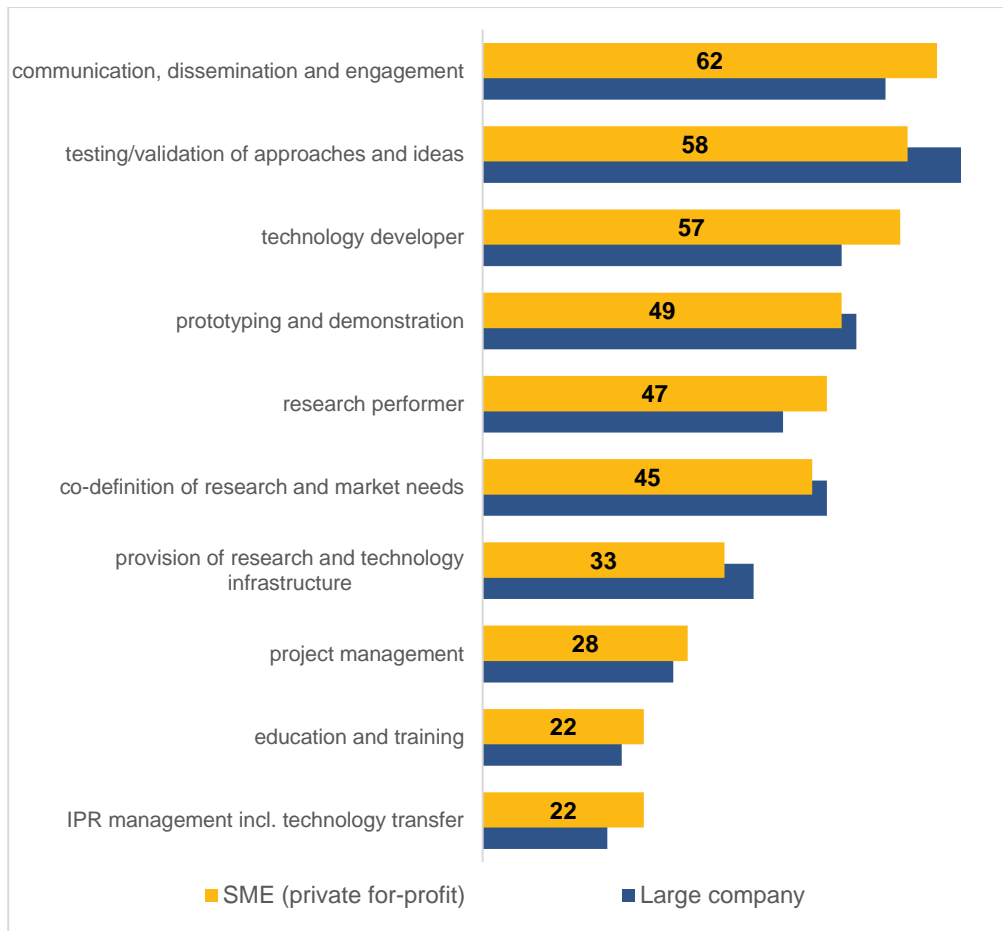


Figure 26: Role of SMEs (private for-profit) and large companies in Horizon Europe Pillar II projects, top-10 roles. European Commission own calculation. R&I programmes' monitoring system (CORDA), Reference date 1 January 2024.

The role of SMEs is somewhat different across Horizon Europe clusters. SMEs with a communication role are more common in Cluster 2 (where over 75% of participations are for this role) and Cluster 6. In Cluster 4 and 5, which are more industry-oriented and where SME participation is highest, development of technologies and testing are more commonly declared as roles than communication. This again points to the diversity of SME participants in the programme: while levels of participation might be similar across collaborative research parts, the actual contribution of SMEs (and, therefore, the relevance of their participation for R&I outcomes) changes in meaning depending on the topic of projects.

8. What data are we still missing? Some evidence from indirectly managed actions

Not all Horizon Europe funding schemes are directly managed by the European Commission and its agencies. **Some programme parts adopt a “cascade funding” model**, where the Commission issues a grant to an entity (or a consortium) which is entrusted to redistribute the funding based on its own call system (and its own grant management tools). As a result, the beneficiary initially captured by central monitoring systems will be the entity arranging these “second level” calls, and not the ultimate recipient of EU funding.

This process is typical of some European partnerships⁴⁸, of which the most relevant for SMEs are actions managed by EIT Knowledge and Innovation Communities (section 8.1) and co-funded partnerships (section 8.2). Forms of cascade funding is also increasingly used in some non-partnership actions, under the name of “Financial support to third parties” (section 8.3). **Some of these actions are expected to have high SME participation**: however, due to data collection limitations, this cannot be captured in the same way of the rest of the “directly managed” programme. These are typically available with a time lag; moreover, data quality and completeness are reliant on effective technical cooperation between the Commission and the bodies managing the grants, as well as accurate reporting from participants.

8.1. EIT Knowledge and Innovation Communities

While an autonomous body, the European Institute of Innovation and Technology (EIT) is an integral part of Horizon Europe. It is funded out of the programme budget (around €3 billion for the 2021-2027 period) and is classified under the “Innovative Europe” Pillar III, underlining its mission to strengthen technology transfer and innovation ecosystems in Europe.⁴⁹

The EIT funds nine⁵⁰ “Knowledge and Innovation Communities” (EIT KICs). KICs are private legal bodies, institutionalised European Partnerships bringing together universities, research organisations, companies and other stakeholders. The transfer of research results to business, and SMEs in particular, is a key objective of KICs. This includes business creation and support to start-ups, including financing but also education, consulting, and more.

Participation in EIT funded actions is currently available for 2021 and 2022 only. Figures indicate that SMEs are major participants in KIC activities (or KAVA, “KIC Added Value Activities”). **Over 1400 KAVA partners are SMEs**, which is 36.8% of total participation. In Energy and Climate KICs, SMEs make up around half of KAVA partners.

⁴⁸ The same mechanism is used for an entity that is not a European Partnership, the €153 million grant issued to the COST association (<https://www.cost.eu/>). Data on COST actions is not available in Commission monitoring systems and not included in this report.

⁴⁹ A complication of monitoring SME participation in EIT KICs is that some entities organising the community (i.e., the first recipients of EIT grants) are themselves SMEs. Approximately 3% (€201 million) of the total SME funding in Horizon Europe between 2021 and 2023 has been issued to legal vehicles for EIT KICs: the majority of this funding supported specifically two legal entities, the EIT KIC Urban Mobility (€134.5 million) and EIT Digital (€32.8 million). Since EIT KICs are autonomous in their organisation and can be formed also by multiple legal entities, the other grants are more spread out.

⁵⁰ [EIT Climate-KIC](#), [EIT Culture and Creativity](#), [EIT Digital](#), [EIT Food](#), [EIT Health](#), [EIT InnoEnergy](#), [EIT Manufacturing](#), [EIT RawMaterials](#), [EIT Urban Mobility](#).

In 2021 and 2022, SME partners in EIT KICs received around €145 million in EU funding. This is around 21.2% of the total grant that EIT KICs have received over those two years. Assuming constant SME participation also in 2023, we can estimate that SME partners in EIT KICs received around €200 million in EU funding.

A breakdown by KIC shows that the distribution of SME funding by thematic priority is somewhat similar to collaborative actions under Horizon Europe Pillar II: involvement of SMEs is high in numerical terms, but these are rarely allocated more than one third – most often, less than 20% - of all financial resources available. Another remarkable finding is the large gaps between KIC in the average amount of SME grants, which suggests differences between the funding model of each body.

KIC	n. partners	n. SME partners	% SME partners	EIT grant to SMEs	% EIT grant to SMEs	avg. grant to SMEs
EIT Climate-KIC	549	253	46.1%	€8 918 355	16.5%	€35 250
EIT Digital	444	175	39.4%	€10 084 020	15.4%	€57 623
EIT Food	343	123	35.9%	€30 811 686	29.9%	€250 502
EIT Health	728	159	21.8%	€15 342 098	13.7%	€96 491
EIT InnoEnergy	591	300	50.8%	€28 903 858	33.5%	€96 346
EIT Manufacturing	273	103	37.7%	€20 462 700	27.6%	€198 667
EIT RawMaterials	635	209	32.9%	€19 680 914	17.2%	€94 167
EIT Urban Mobility	311	102	32.8%	€11 183 327	14.7%	€109 640
Total	3874	1424	36.8%	€145.4 m	21.2%	€102 098

Table 12: SME participation in EIT Knowledge and Innovation Communities, n. partners and EU funding, 2021-2022 only. Source: EIT monitoring data.

This data allows to close an information gap on the ultimate recipients of EIT funding, which represent a small (approximately 3%) but not negligible part of all Horizon Europe financial support to SMEs. KIC implementation data is in the process of being fully integrated in Commission monitoring systems: at that stage, it will be possible to assess more in detail whether the KIC model can attract SMEs that do not participate in other parts of Horizon Europe, or that are even newcomers to EU R&I programmes (see section 2.3).

8.2. Co-funded partnership on Innovative SMEs

Besides EIT KICs, in Horizon Europe there are two types of European partnerships that manage their own call system: “Article 185” partnerships, and co-funded partnerships. By 1 January 2024, 11 co-funded partnerships and one Art. 185 partnership⁵¹ were in place.

Like EIT KICs, these partnerships are required to communicate to the Commission a wide set of information about participation in projects. However, due to delays in reporting and different structure of the data, these results are not yet smoothly integrated in the

⁵¹ The name “article 185” is a reference to the Treaty on the Functioning of the European Union, a provision on EU participation in R&D programmes undertaken by several Member States. The only Art. 185 partnership in place in the first three years of Horizon Europe is the **European Partnership on Metrology (EPM)**. While most EPM participants are research organisations (and specifically national metrology institutes), there are a few dozen SME participants also in this partnership. No data is yet available to this report on the amount of funding (and EU funding) that they have received – this will be published in the interim evaluation of the partnership.

Commission monitoring systems. To avoid misrepresentation based on a small sample of projects, this report opts not to present partial data.

However, a report about SME participation in Horizon Europe would be incomplete without acknowledging one partnership that is specifically targeted to them: the **European partnership on innovative SMEs**.⁵² This partnership is co-funded 30% from EU grants and for the remaining 70% with support from 37 national funding bodies in EU Member States and beyond, jointly forming the Eureka network⁵³.

The partnership is supported under the European Innovation Ecosystems (EIE) component of Pillar III. Up to now, the Innovative SMEs partnership has been supported by two Horizon Europe grants (in 2021 and in 2023), for a total of around **€160 million** in EU funding. This represents more than 70% of all funding issued up to January 2024 under the EIE programme⁵⁴.

The partnership manages two main funding schemes, **Eurostars 3** and **Innowwide**.

According to Eureka monitoring data, the **Eurostars** scheme has supported **1174 innovative SMEs** in its first 5 calls, taking place between end 2021 and end 2023. Innovative SMEs are the vast majority (72.9%) of Eurostars funded entities.

Co-funded partnerships are designed to leverage high amount of funding from Member States compared to the EU contribution provided. In the Eurostars scheme, most funding targeting SMEs (at least 75%) originates from national co-funding.

Eureka estimates that, during the reference period, Eurostars 3 Innovative SMEs participants have received around **€61.1 million in EU funding**. This represents just a minority of all financial resources under this co-funded scheme: in practice, 25% of the total funding issued to entities based in EU countries, Horizon Europe associated countries, and lower- and middle-income third countries. Entities falling in this group – which are 76% of Eurostars beneficiaries⁵⁵ – received over €244.4 million in Eurostars grants at the reference date.

Unlike Eurostars 3, the smaller **Innowwide** scheme, with a total budget of €25 million over 6 years, is entirely funded with Horizon Europe money. Up to now, Innowwide has issued a €60 000 lump sum grant to **120 SMEs** between 2022 and 2023, for total **€7.2 million in EU contribution**.

The role of the partnership in supporting SME participation in Horizon Europe is therefore substantial. However, as for EIT KICs, it is not yet possible to assess how many Eurostars and Innowwide participants are also participating in the rest of Horizon Europe. Funded entities in the Innovative SMEs partnership have no obligation to obtain a PIC number, which makes it more complex to assess whether they were funded (or applied) for other parts of the FP, or previous FPs.

⁵² <https://www.eurekanetwork.org/about-us/european-partnership-on-innovative-smes>

⁵³ <https://www.eurekanetwork.org/about-us/eureka>

⁵⁴ In programme statistics shown in this report, EIE already appears as an SME-oriented programme part, e.g. because of its high presence of start-ups, but the actual extent of this is severely understated. Formally the signatories of grants in co-funded partnerships are public bodies: in the case of the Innovative SMEs partnership, they are specifically the national funding bodies that are partners in the Eureka consortium. For this reason, SME participation intensity (as shown in section 3.2) appears low in EIE, while actually most of the funding under this programme goes to SMEs.

⁵⁵ Effectively, the number of EU-funded innovative SMEs in the Eurostars scheme is 894. The remaining 280 participants were either ineligible for Horizon Europe funding or self-funded their participation.

8.3. Financial support to third parties

In R&I Framework Programmes, **Financial Support for Third Parties (FSTP)** mechanisms are meant to distribute public funding in order to assist beneficiaries, such as start-ups, scale-ups, SME and mid-caps, in the uptake or development of (mostly digital) innovation. Unlike the schemes presented earlier in these sections, grants with FSTPs are not associated with European partnerships.

In practice, FSTP schemes allow grant beneficiaries to allocate a share of their costs to the organisation of EU-funded “cascading” competitive calls. These “second level” calls normally have a much less complex application process, shorter timeframes for payment, and often much smaller grants than those issued under the “mainstream” framework programme. While EU financial rules normally set a limit of €60 000 for third party grants⁵⁶, several calls under Horizon Europe are authorised to issue much larger FSTP grants. The third parties funded under these calls can be SMEs and even individuals.

Compared to the past, FSTP “cascading” schemes have been encouraged in a broader range of programme parts. They are increasingly common under Cluster 4 of Pillar II, especially its Digital topics. Most topics under the “Next Generation Internet” programme part⁵⁷ allow the use of cascading grants, which are primarily used to improve involvement of open-source communities of web developers.

FSTP grants pose a challenge for monitoring. Formally, beneficiaries – who are the organisers of these second-level funding schemes – are required to report information about the calls they organise under the project, and the recipients of EU money. Structure of reporting is minimal, meaning that data on these participants is much more limited than for “mainstream” programme participants⁵⁸. Moreover, reliance on beneficiary reporting means that availability of data will come with a significant time lag – often at least two years into the implementation of projects.

At the reference date, no project with FSTPs had yet submitted a mid-term periodic report, meaning that reliable information about these schemes is not yet available. Some data is available through self-reported “continuous reporting”, which indicates that recipients of FSTPs are already hundreds. Especially in Cluster 4, many of them are specifically individual open-source software developers. Preliminary data suggests third parties in cascading grants have received a minimum of €180 million – although this estimate covers few projects and may not be fully reliable.

⁵⁶ Cfr. Article 204 of the Financial Regulation No 2018/1046

⁵⁷ <https://www.ngi.eu/about/>

⁵⁸ In the case of individuals, contextual data available often does not go beyond the country of origin of the person. It is also difficult to measure the number of newcomers in these grants, as PIC numbers (which are needed to measure this indicator) are rarely reported. Even if we can assume that most legal entities among participants are SMEs, SME status is not formally collected and assessed in these templates.

9. Conclusions and next steps

Participation of SMEs in research and innovation programmes of the European Union has changed in the last years. In Horizon Europe, compared to the recent past, there is clearly more money on the table, and support instruments have evolved with a more prominent focus on equity investments. Assuming constant share of funding to SMEs, no major reduction in the Horizon Europe budget, and including also indirectly managed actions, **it is not unrealistic to estimate that total Horizon Europe funding to SMEs by 2027 will be well over €15 billion**, much more than the approximately €12 billion allocated in Horizon 2020.

SMEs were and are important beneficiaries of the R&I framework programme – in basically all of its parts and instruments and not just in SME-tailored actions, although of course intensity of support varies. They are the majority of all private companies in the programme, and play a meaningful, R&I-relevant role in projects – although rarely that of project coordinator.

SMEs participating in Horizon Europe seem to be slightly different than in the past. As of now, compared to Horizon 2020, the average SME in Horizon Europe is older, less likely to be a manufacturing firm and less likely to be a newcomer to the programme. Most of this effect is clearly due to the change in approach in SME-specific actions: EIC Accelerator beneficiaries are different in many ways from Horizon 2020 SME instrument participants.

The issue on whether SME participation in Horizon Europe projects should be broadened is linked to the debate on the “trade-off” between excellence and inclusion that is typical of R&I policy. The fact that distribution of EIC Fund investments closely mirrors the size of national venture capital markets – i.e., it is not yet addressing regional VC funding gaps – is a clear case of this dichotomy. Further analysis should take care to identify systematically the regional drivers of SME participation in the programme, especially in its more competitive actions.

More analysis is also needed to investigate the drivers of the **increase in success rates**. While it is certainly linked to the increase in funding available compared to Horizon 2020, there may be also other explanations. If only SMEs that are familiar with the programme and have experience in winning funding participate in proposals, this would throw a less positive light on the strong increase in the quality of SME applications observed between Horizon 2020 and Horizon Europe. Better applications are not themselves a guarantee of better research results.

Even if success rates are generally improving, **Horizon Europe remains a highly competitive programme**, where only a minority of high-quality applications can be selected for funding. More information should be collected on the actual follow-up to the **Seal of Excellence**, particularly in the EIC Accelerator; in other words, the extent to which national funding bodies and the private sector are making use of this signalling device, and especially how this is combined with other sources of EU funding under shared management, such as EU cohesion funds and the Recovery and Resilience Facility.

This report also underscores the importance of monitoring SME participation in actions that, while funded by Horizon Europe, are managed at a decentralised level. Actions such as the activities of EIT KICs, or the Innovative SMEs co-funded partnership, can offer alternative channels to become involved in research and innovation projects. Participants in these actions are by every definition supported by Horizon Europe too, and their participation should be monitored as closely as that in actions directly managed by the Commission.

Moreover, wider adoption of Financial support to third parties' schemes allows to involve SMEs (and even individual entrepreneurs) in larger research projects with leaner

participation rules and less administrative effort. FSTP grants may also be very small and limited to very specific tasks. The small size of the grants is resembling of the phase 1 SME instrument; still, their focus is on uptake of technologies rather than on development. FSTP schemes also pose a challenge for monitoring – the system in place relies entirely on good reporting practices by the beneficiaries of the “first level” grant – as well as for compliance with general programme participation rules.

Last, but not least, on the impact of R&I funding to SMEs. Three years into an R&I framework programme is extremely early to capture any measurable – and meaningful – dimension of impact, being it on science, on society, or on the economy. As projects start to report results, in the next years assessment of SME participation will also benefit from evidence coming from **the Key Impact Pathway indicators (KIPs)**.

Some of the **economic impact** KIPs codified in the Horizon Europe regulation are particularly relevant for SMEs:

- **KIP 7 medium term:** number of innovations resulting from projects
- **KIP 7 longer term:** creation, growth & market shares of companies having developed innovations
- **KIP 8 medium term:** increase of employees in participating legal entities causally linked to project participation
- **KIP 9 medium term:** amount of public and private investment mobilised to exploit or scale-up results (including foreign direct investments)
- **KIP 9 longer term:** progress made by the programme towards the 3% target for GDP allocated to R&D expenditures (from the public and *private* sector)

However, SMEs clearly play a part also under most other KIPs, such as KIP 3 (on collaborations using open access research outputs, long term), KIP 4 (results addressing EU policy priorities and Sustainable Development Goals), and KIP 6 (uptake and outreach of co-created scientific results and innovative solutions, medium term). These outcomes and dimensions of impact, many of which have a long-term or very long-term outlook, will need to be followed well beyond 2027, the last year of the implementation period of the Horizon Europe programme.

Appendix

Appendix A: participation table by country

<i>Country group</i>	<i>Country</i>	<i># SMEs</i>	<i>Projects per SME</i>	<i>Total SME EU funding</i>	<i>of which: equity</i>	<i>EU funding per project</i>	<i>% SME among country part.</i>	<i>% EU funding to SMEs</i>
<i>EU non-widening</i>	France	669	1.8	€902,540,991	€314,881,128	€760,996	34.4%	23.7%
	Spain	851	2.0	€829,033,359	€96,336,659	€502,445	38.9%	24.3%
	Germany	890	1.7	€802,378,612	€170,324,571	€537,427	38.1%	15.4%
	Netherlands	585	1.7	€661,747,386	€168,459,692	€667,757	45.3%	22.2%
	Italy	677	2.0	€454,612,357	€29,000,000	€338,757	36.0%	16.6%
	Belgium	373	2.5	€409,732,919	€18,521,523	€434,961	33.7%	18.7%
	Ireland	179	2.3	€265,060,464	€63,575,857	€638,700	43.9%	35.8%
	Finland	182	1.5	€219,943,870	€92,436,375	€829,977	38.6%	22.8%
	Sweden	214	1.4	€196,783,567	€39,825,000	€664,809	40.2%	18.3%
	Denmark	176	1.6	€175,185,783	€51,263,584	€623,437	40.7%	18.5%
	Austria	240	1.8	€171,274,404	€15,372,100	€396,469	38.4%	16.8%
	Luxembourg	30	2.2	€26,012,876	€3,000,000	€394,134	32.6%	16.8%

**EU
widening**

Greece	367	2.6	€300,246,707	€0	€320,092	46.0%	24.4%
Portugal	176	2.4	€172,743,435	€10,900,000	€404,551	28.1%	24.3%
Poland	115	1.7	€101,445,602	€2,594,000	€504,704	24.4%	24.3%
Cyprus	94	3.2	€95,043,680	€0	€312,644	51.1%	44.9%
Romania	69	2.0	€51,998,069	€8,380,113	€371,415	19.5%	23.8%
Lithuania	45	2.2	€50,702,035	€16,900,750	€502,000	32.8%	41.3%
Bulgaria	59	1.9	€50,686,232	€14,000,000	€444,616	22.2%	41.7%
Estonia	71	1.8	€49,013,434	€1,248,700	€377,026	43.8%	29.8%
Slovenia	80	1.8	€41,126,081	€0	€293,758	30.5%	15.9%
Czechia	94	1.6	€41,086,882	€2,700,000	€266,798	29.5%	11.8%
Hungary	75	2.0	€40,145,916	€0	€264,118	33.0%	28.7%
Slovakia	38	1.8	€19,923,059	€0	€297,359	25.5%	24.7%
Croatia	41	1.8	€18,646,109	€0	€258,974	19.6%	21.2%
Malta	16	2.0	€11,067,999	€0	€345,875	29.1%	29.3%
Latvia	20	1.9	€8,708,387	€0	€235,362	21.1%	14.1%

Non-EU associated ⁵⁹	Israel	82	1.3	€193,897,983	€94,803,406	€1,846,647	48.8%	28.7%
	Norway	166	1.4	€141,524,363	€29,700,000	€628,997	34.7%	13.5%
	Iceland	16	1.4	€32,185,869	€19,500,000	€1,462,994	30.8%	44.4%
	Türkiye	69	1.3	€23,417,770	€0	€254,541	23.8%	11.4%
	Serbia	29	2.0	€15,441,079	€0	€261,713	18.6%	18.8%
	Ukraine	22	1.2	€5,785,133	€0	€214,264	15.4%	16.5%
	North Macedonia	3	2.0	€1,686,233	€0	€281,039	12.0%	21.6%
	Faroe Islands	1	2.0	€1,105,907	€0	€552,953	16.7%	38.2%
	Albania	2	1.5	€312,196	€0	€104,065	8.3%	5.4%
	Moldova	2	1.0	€305,825	€0	€152,913	7.4%	6.8%
	Montenegro	3	1.0	€279,691	€0	€93,230	16.7%	7.0%
	Georgia	1	1.0	€90,000	€0	€90,000	3.7%	2.5%
	Tunisia	1	1.0	€67,813	€0	€67,813	3.3%	0.7%
	Bosnia and Herzegovina	1	1.0	€0	€0	€0	4.3%	0.0%
Non-EU third	other non-EU third	94	1.0	€13,675,403	€0	€139,545	6.3%	4.7%
	Switzerland	183	1.9	€953,148	€0	€20,511	37.5%	9.3%
	United Kingdom	373	1.4	€695,676	€0	€1,330	39.8%	0.9%

⁵⁹ There are no SME participants from New Zealand (also an associated non-EU country)

Appendix B: Role of Horizon Europe participants in projects (Pillar II only)

role	SME (private for-profit)	SME (not private for-profit)	Large company	University	Research org.	Public body	Other
project management	28	26	26	35	40	27	27
communication, dissemination and engagement	62	75	55	68	73	66	81
provision of research and technology infrastructure	33	24	37	52	58	21	15
co-definition of research and market needs	45	45	47	35	32	35	42
civil society representative	1	13	2	3	2	11	26
policy maker or regulator	2	7	3	4	2	36	8
research performer	47	44	41	80	85	24	23
technology developer	57	21	49	39	33	7	7
testing/validation of approaches and ideas	58	52	66	60	56	47	40
prototyping and demonstration	49	27	51	32	26	23	16
IPR management incl. technology transfer	22	13	17	16	18	4	8
public procurer of results	1	3	2	4	5	17	3
private buyer of results	2	1	4	0	0	0	1
finance provider (public or private)	1	1	2	2	2	12	2
education and training	22	40	19	41	66	32	43
contributions from the social sciences and humanities	8	18	4	12	21	10	18
other role	7	9	6	4	3	12	11

Role of participating organisations in the projects, as reported in Horizon Europe standard application form (successful applicants only), in % of project participations. R&I programmes' monitoring system (CORDA), reference date 1 January 2024. Applicants could indicate more than one role in the proposal form (no limit)

Appendix C: SME funding intensity in main programme parts, Horizon 2020 and Horizon Europe

Programme part	Horizon 2020
Total	17.0% (incl. EIC Fund: 17.7%)
Pillar I - Excellent Science	4.1%
Pillar II - Industrial Leadership	33.0%
of which: LEIT	25.2% (>20%)
Pillar III - Societal Challenges	20.7% (>20%)
other pillars	17.4%

Programme part	Horizon Europe
Total	20.6%
Pillar I - Excellent Science	3.1%
Pillar II - Global challenges	18.5%
of which: Cluster 4	23.7%
of which: other Pillar II Clusters	16.5%
Pillar III - Innovative Europe	61.1%
of which: EIC	74.8% (>70%)
horizontal actions	6.9%

Share of funding to SMEs in Horizon 2020 and Horizon Europe, pillars and main programme parts. R&I programmes' monitoring system (CORDA) and EIC Fund data, reference date 1 January 2024. Programme parts for which there is a legal participation target are highlighted in bold.

Appendix D: Correlation between SME participation by country and SME innovation metrics

	SMEs per 10 000			
	Model 1	Model 2	Model 3 (CY excluded)	Model 4 (CY, LU, EE excluded)
3.1.1 SMEs introducing product innovations	0.007 (0.018)			
3.1.2 SMEs introducing process innovations	-0.010 (0.015)			
3.2.1 Innovative SMEs cooperating with others	0.023*** (0.008)	0.020*** (0.004)	0.014*** (0.004)	0.013*** (0.003)
Constant	0.031 (0.966)	-0.022 (0.745)	0.627 (0.630)	0.459 (0.460)
N	27	27	26	24
R-squared	0.460	0.448	0.352	0.500

***p < .01; **p < .05; *p < .1

Table: Regression models correlating SME variables in Community Innovation Survey and share of SMEs in Horizon Europe per 10 000 participants. R&I programmes' monitoring system (CORDA), Eurostat (sbs_sc_oww), and European Innovation Scoreboard 2023. The three indicators used are originally from the Community Innovation Survey by Eurostat.

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct centres. You can find the address of the centre nearest you online (european-union.europa.eu/contact-eu/meet-us_en).

On the phone or in writing

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696,
- via the following form: european-union.europa.eu/contact-eu/write-us_en.

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website (european-union.europa.eu).

EU publications

You can view or order EU publications at op.europa.eu/en/publications. Multiple copies of free publications can be obtained by contacting Europe Direct or your local documentation centre (european-union.europa.eu/contact-eu/meet-us_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex (eur-lex.europa.eu).

EU open data

The portal data.europa.eu provides access to open datasets from the EU institutions, bodies and agencies. These can be downloaded and reused for free, for both commercial and non-commercial purposes. The portal also provides access to a wealth of datasets from European countries.

Small and medium enterprises (SMEs) received approximately 20.6% (€6.6 billion) of the funding issued by the current EU's Framework Programme for research and innovation, Horizon Europe. Financial support to SMEs has strongly increased compared to past Framework Programmes.

The report offers a comprehensive overview of SME participation in Horizon Europe, looking at whether the programme is on track with legal targets and expectations. It also looks at the country distribution of SME participants, at the structural characteristics of SMEs, and the role that SMEs play in collaborative research and innovation projects.

Research and Innovation policy

