Annual Activity Report 2024

Circular Bio-based Europe Joint Undertaking

Bio-based Industries Consortium

EUROPEAN PARTNERSHIP

Co-funded by the European Union

CONSOLIDATED

ANNUAL ACTIVITY REPORT 2024

In accordance with Article 26 of Council Regulation (EU) 2021/2085 of 19 November 2021 and Article 23 of the Financial Rules of the CBE JU.

The Consolidated Annual Activity Report will be made publicly available after its approval by the Governing Board.

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FACTSHEET

Name of the JU	Circular Bio-based Europe Joint Undertaking (CBE JU)
Objectives	The CBE JU implements part of the Horizon Europe Framework Programme. In this latest framework, its main general objectives are to: — accelerate innovation and develop bio-based innovative solutions; — accelerate market deployment of existing mature and innovative bio-based solutions; — ensure a high level of environmental performance of bio-based industrial systems. A wider set of objectives are set out in Articles 4, 5 and 46 of Council Regulation establishing the CBE JU.
Legal basis	Article 187 of the Treaty on the Functioning of the European Union and Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe and repealing regulations (EC) No 219/2007, (EU) No 557/2014, (EU) No 558/2014, (EU) No 559/2014, (EU) No 560/2014, (EU) No 561/2014 and (EU) No 642/2014.
Executive Director	Nicoló Giacomuzzi-Moore Executive Office | Circular Bio-based Europe Joint Undertaking
Governing Board	Chair: Rob Beekers, Director of New Business Development at Cargill Bio-Industrial Group Vice-chair: John Bell, Director for Healthy Planet, DG RTD Full list of Governing Board members is provided in section 4.2
Other bodies	States' representatives group Scientific Committee
Number of staff	29
Total available budget in 2024[1]	Commitment appropriations (CA) in EUR[2] *kEUR 222 538* Payment appropriations (PA) in EUR[3] *kEUR 191 275*
Budget implementation/execution	Commitment appropriations: total consumption (amount in EUR and percentage spent on total) Title 1 – *kEUR 3 312 (95 % of kEUR 3 470)* Title 2 – *kEUR 2 095 (72 % of kEUR 2 921)* Title 3 – *kEUR 208 399 (96 % of kEUR 216 608)*

[1] The total budget includes the operational (used for funding selected projects) & administrative (used for funding Programme Office activities) budgets. Figures are from the most recent voted amended budget.

[2] Voted commitment appropriations were kEUR 222 583 including kEUR 71 972 of unused appropriations from previous years.

[3] Voted payment appropriations were kEUR 191 275 including kEUR 30 365 of unused appropriations from previous years.

	Payment appropriations: *total consumption: (amount in EUR and percentage spent on total)* Title 1 – *kEUR 3 185 (94 % of kEUR 3 401)* Title 2 – *kEUR 2 649 (78 % of kEUR 3 411)* Title 3 – kEUR 152 347 (82 % of 184 925) 96 % in total commitment appropriations and 82 % in total payment appropriations
Grants/Tenders/Awards	The project portfolio consists of a total of 194 funded projects of which 70 were still ongoing at the end of 2024, divided as follows: - 52 grants (CBE JU/Horizon Europe) - 18 grants out of a total of 143 (BBI JU/Horizon 2020)
Strategic Research & Innovation Agenda	Strategic Research and Innovation Agenda (SRIA)
Call implementation	Number of calls launched in 2024: 1 Number of proposals submitted: 298 Number of eligible proposals: 289 Number of proposals approved: 30 proposals selected for funding, grant agreements to be signed in 2025
Participation, including SMEs	Total number of beneficiaries covered by the funded projects 2 512, of which: 39 % are SMEs receiving 39 % of the EU funding 56 % are private for-profit companies receiving 58 % of EU funding 0.36 % of entities from non-associated non-EU countries (openness) 57 % are newcomers (defined as beneficiaries that have never received funding from the programme in any preceding year, either under the CBE JU or its predecessor, the BBI JU) (*Reference to recital 29 and Article 26 of Council Regulation establishing the JUs under Horizon Europe regarding the assessment of the level of SME participation and JU attractiveness to newcomers*)

FOREWORD

It is with great pleasure that I present to you the Annual Activity Report (AAR) of the Circular Bio-based Europe Joint Undertaking (CBE JU). 2024 has been another very successful year in terms of the progress achieved on the call and programme management, the project portfolio is expanding and is delivering beyond expectations, CBE JU projects are achieving impressive milestones and are promoted at European and global events.

The progress achieved by the partnership, the projects and the stakeholder community echoes the increased importance of the circular bioeconomy within the new European Commission political guidelines and that of the European Council strategic agenda. The bioeconomy is recognised as an area that can deliver in terms of competitiveness of European industry, environmental sustainability when it comes to production processes and consumption, strategic autonomy as well the central role played by the primary sector and local communities in its value chains.

While the Programme Office finalised 31 grant agreements and finalised evaluations resulting in a further 30 new projects to be funded in 2025, the European Commission and the Bio-based Industries Consortium (BIC) continued their successful collaboration in preparing the new calls, with a particular focus on scaling up, competitiveness and biotechnology - reflecting the new priorities at European level. This again demonstrates the flexibility of the Joint Undertaking in being able to react and adapt to the changing economic, geopolitical and industrial realities.

This aspect has also been recognised in the independent CBE JU mid-term evaluation that recognises the key role of CBE JU in accelerating the European bioeconomy by supporting innovative start-ups and SMEs, enabling scale-up and industrialisation, and driving innovation to the market with very concrete results.

During 2024, I had the pleasure to attend the inauguration of three biorefineries: SWEETWOODS in Estonia, Circular Biocarbon in Spain, and PEFerence in the Netherlands. Thanks to public and private investments, these three flagship projects – operating in three different domains with different feedstock types – are concrete examples of plants that deliver from technological innovation, environmental and industrial aspects, involving farmers and primary producers in biobased value chains. These large scale first-of-its-kind biorefineries are a unique instrument demonstrating the potential of the bioeconomy in delivering on competitiveness, sustainability and strategic autonomy.

Jointly with our founding partners, the CBE JU Programme Office strengthened its stakeholders' community by implementing the widening strategy that is showing promising results in terms of participation in the annual call for proposals. At the same time, the work on the establishment of the deployment groups delivered its first results with a CSA funded to support the participation of primary producers in the bioeconomy. The involvement of CBE JU, the European Commission and BIC in the finalisation of the EIB study on the bioeconomy will pave the way for the setting up of the deployment group on finance and investments.

The Programme Office experienced a number of changes in it staffing in 2024, with several recruitments in key functions. Despite this, the CBE JU team was able to manage the transition, ensuring a high level of operational efficiency and effectiveness in delivering on its objectives. I cannot thank my colleagues enough for their motivation and commitment towards the organisation.

To conclude, I would like to thank the European Commission and the Bio-based Industries Consortium for their fruitful collaboration and for their trust in the Programme Office. This is the strength of the CBE JU partnership and shows a joint strategic vision that is fundamental to further

“scale up” the bioeconomy in Europe, and maintain Europe’s leadership in this strategic sector. The Joint Undertaking remains a unique instrument that - thanks to the commitment of its funding partners – can deliver a “competitive bioeconomy for a sustainable Europe”.

Nicoló Giacomuzzi-Moore,

CBE JU Executive Director

EXECUTIVE SUMMARY

Introduction

In 2024, the Circular Bio-based Europe Joint Undertaking (CBE JU) continued to build on its achievements, advancing its strategic objectives and demonstrating considerable impact in the bio-based sector. The CBE JU affirmed its operational efficiency by signing all new grant agreements in a timely manner, ensuring that all project payments were made on time, and demonstrating strong budget execution. The 2024 call for project proposals was also an impressing success, attracting 298 proposals, almost double the number received in the 2023 call, which had a similar budget. The project portfolio has continued to grow, with 194 projects funded either by the Bio-based Industries Joint Undertaking (BBI JU) or the CBE JU, of which 70 are still ongoing, consolidating the strong participation of SMEs (39 %) in all funded projects.

The evolution of the projects' portfolio has shown a significant contribution vis-à-vis the set objectives, with BBI JU-funded projects delivering tangible results that meet the vast majority of the relevant KPIs. They also have played a vital role in demonstrating the leverage effect of the Joint Undertaking, with a return of 3.5 euro for every euro of EU funding invested. In addition, the inauguration of three flagship biorefineries in 2024 has further demonstrated the success of project consortia in delivering bio-based innovation, scaling up technologies in Europe and bringing novel products to the market. These concrete examples are essential for advancing the circular bioeconomy in Europe, as they showcase its advantages for EU competitiveness, environmental sustainability and the well-being of citizens to policymakers, investors, and civil society.

On the stakeholder side, the CBE JU, together with the European Commission and the Bio-based Industries Consortium (BIC), continued to make progress on the implementation of the action plan accompanying the widening participation strategy and the establishment of the working group on primary producers and the deployment group on finance and investments.

Operational achievements

Continuing its strong track record, the CBE JU Programme Office maintained a high standard of operational performance.

The KPIs related to budgetary and financial management once again showed strong performance in 2024. All 31 grant agreements under the 2023 call were signed in a timely manner. In terms of operational expenditure, all validated interim and final cost claims were paid on time, with an average Time to Pay (TTP) of 58 days for interim payments and 62 days for final payments.

Gender balance was achieved in the management team, with 60 % of middle and senior management positions held by women. The annual staff survey once again delivered impressive results, with 96 % of employees stating that they enjoyed working at the CBE JU and 88 % stating that they would recommend it as a place to work.

The CBE JU continued to work with other Joint Undertakings to promote synergies and establish common back-office arrangements (BOAs). Regarding the HR BOA, led by the CBE JU together with the Innovative Health Initiative Joint Undertaking (IHI JU), progress was made in the implementation of the action plan, in particular through the adoption of a common online assessment solution for remote testing; the alignment and harmonisation of selection and recruitment procedures across the JUs; and the centralised delivery of training on shared topics of interest, such as ethics and integrity, anti-fraud policy, and dignity and respect at work.

The CBE JU 2024 call

The 2024 call for project proposals received 298 applications, an increase of 84 % compared to the 2023 call, 32 % of all applicants, demonstrating that the CBE JU programme remains an attractive, relevant and important opportunity across 18 topics. Applicants requested more than EUR 1.4 billion in CBE JU funding against an indicative budget of EUR 213 million. The participation of small and medium-sized enterprises (SMEs) remained high at for innovation and growth. Around half of the applicants in the 2024 call were newcomers, having never received funding from the programme or the BBI JU in the past. This highlights the success of the programme's outreach activities and is an important indicator of its openness to new applicants. Private companies make up the largest proportion of new applicants (62 %), suggesting that interest from the private sector remains very high. From the large number of applications received in the 2024 call, 30 proposals have been selected to receive a total of EUR 200 million in CBE JU funding. The grant agreement preparations are still ongoing at the time of writing.

Continuing successful projects' implementation

In 2024, 31 proposals selected for funding from the 2023 calls finalised their grant agreement preparation within the set Time-to-Grant. In these new projects, all but one Member State were represented among the beneficiaries, 6 beneficiaries are from associated countries and 3 from third countries. Nearly a third of the beneficiaries were SMEs and they received one third of the funding, and one in four projects was coordinated by an SME.

A number of projects reached important milestones. In May 2024, the flagship project SWEETWOODS (Imavere, Estonia) inaugurated its biorefinery which converts wood residues such as sawdust and wood chips to high-value products ranging from insulation materials for the construction sector to personal care products. Circular Biocarbon (Zaragoza, Spain) commenced operations in late 2024, converting municipal waste and sewage sludge into products such as green graphene and bio-based fertilisers. In October, the PEFerence flagship project, based in Delfzijl, the Netherlands, inaugurated its biorefinery, which produces monomers and polymers and delivers premium bio-based products such as plastics and textiles to end users. WASTE2FUNC has successfully demonstrated the use of food waste to produce lactic acid and microbial biosurfactants that can be used in a range of applications from cleaning products to cosmetics. The project is attracting interest from well-known brands.

These CBE JU-funded projects are continuing to create impact on the ground by creating jobs in rural areas as in the case of the SWEETWOODS flagship biorefinery (50 direct and 100 indirect jobs), developing new business models and revenue streams for local primary producers, bringing to the market innovative products with a lower environmental footprint as in the case of the PEFerence flagship biorefinery, while at the same time reducing the EU's dependence on fossil-based resources and strengthening the EU's resilience through the creation of local supply chains.

Progress on the key performance indicators (KPIs)

The CBE JU monitors how its funded projects are contributing to both CBE JU-specific KPIs and other expected impacts of the programme on an annual basis. In 2024, 52 CBE JU projects funded under the 2022 and 2023 calls provided their forecasted contributions using a dedicated reporting webtool developed by the CBE JU Programme Office.

Although the CBE JU-funded projects are still at an early phase, with the first projects having started only in 2023, progress is already visible. Some key highlights include the involvement of primary producers in funded projects (KPI 1). 31 primary producers are involved in CBE JU-funded

projects, of which 18 are beneficiaries. Projects such as Rural BioReFarmeries are demonstrating how primary producers can be strategically involved by enabling farmers to co-produce inputs for their farms alongside additional high-value intermediate products and products developed in collaboration with centralised facilities and downstream industry players. Another significant achievement at the current stage is the market uptake of bio-based products (KPI 7). The strategic involvement of brand owners in funded projects plays a key role in increasing consumer awareness and in the overall uptake of bio-based products. To date, 41 brand owners are directly participating in projects at a business-to-consumer (B2C) level, with a programme target of 50 foreseen.

All the projects funded by the BBI JU programme continue to be monitored in terms of their contribution to the BBI JU-specific key performance indicators (KPIs). This shows that the BBI JU has met, and in many cases significantly exceeded, the targets for all KPIs linked to project outputs.

With an increasing demand for public funding and resources, public-private partnerships such as the CBE JU are catalysing, attracting and retaining investment in Europe. In the case of the CBE JU, the leverage effect was EUR 3.5 – well above the 2024 target of 2.8. Leverage refers to the ability of the Joint Undertaking to attract additional funding from beneficiaries to multiply the public funding provided under the framework programme for Research and Innovation.

Stakeholder activities

Important steps have been taken to implement the CBE JU's widening participation strategy, including by fostering stakeholder engagement and cooperation through the organisation of national info days and bilateral dialogues with key countries; raising awareness through increased cooperation with the National Contact Points (NCPs); and strengthening synergies with various programmes, such as COST, and networks in the widening countries such as BIOEAST, BOOST4BIOEAST and CEE2ACT. The impact of the strategy was already visible in the 2024 call, with a significant increase in the overall number of applicants from widening countries.

Progress has also been made on the establishment of the Deployment group on finance and investments and the Working group on primary producers. Regarding the former, the Governing Board approved a concept note for its establishment and the CBE JU Programme Office provided input and feedback to the European Investment Bank (EIB) which led the Bioeconomy 2.0 study. For the Working group on primary producers, a participatory workshop was organised with relevant stakeholder's. The workshop successfully involved primary producers and key stakeholders interested in strengthening the role of the primary sector in circular bio-based value chains. The workshop's outcome was used to finalise a concept note, defining the scope, the objectives, the

action areas and the composition of the working group (sectors, types of entities, etc.). Both initiatives are expected to yield tangible benefits for the bio-based sector.

Communication activities

One of the highlights of the year was the CBE JU Info Day, which took place on 23 April 2024. The event attracted 460 participants who attended in person and a further 1 500 online participants, an increase of 50% compared to the info day in 2023. 23% of the participants were from underrepresented countries, targeted by a CBE JU promotional campaign conducted earlier in the year and supported by WIDERA.NET travel grants. 65 % of the registered participants were newcomers to the CBE JU or BBI JU info days, demonstrating for the second year in a row the wide reach and interest beyond the established partnership community. A total of 1 300 networking meetings took place during the event, an increase of almost 200 % compared to 2023, with many more meetings scheduled online. The CBE JU promoted national info days in 13 countries, working with local organisers to attract new applicants. There was also a focus on promoting the achievements and impacts of CBE JU-funded projects. Some of the activities included a travelling exhibition of innovative bio-based solutions at four key bioeconomy events; a publication dedicated to CBE JU-funded projects, focusing on flagship, first-of-their-kind biorefineries across Europe; the publication and promotion of 25 project success stories; and a #CBEfaces series of interviews with project representatives, highlighting the impact of the projects and showcasing a variety of professional careers in the bio-based sector.

Conclusion

With a record number of submissions in the 2024 call, the consistently high participation rate of SMEs, the attractiveness of the programme for newcomers and the participation of applicants from an increasing number of countries, indicates that this unique funding instrument remains relevant, important and attractive to a sector of strategic importance for Europe.

The CBE JU continues to deliver results through the projects it funds, with significant potential on environmental, economic and social impacts across Europe’s regions and coastal areas. This is exemplified by the flagship projects reaching important milestones and opening their production facilities.

The ability of the Joint Undertaking to attract and retain investments in Europe is a key indicator of its success as it de-risks investments in a high-capital high-risk sector, supporting the scale-up and commercialisation of innovative bio-based products and solutions and the strong involvement of brand owners in the funded projects. The CBE JU continues to play a central role in the implementation of the European Green Deal, supporting a just transition while making important contributions to Europe’s competitiveness, resilience and strategic autonomy.

1. IMPLEMENTATION OF THE ANNUAL WORK PROGRAMME 2024

This chapter sets out the main activities and key achievements of the CBE JU (and the legacy of the BBI JU) in 2024. It covers the leveraging of private finance, scientific and technological advances, progress against target KPIs, the expected impacts in terms of competitiveness, growth and job creation and our contribution to addressing societal challenges.

1.1. KEY CBE JU 2024 OBJECTIVES, ASSOCIATED RISKS AND CORRECTIVE MEASURES

The CBE JU operates under the Horizon Europe programme and aims to **accelerate innovation and the market uptake of innovative bio-based solutions while improving the sustainability of bio-based systems** in areas such as end-of-life of products, zero pollution, contribution to climate change mitigation and resource efficiency. In addition, the sustainable and local sourcing of biomass, the use of all types of bio-based side streams and the reuse, recycling and up-cycling of resources all play a key role in ensuring a sustainable and efficient use of natural resources.

The **transition from a fossil-based economy to a bioeconomy** requires sustainable bio-based products with high levels of technical performance that fully meet market requirements and are thus capable of successfully replacing their current fossil-based counterparts. The bioeconomy also has great potential to support regional development by bringing together diverse stakeholders across the value chain from primary producers to consumers—as well as technology developers, researchers and companies exploring new cross-sector collaborations and business models.

In this context, the CBE JU is expected to play a key role in supporting the European Green Deal and the Fit for 55 package, aiming to help achieve the ambitious EU targets of reducing net greenhouse gas emissions by at least 55 % (compared to 1990) by 2030 and becoming the first climate-neutral continent by 2050. The CBE JU will also play its part in the transition from a fossil-based economy to a sustainable bioeconomy, in line with the objectives set out in the updated EU Bioeconomy Strategy and its Action Plan 2018 and will support the commitments set out in the United Nations Sustainable Development Goals (SDGs) and the COP 21 Paris Climate Agreement. In addition, the CBE JU contributes directly to the new EU initiative on Biotechnology and Biomanufacturing by increasing the innovation and competitiveness of industrial biotechnology across different topics by supporting the scaling up of biotechnological solutions and promoting greater biomanufacturing capacity at European level.

The chapters below present how the CBE JU 2024 call is contributing to the CBE JU objectives and strategic priorities and then set out the specific operational and management objectives for 2024, together with the associated operational risks and the mitigating, preventive and corrective measures taken to address them.

1.1.1. The CBE JU's objectives and strategic priorities

Figure 1 shows the general and specific objectives of the CBE JU, as set out in the Council Regulation establishing the Joint Undertakings under the Horizon Europe Programme, together with the related strategic priorities as detailed in the CBE JU Strategic Research and Innovation Agenda (SRIA).

Figure 1 CBE JU general (GOs) and specific objectives (SOs) and related SRIA strategic priorities (SPs) with their logical link highlighted with three different colours (light blue GO1, dark yellow GO2 and light green GO3).

Figure 2 shows the links between the topics in the CBE JU Annual Work Programme for 2024 and the general and specific objectives of the CBE JU, and Figure 3 shows their links to the strategic priorities identified in the SRIA along the three main blocks (feedstock, processing and products) and the specific cross-cutting priorities.

CBE JU Specific Objectives		CBE JU TOPICS AWP2024																		
		2024.IA-Flag01	2024.IA-Flag02	2024.IA-Flag03	2024.IA-Flag04	2024.IA-01	2024.IA-02	2024.IA-03	2024.IA-04	2024.IA-05	2024.IA-06	2024.IA-07	2024.R-01	2024.R-02	2024.R-03	2024.R-04	2024.R-05	2024.S-01	2024.S-02	2024.S-03
1. Accelerate the innovation process and development of bio-based innovative solutions	1.1.-Increase cross-disciplinary research and innovation activities, reaping its benefits for the development and demonstration of sustainable bio-based solutions.	x			x									x	x	x	x	x	x	
	1.2 - Increase and integrate the research and innovation capacity of stakeholders across the EU to unlock bioeconomy potential even in regions with underdeveloped capacity.													x	x	x	x			
	1.3-Increase the research and innovation capacity and development sustainable bio-based innovations, by ensuring that sustainability issues and environmental performance are integrated throughout the whole innovation chain.													x	x	x	x			
2. Accelerate market deployment of the existing mature and innovative biobased solutions	2.1- Reinforce the integration of bio-based research and innovation in EU bio-based industries and increase the involvement of R&I actors, including feedstock providers, in the bio-based value chains.	x	x	x	x	x	x	x	x	x	x	x	x		x			x	x	
	2.2- Reduce the risk for research and innovation investment in bio-based companies and projects.										x									
3. Ensure a high level of environmental performance of bio-based industrial systems	3.1- Ensure that circularity and environmental considerations, including contributions to climate neutrality and zero pollution objectives, are considered in the development and implementation of R&I bio- based projects and facilitate societal acceptance.	x	x	x	x	x	x	x	x	x	x	x	x					x		

Figure 2 Contribution of AWP 2024 topics to the CBE JU-specific objectives.

SRIA Strategic priorities			CBE JU TOPICS AWP2024																	
			2024.IA-Flag01	2024.IA-Flag02	2024.IA-Flag03	2024.IA-Flag04	2024.IA-01	2024.IA-02	2024.IA-03	2024.IA-04	2024.IA-05	2024.IA-06	2024.IA-07	2024.R-01	2024.R-02	2024.R-03	2024.R-04	2024.R-05	2024.S-01	2024.S-02	2024.S-03
FEEDSTOCK		1.1.1 - Ensure the availability and quality of sustainable bio-based feedstock	x			x													x		
		1.3.1 - Protect and enhance biodiversity and ecosystem services in bio-based feedstock supply systems	x			x										x			x		
		2.1.1 - Demonstrate the sustainable supply of bio-based feedstock	x	x	x	x		x	x		x		x						x		
PROCESSING		1.1.2 - Develop innovative production systems in the bio-based industry													x	x	x	x			
		1.3.2 - Improve environmental performances of bio-based processes										x			x	x	x	x			
		2.1.2 - Deploy innovative production technologies		x	x		x	x	x	x	x	x	x	x							
PRODUCTS		1.1.3 - Develop innovative bio-based products													x	x	x	x			
		2.1.3 – Scale-up production and market uptake of innovative bio-based products		x			x	x	x	x	x	x		x							
CROSS-CUTTING	**Communication**	1.2.1 - Stimulate research activities in countries and regions with underdeveloped R&I capacity for bio-based systems	x																x	x	
		1.2.2 – Increase the awareness and capacity of national and regional research support agencies for industrial bio-based systems																		x	
		1.2.3 - Facilitate the development of expertise in bio-based fields by improving higher education and skills development in the private sector																			
		2.1.4 - Build policy makers' awareness and acceptance of bio-based solutions																		x	
		3.1.3 – Facilitate social acceptance of bio-based applications			x			x						x	x	x	x				
	Finance	2.2.1 – Improve the risk profile of bio-based projects																			
		2.2.2 - Develop investment tools and approaches that mitigate the investment risk in bio-based systems																			
	Environmental sustainability framework	3.1.1 - Set effective and robust environmental sustainability and circularity criteria for bio-based systems																			
		3.1.2 - Incorporate the environmental sustainability and circularity criteria in bio-based systems	x	x	x	x	x	x	x	x	x	x	x	x					x		

Figure 3 Contribution of AWP 2024 topics to SRIA Strategic priorities.

While all Type of Actions contribute significantly to all three general objectives (see Figure 3), there is some correlation of the general objectives with the different types of actions. For example, all RIAs clearly contribute to general objective 1 to accelerate the innovation process and development of bio-based solutions (GO 1), and all IAs, including Flagships, clearly support the market deployment (GO2) and ensure high level of environmental performance and circularity of bio-based industrial systems (GO3). CSAs, which address diverse non-technological cross-cutting aspects, contribute to different objectives depending on their thematic.

A similar correlation can be observed in the SRIA strategic priorities, which are also linked to the GOs (as indicated with the color pattern in the Figures above). In addition, Figure 3 shows also that, across all types of action, some topics have a stronger focus on the type of feedstock, the processing, the final products or applications, while also addressing other cross-cutting aspects as communication, finance and setting up environmental sustainability frameworks.

1.1.2. The CBE JU's operational and management objectives in 2024

At the CBE JU Governing Board meeting in October 2023, the acting Executive Director presented the following priorities for 2024, focusing on four areas:

1. **Governance**

- Ensuring the transition to a new Executive Director while maintaining efficiency in CBE JU's day-to-day operations.
- Establishing the Deployment group on finance and investments and setting up the Working group on primary producers after its scope and objectives are agreed.
- Approving the method to be used to monitor the financial contributions to the CBE JU.

2. **Programme implementation**

- Completing CBE JU grant agreement preparation and launching the implementation of CBE JU projects selected in the 2023 call.
- Promoting the CBE JU 2024 call and project proposal evaluation.
- Launching the new web-based KPIs reporting tool and integrating it into the CBE JU website.

3. **Communication and stakeholder management**

- Promoting the CBE JU flagship projects through a new exhibition and participation in the respective inauguration events.
- Focusing communication on specific stakeholder groups, particularly in view of the election of the new European Parliament and the formation of the new European Commission.
- Following up on the conclusions of the CBE JU stakeholder forum.

4. **Administration and finance**

- Leading the implementation of the back-office arrangement — HR support and contribution to the back office arrangement in other key areas (IT, logistics, procurement).
- Completing the office set-up in line with the new ways of working in cooperation with other JUs.
- Efficient phasing out of the BBI JU budget.

1.1.3. Associated risks and mitigation measures

In line with CBE JU's risk identification and mitigation procedures, the 2023 risk assessment exercise carried out in respect of the objectives and priorities for 2024 identified seven risks with varying degrees of importance, convergence and interdependency. Other emerging risks were additionally identified and monitored throughout the year in terms of likelihood and impact.

These risks were detailed in the CBE JU Risk Register together with appropriate risk responses, responsibilities and deadlines for implementation by the JU Programme Office or external stakeholders. As a result of these planned actions, in 2024 the JU Programme Office was able to monitor and mitigate both the likelihood and impact of the risks identified, maintaining them at an acceptable level. Some risks did materialise during the year and for these a high and significant level of concern remains in 2024 and beyond[4]. This applies to the key risks described below.

Objective(s)	Risk(s)	Result(s)
Consolidate the effective delivery of the project portfolio while supporting effective and ambitious strategic planning for the Joint Undertaking's governance model.	The lingering effects of the Covid-19 pandemic (including supply and access to raw materials), the illegal invasion of Ukraine by Russia, inflation, the increase in energy prices and the new challenges posed by the current geopolitical and economic scenarios in Europe jeopardise objectives as the CBE JU is an industry-driven initiative.	As observed in 2023, the implementation of the CBE JU project portfolio continued to experience delays in 2024, mainly due to feedstock supply disruptions, energy price increases and inflation. The CBE JU governing bodies are fully committed to monitoring these risks, maintaining efficient channels of communication with project consortia and project quality to ultimately achieve the initiative's multi-year strategic objectives in a timely manner.
Maintain high operational standards of the CBE JU and ensure efficiency for workload absorption in 2024. Ensure that a skilled and competent workforce is readily available and operates in safe working conditions.	Business continuity disruptions and unsustainable workload redistribution.	In 2024, the CBE JU managed to achieve its overall operational efficiency targets and took measures to protect and promote the well-being of its staff. However, staff turnover and long-term absences had a significant impact on the internal redistribution of tasks and eventually led to bottlenecks in some key processes, particularly those relevant to the work of the Financial and Administrative Unit.

Table 1: Most significant risks managed in 2024.

The above-mentioned results are detailed in the relevant sections of this document.

[4] As indicated in the CBE JU Annual Work Programme 2024 (pages 18-19), additional mitigating actions were planned for 2024, with the residual threats to the achievement of the annual targets not assessed as critical at the time of preparation of the work programme.

1.2. RESEARCH & INNOVATION ACTIVITIES AND ACHIEVEMENTS

This section provides an overview of the CBE JU project portfolio, which covers a wide range of technologies, processes and types of biomass to develop products for a variety of uses, ranging from feed and food ingredients to packaging, construction, personal and home care, automotive and many others. The CBE JU project portfolio currently includes completed and ongoing BBI JU projects and 51 CBE JU projects from the first two CBE JU calls 2022 and 2023. For the sake of simplicity, we will only refer to the CBE JU projects/portfolio, which includes both BBI JU and CBE JU projects.

1.2.1. Overview of the CBE JU portfolio and its evolution

Types of actions and TRLs

As shown in Figure 4, the CBE JU implements its research and innovation programme founding four types of actions as described in the CBE JU SRIA, targeting different Technology Readiness Levels (TRLs). While **Research and Innovation Actions** (RIAs) focus on filling the gaps in technological innovation, **Innovation Actions** (IAs) prioritise the integration, deployment and up-scaling of technologies, and ultimately bringing the technology closer to a commercial scale, as in the case of the first-of-a-kind **flagship biorefineries** (IAs-Flagships). **Coordination and Support Actions** (CSAs) work to create value chains by addressing cross-cutting challenges.

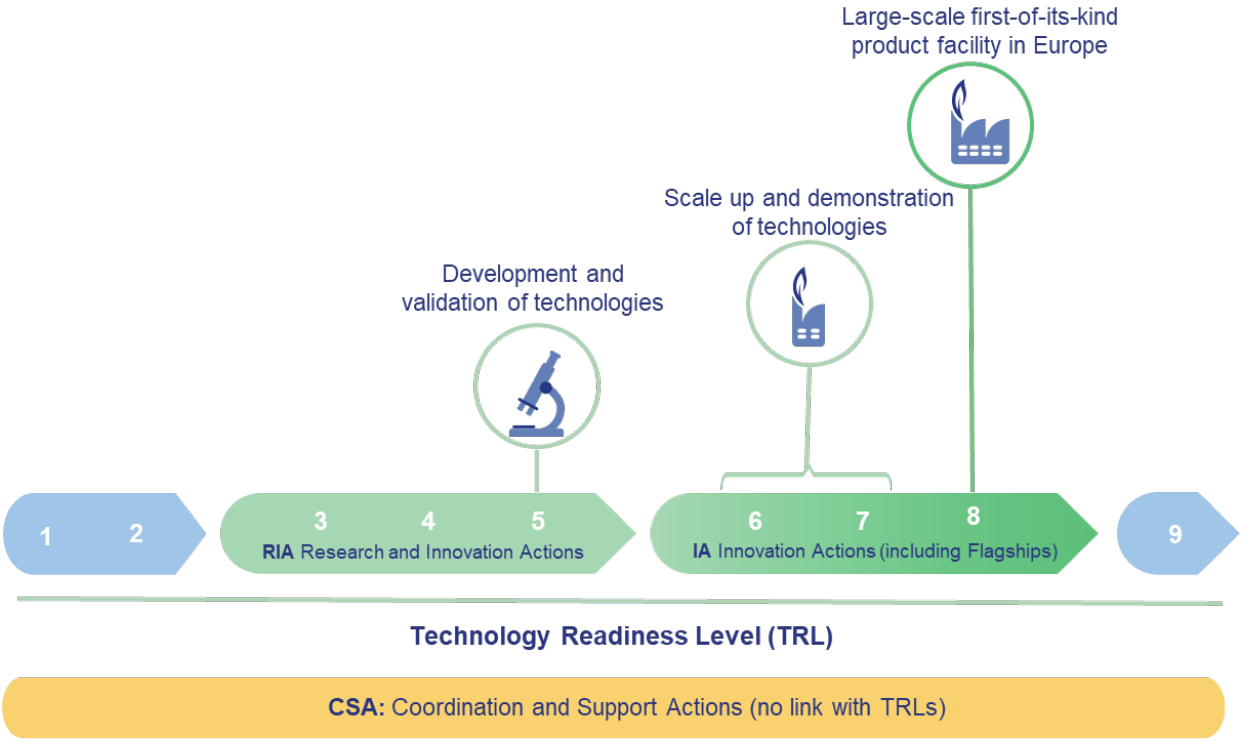


Figure 4 Types of action in relation to their respective TRLs.

The CBE JU portfolio currently consists of a total of 194 funded projects, of which 70 are ongoing and 120 were completed at the end of 2024. As shown in Figure 5, of the ongoing projects, 18 are funded by the BBI JU under the previous Horizon2020 programme.

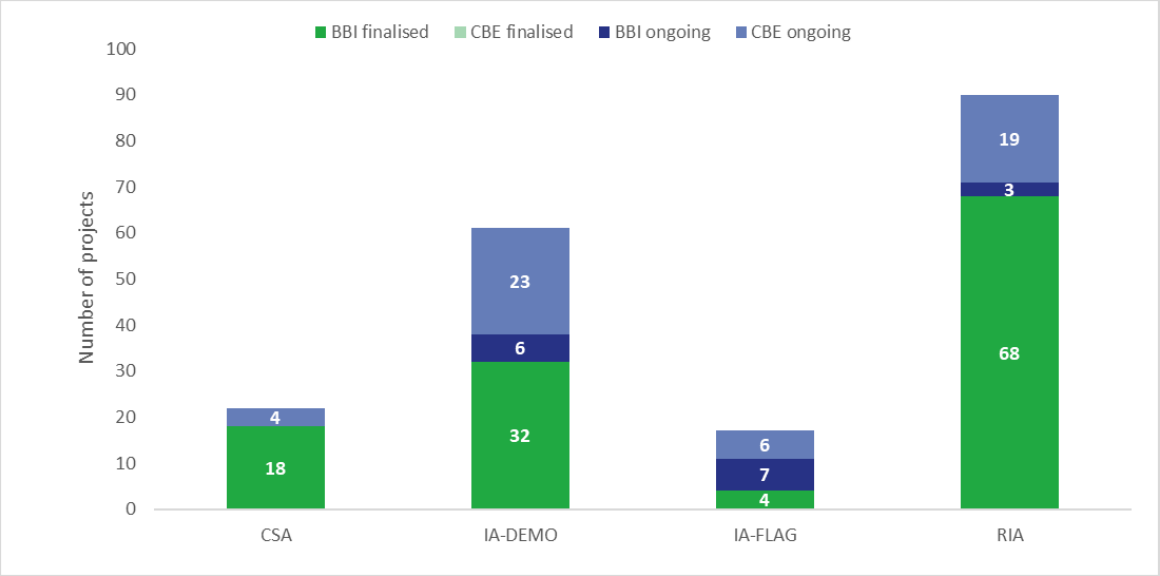


Figure 5 Number of CBE JU projects per type of action completed and ongoing at the end of 2024.

When considering the funding distribution across types of actions, as shown in Figure 6, overall support levels are comparable for RIA, IA-DEMO, and IA-FLAG type of projects. Whereas more than half of RIA and IA-DEMO funding support is already completed, the majority of IA-FLAG funding is concentrated in ongoing projects, either under BBI or CBE. This reflects also the typically longer duration of the more complex IA-FLAG projects.

Figure 6 Total EU contribution per type of action completed and ongoing at the end of 2024.

Figure 7 shows the locations of the Flagship biorefineries (industrial-scale plants) and the Innovation Action demonstration plants funded by the BBI JU and CBE JU until the end of 2024.

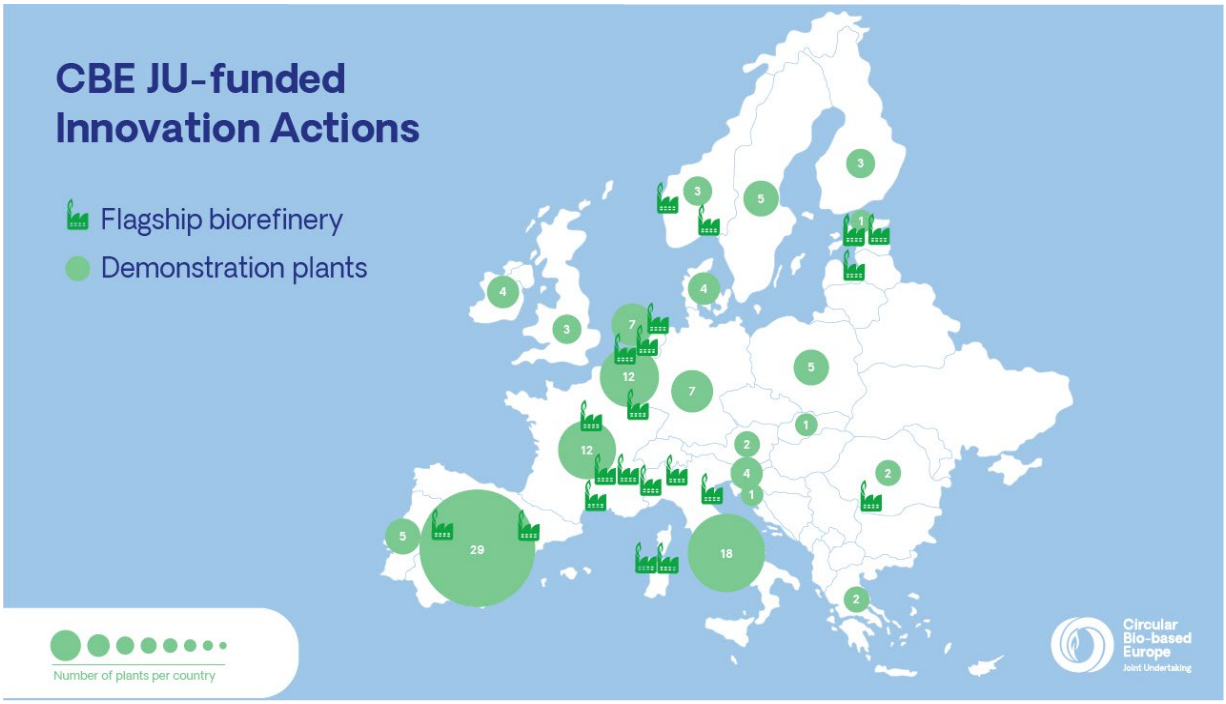


Figure 7 BBI JU and CBE JU-funded flagship biorefineries and Innovation Action demonstration plants under construction or in operation.

Main source of feedstock

The main types of feedstock used in all CBE JU projects, excluding CSAs, and their respective percentages in relation to the overall portfolio of projects are:

- **Agri-food feedstock**, including residues and by-products from the agro-food industry (33%);
- **Forest-based feedstock,** including lignocellulosic side streams and wood residues (23%);
- **Aquatic feedstock,** including aquatic organisms, fisheries, aquaculture sectors and their residues (8%);
- **Industrial side streams,** including black liquor from the pulp and paper industry and dairy process side streams (5%);
- **Biowaste,** including organic fraction of municipal solid waste and wastewater (6%);
- **Biogenic gas**, in particular CO_2 (2%);
- **Other feedstocks**, including a small number of RIA projects (RECOVER, BIZENTE, ENZYCLE) developing technologies to convert non-biomass feedstocks (referred to as "other feedstocks") using biotechnological processes (5%).

As shown in Figure 8, the bio-based sector is the main source of feedstock for CBE JU projects across all types of actions, followed by the forest-based sector. Mixed feedstocks are used in 12% of the projects using two or more different feedstocks, which in most cases are residues from the agricultural and food production and from lignocellulosic biomass. However, the use of other types of feedstock, such as aquatic feedstock, biogas and biowaste, is increasing in the CBE JU portfolio. All main sources of feedstock are covered by at least one of the three types of action (RIA, IA-DEMO and/or IA-Flagship).

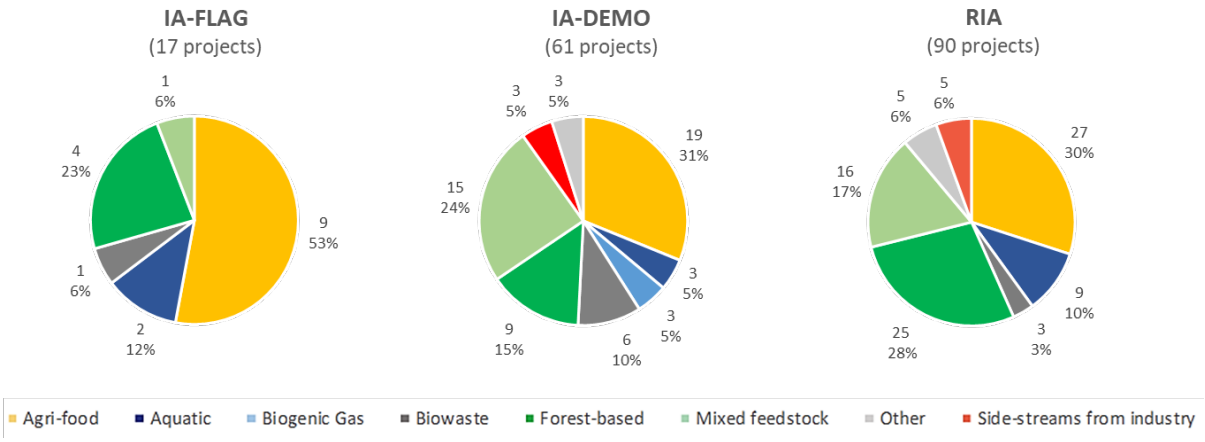


Figure 8 Number of CBE JU projects in relation to their main feedstock per type of action (excluding CSAs).

In the table below, some examples of CBE JU projects, funded mainly from the 2023 call, are presented to explain the main source of feedstock used in the different categories.

Feedstock	CBE JU project
Agri-based	**IASIS** (RIA) aims to remediate both contaminated and saline soils through crop management by growing selected high-yield industrial crops on the affected land for the development of bio-based materials and chemicals. **Zest** (IA-DEMO) aims to evaluate various raw materials and agricultural side streams for their suitability as feedstock for fungal fermentation. Based on nutrient content, the best ones will be selected and used in the production of bio-based protein products.
Forest-based	**WOODCELL** (IA-Flagship) focuses on the valorisation of residual and low-quality hardwood residues into novel functional bio-based raw materials for the production of special microcrystalline cellulose (MCC), which is used as a strength additive and rheology modifier in various products, including building materials, paper and packaging, and energy storage.
Aquatic	**PROTEUS** (IA-Flagship) will establish a fully integrated industrial biorefinery for the valorisation of untapped marine resources, and more specifically the brown seaweed *L. hyperborea*, by optimising formaldehyde-free harvesting and residual extraction methods for food, animal feed, personal care and industrial applications.
Side stream from industry	**SurfToGreen** (IA-DEMO) aims to utilise EU-based resources from agricultural or forest industry side streams such as fats and oils, glycerol and sawdust. These resources will be employed to identify and select building blocks for integration into synthetic processes, leading to the development of innovative, sustainable, and competitive surfactants.
Biowaste	**LandFeed** (IA-DEMO) aims to valorise underutilised biowaste (HORECA waste, olive oil waste, etc.) by implementing innovative technologies to produce new bio-based fertilisers with a tailored nutrient dosage adapted to crops and farmers' practices.
Biogenic gaseous carbon gas	**HICCUPS** (IA-DEMO) demonstrates an optimal way to efficiently utilise CO_2 from wastewater treatment plants. The aim of the project is to capture, purify and convert CO_2 into bio-based materials to replace fossil-based polyethylene in plastic products and food packaging, which will be renewable and biodegradable.

Table 2 Sources of feedstock in CBE JU projects.

Main application areas

The main application areas covered by the CBE JU portfolio are:

- **Bio-based chemicals**, including surfactants, solvents and platform chemicals;
- **Biopolymers and bio-based plastics,** including coatings, polyurethanes, polyesters, resins and adhesives;
- **Construction**, fibres and panels for furniture, binders, composites and insulation materials;
- **Crop protection and fertilisation**, including biopesticides, fertilisers and pheromones;
- **Food and feed**, including proteins, sugars, additives and bioactive compounds;
- **Packaging**, mainly the production of bio-based materials with tailored properties for packaging applications (including food packaging);
- **Textiles**, including textile fibres and textile coatings;
- **Others**, including biofuels, biogas, forest management, digital tools, etc..

As shown in Figure 9, the main application areas covered by IA-Flagship, IA-DEMO and RIA action types are food and feed (39 projects), biopolymers and bio-based plastics (34 projects), bio-based chemicals (31 projects), packaging (25 projects) and construction materials (12 projects). The portfolio also includes RIA and IA-DEMO projects in both crop protection and fertilisation (10 projects) and textiles (8 projects).

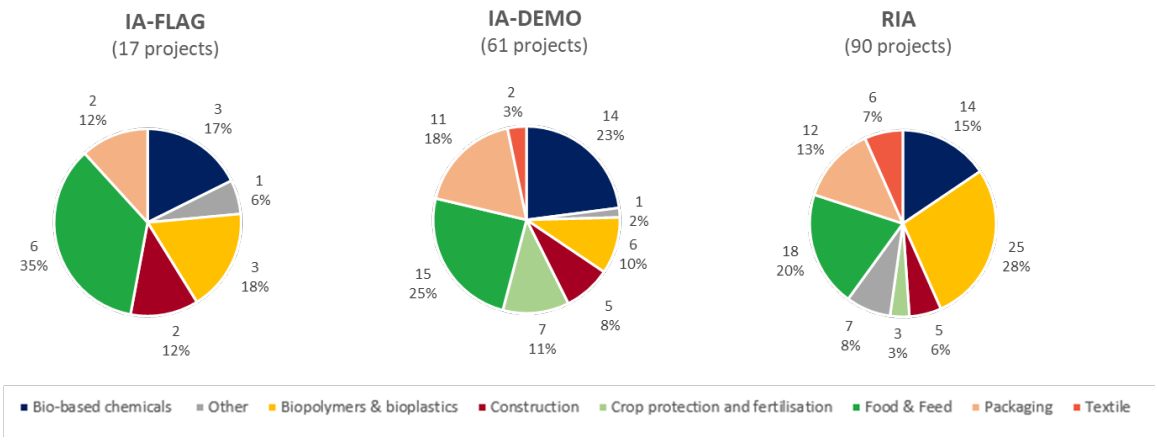


Figure 9 Number of CBE JU projects by main application area and type of action (excluding CSA).

In the table below, examples of CBE JU projects, funded mainly from the 2023 call, are presented to provide examples on products developed in the different applications areas.

Applications	CBE JU project
Bio-based chemicals	**CIRCLE** (IA-Flagship) aims to convert food waste into added value chemicals and intermediates. The project will explore the possibility of upgrading the capacity of an existing plant to convert the waste into high value bio-based chemicals and intermediates such as lactic acid (LA) and its derivatives, including those based on polylactic acid (PLA).
Biopolymers and bio-based plastics	**BIOntier** (IA-DEMO) aims to produce multifunctional bio-based composites for the automotive, aerospace, energy and water treatment sectors, starting from waste from agricultural food production and forest-based feedstocks. The new composites will have improved thermal, mechanical and chemical properties, as well as corrosion and chemical resistance, hardness and mechanical resistance, high temperature and fire resistance, and structural health monitoring functionalities.
Construction	**SSUCHY-NEXT** (IA-DEMO) builds on the BBI JU-funded predecessor project SSUCHY. Its main goal is to produce hemp fibre and demonstrate the use and environmental benefits of the new bio-based polymer matrices in wind turbine blades, leather substitutes and construction materials such as façade cladding panels.
Crop protection and fertilisation	**ReLeaf** (IA-DEMO) aims to valorise biowaste streams such as sewage sludge, fish processing waste and effluent, mixed food waste and agricultural food production waste. Its goal is to convert these feedstocks into controlled-release, growth-targeted and biostimulant-enriched bio-based fertilisers.
Food & feed	**Rural BioReFarmeries** (IA-DEMO) will develop sustainable grass-based business models in rural areas by optimising grasslands and alternative green biomass feedstocks for the production of essential agricultural inputs (feed, energy and nutrients) and high-value products (human-grade protein, flavours, antimicrobials and biomaterials).
Packaging	**TERRIFIC** (IA-Flagship) will establish a first-of-its-kind multi-purpose biorefinery. Starting from second generation biomasses from agricultural and forest-based residues, the project aims to produce biopolyesters and biomaterials with more than 95 % renewable resource content and enhanced properties, including barrier and durability, for packaging applications.
Textile	**PHYBI** (RIA) aims to combine the production of high-yield biomass, such as woody and herbaceous crops in degraded and polluted soils, following phyto-management practices. The lignocellulosic fraction will be further valorised in the production of pigments and coatings for the textile industry.

Table 3 Main applications in CBE JU projects.

CBE JU Coordination and Support Actions

Lastly, the 22 funded CSAs are regrouped below according to the main focus of the project.

Focus	CBE JU project
Public awareness and engagement	**Allthings.bioPRO** is deploying a smart combination of gamification, serious gaming, a mobile app and a communication campaign to increase awareness, participation and co-creation of the bio-based industry among citizens.
Education, skills and career development	**NEBA Alliance** aims to establish an international network to make high-quality training accessible to professionals across Europe and neighbouring regions.
Mapping and improving regulatory frameworks	**BioINSouth** is supporting regional environmental sustainability assessment for the bio-based sectors to improve innovations, industries and inclusivity in South Europe.
Increasing bioprocess efficiency	**COPILOT** is developing the next generation platform of pilot and demo infrastructures, unlocking faster innovation and EU bioeconomy growth.
Network and strategy development	**BioeconomyVenture** aims at creating and expand an interconnected European network in the bio-based industries establishing a platform that connects start-ups and spin-offs, and related organisations, clusters, corporates and investors seeking opportunities.

Table 4 examples of projects for each category are presented.

- **Public awareness and engagement** (4 projects)
- **Education, skills and career development** (3 projects)
- **Mapping and improving regulatory frameworks** (4 projects)
- **Increasing bioprocess efficiency** (3 projects)
- **Network and strategy development** (8 projects)

Focus	CBE JU project
Public awareness and engagement	**Allthings.bioPRO** is deploying a smart combination of gamification, serious gaming, a mobile app and a communication campaign to increase awareness, participation and co-creation of the bio-based industry among citizens.
Education, skills and career development	**NEBA Alliance** aims to establish an international network to make high-quality training accessible to professionals across Europe and neighbouring regions.
Mapping and improving regulatory frameworks	**BioINSouth** is supporting regional environmental sustainability assessment for the bio-based sectors to improve innovations, industries and inclusivity in South Europe.
Increasing bioprocess efficiency	**COPILOT** is developing the next generation platform of pilot and demo infrastructures, unlocking faster innovation and EU bioeconomy growth.

Network and strategy development	**BioeconomyVenture** aims at creating and expand an interconnected European network in the bio-based industries establishing a platform that connects start-ups and spin-offs, and related organisations, clusters, corporates and investors seeking opportunities.

Table 5 Example of CSAs funded by CBE JU.

1.2.2. Main Research & Innovation achievements

The CBE JU-funded projects achieved significant milestones in 2024, including the successful completion of 18 BBI JU-funded projects. This section presents some examples, focusing on those with results that have a significant (potential) impact and illustrate how sustainable bio-based solutions can help address some of society's most pressing challenges. These include using different types of biowaste and bio-based residues as resources for the production of sustainable bio-based chemicals and materials, introducing circular approaches to production and consumption, using resource-efficient technologies and processes, reducing greenhouse gas (GHG) emissions and microplastic pollutants, and improving soil health.

SWEETWOODS (BBI JU-funded IA flagship project completed in May 2024)

The inauguration of the CBE JU-funded SWEETWOODS in Imavere, Estonia, in May 2024, represented a major milestone in advancing a sustainable, bio-based economy in Europe. This biorefinery converts hardwood residues from wood processing and forestry into lignin and cellulosic sugars for use in bio-based products such as insulation materials, soap and personal care products, sustainable packaging, compostable and biodegradable plastics, and carbon neutral asphalt. SWEETWOODS uses the Sunburst™ technology, a highly efficient fractionation technology that can convert over 90 % of the woody biomass into high value materials. This technology also enables the production of new materials with a small environmental footprint, using minimal amounts of water and chemicals. A system has been installed at the plant to treat and reuse most process water, integrating a circular production approach.

Figure 10 SWEETWOODS biorefinery.

PEFerence (ongoing BBI JU-funded IA flagship project)

The PEFerence biorefinery in Delfzijl, the Netherlands, was officially inaugurated in October 2024, with the participation of Queen Maxima of the Netherlands and Deputy Prime Minister Hermans. This biorefinery demonstrates the feasibility of the large-scale production of sustainable bio-based chemicals, such as furandicarboxylic acid (FDCA). This molecule can be used to produce a wide range of circular chemicals and polymers such as polyesters, polyamides, coating resins and plasticisers and, crucially, polyethylene furanoate (PEF), a 100 % bio-based alternative plastic that outperforms traditional fossil-based PET. A bio-based material, PEF

Figure 11 Inauguration of the PEFerence biorefinery.

has properties that make it suitable for a wide range of applications, including food and beverage packaging, textiles, and consumer goods. With its superior barrier properties and full recyclability, the bio-based material offers a compelling alternative to PET, which is widely used in plastic bottles and other packaging.

CIRCULAR BIOCARBON (ongoing BBI JU-funded IA flagship project)

The biorefinery, which began operations in October 2024, serves as an excellent example of how cities can successfully apply circular economy models to waste management, turning municipal waste and sewage sludge into valuable bio-based products, such as green graphene and bio-based fertilisers. Once the waste treatment facility becomes fully operational, the CIRCULAR BIOCARBON biorefinery will treat more than 300 million tonnes of waste per year, generated by around 1 million people. The facility highlights the shift towards a circular bio-based economy, with a real replication potential across Europe and beyond. In addition to the Zaragoza biorefinery, a similar facility is under construction in Sesto San Giovanni, Italy, further demonstrating the scalability of this innovative solution for sustainable urban waste management.

Figure 12 CIRCULAR BIOCARBON biorefinery.

B-FERST (BBI JU-funded IA-DEMO project completed in October 2024)

B-FERST has demonstrated how to enhance the productivity of agricultural land in a sustainable way by developing 8 bio-based fertilisers derived from nutrients recovered from different biowaste sources. The project has demonstrated the use of biowaste in the form of solid nutrients from ash, struvite or compost, and non-microbial plant biostimulant from biomass to produce advanced bio-based fertilisers. This approach allows the substitution of about 15-30 % of mineral raw material by biowaste residues, reducing dependence on feedstocks, improving the sustainability of fertilisers and valorising underutilised biowaste for more sustainable agricultural management. It also contributes to the decarbonisation of the fertiliser sector by replacing fossil-based products with bio-based by-products, which reduces the carbon footprint of fertiliser production by up to 10 %, thereby minimising its environmental impact.

Figure 13 B-FERST consortium partners at Fertiberia facility.

OLEAF4VALUE (BBI JU-funded RIA project completed in June 2024)

While olive oil is a commodity, 4.5 million tonnes of olive tree leaves are discarded each year as a by-product. OLEAF4VALUE has developed a valorisation system for these tree olive leaves. The Smart Dynamic Multi-Valorisation-Route Biorefinery facilitates the cascade valorisation of biomass from olive tree leaves according to its physico-chemical composition, with specific pre-treatments to increase the yield of target products. Advanced green extraction and isolation technologies were used to separate all valuable fractions and compounds using a zero waste approach. Enzymatic

biotransformation, molecularly imprinted polymers and nanoencapsulation technologies were used to develop tailor-made prototypes to meet market needs in high value sectors such as food, feed, health, cosmetics and chemicals. This biorefinery concept was the basis of the ongoing CBE JU-funded flagship project SUSTAINEXT, which focuses on the production of plant-based extracts and ingredients from sustainable feedstocks.

WASTE2FUNC (BBI JU-funded DEMO project completed in November 2024)

WASTE2FUNC has successfully demonstrated the use of food waste in the production of lactic acid (LA) and microbial biosurfactants (BS), which can be used in a wide range of applications, such as cleaning products, detergents, cosmetics and many others. By integrating LA and BS, Ecover has developed several prototypes for cleaning products and Amphistar has formulated a hand soap prototype. The two demonstration lines are being further scaled up in the framework of the ongoing CBE JU-funded flagship projects CIRCLE (LA) and SURFsUP (biosurfactants), which are attracting great interest from investors and end-users. This video, aimed at the general public, explains the concept of the project in different languages.

Figure 14 ECOVER cleaning products containing LA and BS produced in WASTE2FUNC products.

GLAUKOS (BBI JU-funded RIA project completed in May 2024)

This project, named after the mythical Greek sea god of sailors and fishermen, has developed alternative polymers that could help reduce microplastic pollution caused by clothing and fishing gear. Glaukos used a fermentation process developed through microbial strain selection and strain engineering to convert industrial side streams containing sugars into polymer building blocks and then into polymers. These polymers were then used to produce yarn and threads for clothing, fishing nets and fishing net coatings. With the aim of improving the end-of-life of these textiles, the project worked on technologies for biodegradation, mechanical degradation and ecotoxicity, covering the different types of impact of plastics in the marine environment.

Figure 15 Bio-based yarns from GLAUKOS project

BIObec (BBI JU-funded CSA project completed in February 2024)

Education plays a key role in the transition to a bioeconomy, which requires new skills and competences. The BIObec project responds to educational needs by proposing the establishment of six regional Bio-Based Education Centres (BBECs) to encompass the Northern European region (Denmark, Finland, Germany, Ireland), the Mediterranean region (piloted by Italy and Spain but also focusing on Greece and Portugal) and the region of Central and Eastern Europe (piloted by Poland, Czechia and Bulgaria), and contribute to the development of different regional ecosystems and closing industry skills and competence gaps. Combining the concepts of traditional education and knowledge hubs, the BBECs provide a space for interaction between universities, research institutes, innovation labs, R&D centres, industry and policymakers

1.3. CALLS FOR PROPOSALS, GRANT INFORMATION AND OTHER FUNDED ACTIONS

1.3.1. 2024 call for proposal (applicants)

The CBE JU 2024 call for proposals allocated 213 million to four different types of actions: 3 Innovation Actions – Flagships (IA-Flag); 7 Innovation Actions (IA); 5 Research and Innovation Actions (RIA); and 3 Coordination and Support Actions (CSA).

The table below sets out an overview of the main topics of the call (including the budget allocated to each topic), and the number of evaluated proposals per topic.

Type of action	Topic	Indicative topic budget	Estimated number of grants	Total requested EU contribution (eligible proposals)	Number of evaluated proposals	Actual budget / Total requested
IAFlag	HORIZON-JU-CBE-2024-IAFlag-01	€20,000,000	1	€39,908,650	2	50%
	HORIZON-JU-CBE-2024-IAFlag-02	€20,000,000	1	€92,525,663	5	22%
	HORIZON-JU-CBE-2024-IAFlag-03	€20,000,000	1			
IA	HORIZON-JU-CBE-2024-IA-01	€15,000,000	2	€62,643,767	9	24%
	HORIZON-JU-CBE-2024-IA-02	€15,000,000	2	€122,345,346	19	12%
	HORIZON-JU-CBE-2024-IA-03	€15,000,000	2	€21,937,124	3	68%
	HORIZON-JU-CBE-2024-IA-04	€15,000,000	2	€115,632,668	17	13%
	HORIZON-JU-CBE-2024-IA-05	€15,000,000	2	€40,207,233	6	37%
	HORIZON-JU-CBE-2024-IA-06	€15,000,000	2	€66,259,838	11	23%
	HORIZON-JU-CBE-2024-IA-07	€15,000,000	2	€66,614,977	9	23%
RIA	HORIZON-JU-CBE-2024-RIA-01	€7,000,000	2	€52,475,628	16	13%
	HORIZON-JU-CBE-2024-RIA-02	€7,000,000	2	€89,385,332	25	8%
	HORIZON-JU-CBE-2024-RIA-03	€10,000,000	2	€260,925,966	54	4%
	HORIZON-JU-CBE-2024-RIA-04	€7,000,000	2	€123,472,419	35	6%
	HORIZON-JU-CBE-2024-RIA-05	€7,000,000	2	€198,688,610	57	4%
CSA	HORIZON-JU-CBE-2024-CSA-01	€4,000,000	1	€46,050,911	12	9%
	HORIZON-JU-CBE-2024-CSA-02	€3,000,000	1	€15,103,573	5	20%
	HORIZON-JU-CBE-2024-CSA-03	€3,000,000	1	€11,987,575	4	25%
Total	HORIZON-JU-CBE-2024	€213,000,000	30	€1,426,165,279	289	15%

Table 6 Overview of the CBE JU 2024 call topics and submitted proposals per type of action (eligible and admissible proposals).

Between call opening (24 April 2024) and call closure (18 September 2024), 298 proposals were submitted. According to the rules set out in sections A and B of the Horizon Europe General Annexes, nine proposals were found to be ineligible and/or inadmissible. As a result, 289 proposals were evaluated, requesting more than EUR 1.4 billion in total funding. On average, the consortia that submitted proposals consisted of 12 entities, with the smallest consisting of 3 entities and the largest consisting of 30 organisations. This difference depend mainly on the different type of action as well as the complexity of the proposed project.

Overall, the 2024 CBE JU call received 86% more submissions than the 2023 call for the same number of topics (18). The increase in interest was mainly pronounced for RIA topics, with a 125 % increase in submissions compared to 2023 (from 83 to 187 for the same number of RIA topics) while a low number of proposals were received in Flagship topics. The participation of SMEs remained high (32 % of all applicants), as did the participation of BIC members (48 % of all applicants). There was also greater participation from widening countries, with a significant number of applicants from underrepresented countries as defined in the CBE JU widening strategy (see section on widening participation for more info).

Geographical distribution of applicants

In terms of country participation, the consortia comprised entities from 3 to 18 different countries. The average consortium comprised participants from seven different countries. Overall, most applicants were from EU Member States (87 % of all applicants, 3,139 out of 3,598 participations). Applicants from associated countries accounted for 12 % of the total (439 total participations). These included applicants from the 3 most recent countries to become associated to Horizon Europe — New Zealand (since January 2023 with 8 participations), United Kingdom [5] (since January 2024 with 168 participations) and Canada (since January 2024 with 2 participations). Applicants from third countries accounted for the remaining 0.6 % (20 participations from Argentina, Australia, Azerbaijan, Brazil, China, Colombia, Nigeria, Thailand and the United States).

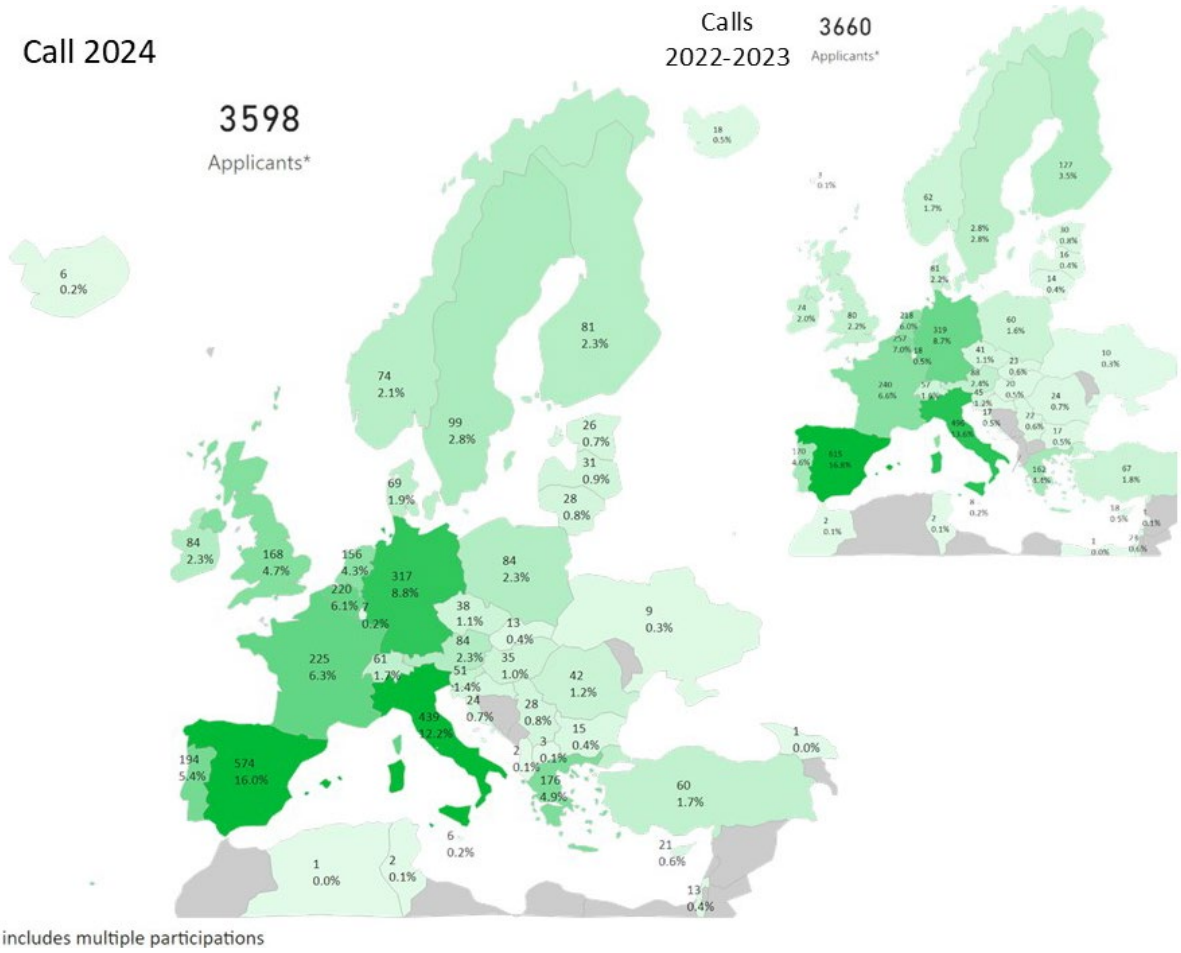


Figure 16 CBE JU 2024 call. Percentage of applicants per country calculated from the total number of applicants (3 598 total, eligible participations, i.e. including multiple counts of participation in more than one proposal) and number of applicants per country, with comparison to the total number of applicants in CBE JU calls in 2022 and 2023, also as percentage of applicants per country calculated from the total number of applicants (3 660 total eligible participations). The number of applicants in the 2024 call (not unique) shown on the map includes: Associated Countries — Canada (2), New Zealand (8); Third

[5] The United Kingdom officially rejoined the European Union's Horizon Europe research and innovation programme as an associated country on 1 January 2024. This association agreement only applies for calls and budget 2024 onwards. Therefore, participants in the CBE JU Call 2024 were informed via the public guidance that, if eligible for funding, they will not be funded by carry-overs from the previous years' budgets. In addition, at the opening of the Call 2024 Grant Agreement Preparation, all consortia of proposals selected for funding with UK participants were notified that only budget from the year 2024 would be used to fund their projects.

Countries — Argentina (3), Australia (1), Azerbaijan (2), Brazil (3), China (2), Colombia (2), Nigeria (2), Thailand (1) and United States (3).

All 27 Member States were represented among the applicants in the 2024 call. The country with the fewest participations was Malta (6), while the country with the highest number of participations was Spain (574). The distribution pattern is overall very similar to the distribution of applicants in the calls conducted in 2022 and 2023. However, as shown in the Figure below, some countries have significantly increased their share in terms of total number of applicants. The largest increase compared to the previous year was in the number of applicants from the UK (+141 %), which is clearly linked to the country's recent association to Horizon Europe, which became effective at the beginning of 2024.

Several Member States from widening countries increased their share of total participations compared to the 2023 call: Latvia (+103 %), Croatia (+57 %), Lithuania (+50 %), Hungary (+47 %), Romania (+30 %), Poland (+24 %) and Portugal (+28 %). There were also significant increases in the number of applicants from Norway (+36 %) and Ireland (+24 %).

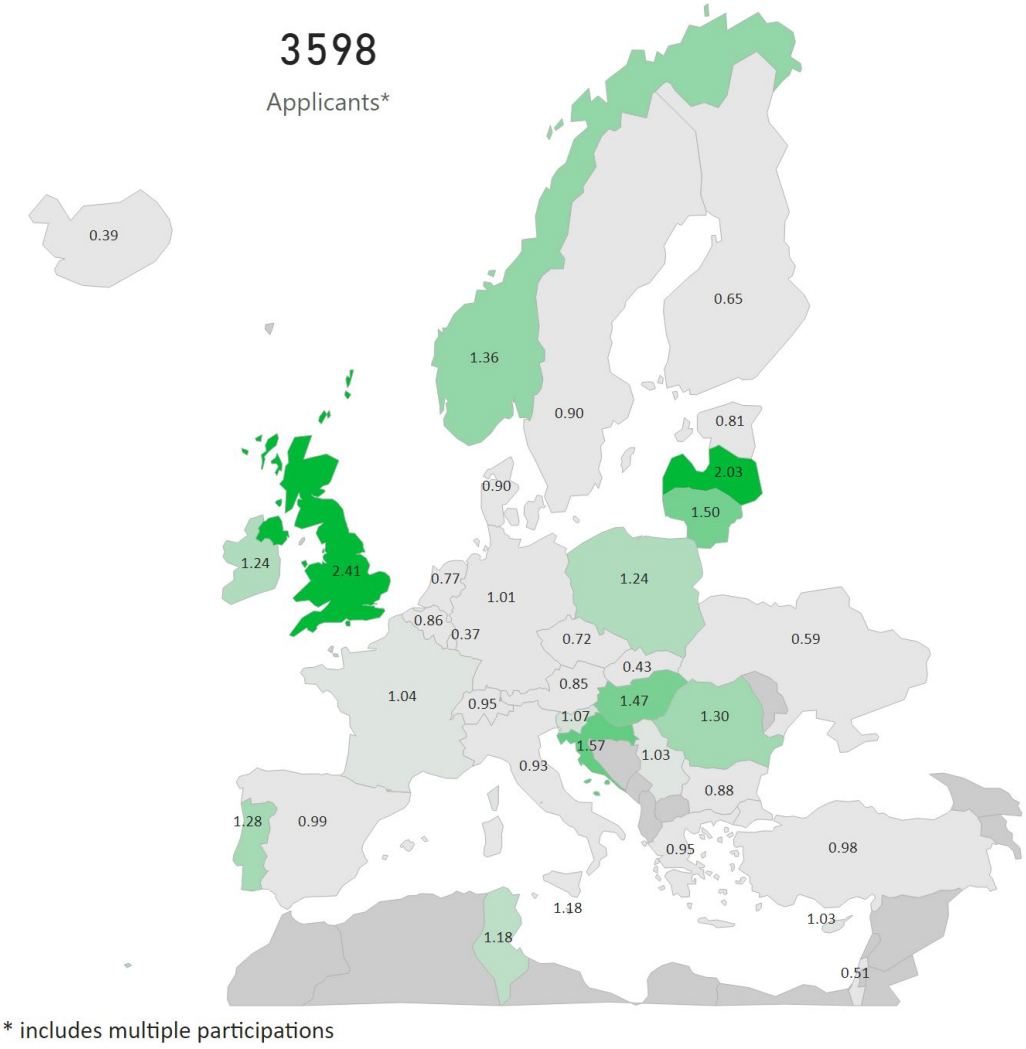


Figure 17 CBE JU 2024 vs 2023 call: ratio of each country's share (total eligible) of the total number of applicants (3 598 for the 2024 call; 2 119 for the 2023 call). Each value reflects the change in a country's share of applicants in the 2024 call compared to the 2023 call. A value above 1 indicates an increase (e.g. 2 represents a two-fold increase), while a value below 1 indicates a decrease (e.g. 0.5 represents a two-fold decrease).

Types of applicants, including SMEs

The CBE JU 2024 call for proposals attracted interest from a wide range of research and innovation actors. Higher education and research centres together accounted for around 47 % of all applicants. The participation of private companies in proposals was at a similar level (44 %). This highlights the strong interest from industry in the CBE JU programme. As in previous years, SMEs accounted for around two-thirds of all applicants.

This high level of participation suggests that the CBE JU programme effectively addresses the needs and challenges of SMEs and continues to be seen as an important opportunity for innovation and growth.

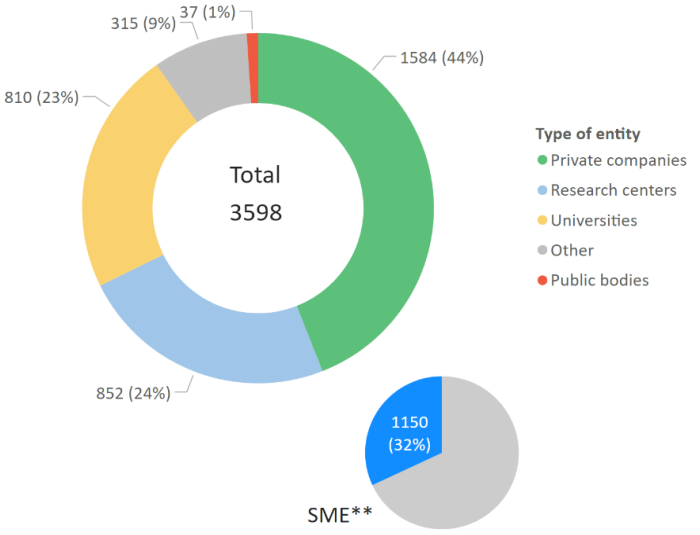


Figure 18 CBE JU 2024 call (not unique) applicants per type of applicant and related percentage calculated from the total number of applicants. ** SME data are based on self-declaration at proposal stage.

Newcomers

Around half of the applicants in the 2024 call (1 062 out of 2 079 unique applicants) had never received funding from the programme in the past, either under the CBE JU or its predecessor, the BBI JU. This is significant number of newcomers (50 % of total applicants) is also the result of the programmes' outreach efforts. The increase in the number of participants continues to be the strongest among private companies (62 % newcomers), suggesting that the growth phase is far from over, particularly in the private sector.

As shown in Figure 19 , the proportion of newcomers and returning SME applicants is more or less equal (57 % and 43 % respectively), indicating that the CBE JU programme remains relevant and attractive to both new and existing participants. It also suggests that the programme is effectively adapting to the changing needs of SMEs.

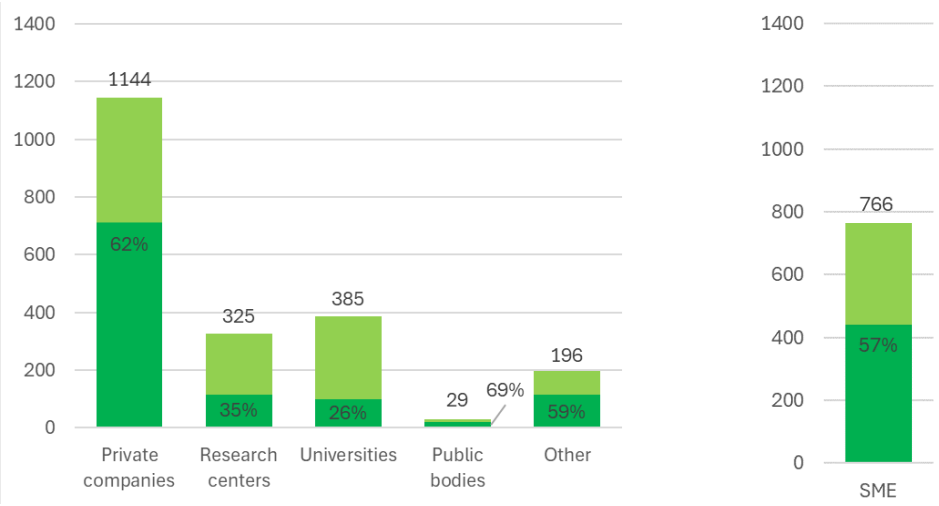


Figure 19 CBE JU 2024 call applicants (2 079 unique applicants) by applicant type, and percentage share of (unique) newcomers (dark green).

BIC members

Owing to the public-private nature of the CBE JU partnership, there is a significant level of participation by members of the Bio-based Industries Consortium (BIC). More than a third of the applicants in the 2024 call were BIC members, either full, associate or new. Notably, among all applicants, there were almost as many new BIC members as there were existing full members.

Figure 20 illustrates the sustained interest in active participation in the programme on the part of BIC members. When looking specifically at the 2024 call for proposal coordinators, more than half of all proposal submissions are coordinated by new or existing BIC members. This suggests that the programme is successful in encouraging its private members not only to participate in proposals and later in projects, but also to take the lead.

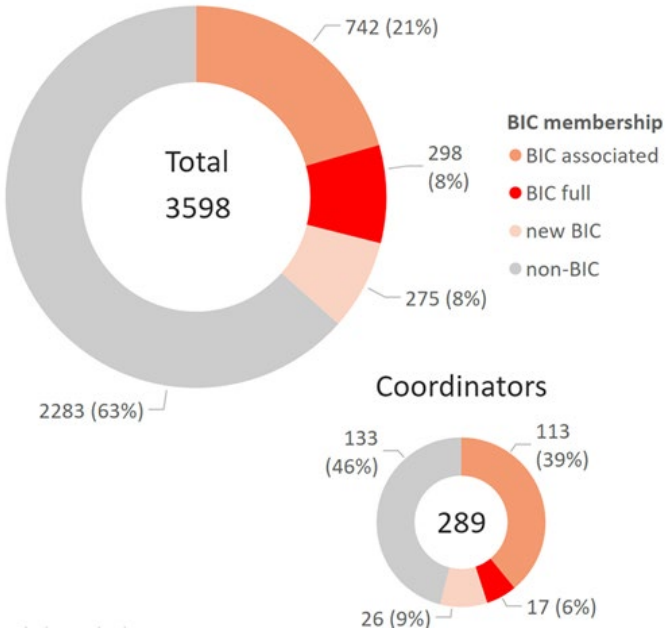


Figure 20 CBE JU 2024 call (not unique) applicants, incl. coordinators, by type of BIC membership (full member, associated member, new [project] member, or non-BIC), as absolute values and related % of total.

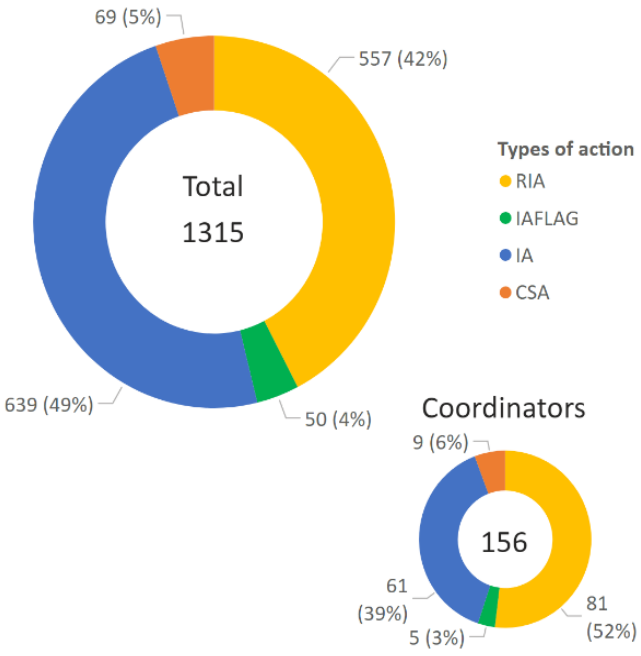


Figure 21 CBE JU 2024 call (not unique) BIC applicants, inc. coordinators, by type of action, as absolute values and related percentage of total, and 2024 call EU contributions requested by BIC applicants by type of action, as absolute values and related percentage

As shown in Figure 21, BIC members applied for all types of actions. RIA and IA actions attracted a larger number of BIC members, while CSA and IA-Flag actions received significantly fewer applications involving BIC members. The difference is largely a function of the number of topics and the number of proposals submitted, which both of which were highest for RIA and IA actions.

If only BIC members with a coordinating role are considered, the overall pattern is still very similar. This shows that the private partner of the CBE JU, which also include research centres and universities is interested in research and innovation at all levels of technological maturity, from TRL 4-5 of RIA projects to TRL 7-8 of IA Flag projects, including also the non-technological CSA projects.

1.3.2. Grants from 2023 calls (participants)

31 proposals were selected for funding from CBE JU's 2023 call, including the NEBA 2023-2 call. Grant Agreement Preparation (GAP) in respect of the proposals retained for funding from the 2023 call started on 24 January 2024 and was successfully concluded with all Grants being signed before the Time to Grant (TTG) deadline of 22 May 2024.

Topic	Project acronym	Project title	Total costs	EU contribution	Duration	Number of participants
IAFlag-01	WOODCELL	Wood residues derived microcrystalline cellulose for sustainable materials	€34,389,620	€16,639,436	60	9
IAFlag-02	CIRCLE	Circular Initiative for Recycling and waste Conversion into Lactate Extracts	€27,438,439	€16,977,025	48	18
IAFlag-03	TERRIFIC	Next generation circular biobased flagship packaging: A catalyst for the green transition	€26,512,551	€16,834,623	48	19
IAFlag-04	PROTEUS	kelP side stReam valOrisaTion to dEvelop new biobased valUe chainS	€14,439,806	€9,605,077	48	11
IA-01	MANUREFINERY	Smart modular mobile biorefining of manure to zero-waste maximising resource and nutrient recovery for feed and fertiliser bioingredients in rural areas	€9,266,640	€7,236,513	48	22
IA-01	Rural BioReFarmeries	Green BioReFarmeries - Small-scale Circular Green Biorefineries for increasing farmer sustainability and competitiveness and building resilient rural areas	€8,813,011	€7,349,887	48	19
IA-02	LANDFEED	Unlocking efficient bio-based fertilisers for soil sustainability from underutilised side streams	€7,997,753	€6,532,131	48	21
IA-02	ReLeaf	Recycling Locally Produced Bio-Wastes to Ensure Affordability and Availability of Innovative Bio-Based Fertilisers	€7,705,979	€6,504,028	48	17
IA-03	PROMOFER	Boosting upstream and downstream processes to maximize yield of PHB production and 2,3-butanediol.	€7,278,906	€5,840,013	48	13
IA-03	Zest	Valorisation of Agro-Industrial Waste through Fungi Fermentation supported by Digital Modelling	€7,503,689	€5,931,246	48	12
IA-04	MoeBIOS	Improving waste management of biobased plastics and the upcycling in packaging, textile and agriculture sectors	€9,745,759	€7,013,929	48	23
IA-04	PROSPER	Promoting innovation for sustainable sorting and recycling of dedicated bio-based plastics	€10,196,836	€7,498,855	48	20
IA-04	ReBioCycle	A new European blueprint for circular bioplastics upcycling solutions	€10,416,833	€7,497,001	48	20
IA-05	SURFs UP	Safe and sustainable by design microbial and lignin-based biosurfactants sourced from sustainable feedstock for home, personal care and agrochemical application	€9,325,205	€7,396,501	42	12
IA-05	SurfToGreen	Bio-based sustainable SURFactants TO foster GREEN industry	€9,062,801	€7,346,988	60	18
IA-06	BIONEER	Scaled-up production of next-generation carbohydrate-derived building blocks to enhance the competitiveness of a sustainable European chemicals industry	€9,517,357	€7,500,000	48	13

IA-06	NEXT-STEP	Next-gen of sustainable biobased chemical platforms and polymers: enhancing sustainability in European industry	€8,046,638	€6,609,476	48	12
IA-07	BIOntier	BreakIng Frontiers in sustainable and circular biocomposites with high performance for multi-sector applications	€8,345,473	€7,017,866	36	25
IA-07	SSUCHY-Next	Developing the supply chains for industrial hemp fibre and bio-based resins towards high performance circular bio-based composites	€8,036,954	€6,735,747	48	19
RIA-01	IASIS	Curing contaminated and saline land with Industrial crops and producing biomass for high-value applications	€4,999,900	€4,999,900	48	18
RIA-01	pHYBi	PHYtomanagement as a sustainable feedstock source of lignocellulosic-based high-value BIo-based products for textile applications	€4,991,539	€4,991,539	48	11
RIA-02	OptiForValue	Optimising forest operations for sustainable forest management and high-value applications	€4,997,361	€4,997,361	48	17
RIA-02	SingleTree	Optimizing multifunctional forest-based value chains with single tree information and application of digital technologies	€5,152,153	€4,997,528	48	14
RIA-03	FLEXIZYME	Construction of a FLEXIble and adaptable enZYMatic biotechnological platform for sustainablE industrial production of bio-based fatty amines from side stream materials	€4,984,164	€4,984,164	48	19
RIA-03	GoodByO	Multi-commodities microbial-driven BiOrefinery based on food-processing industry wastes, biogenic CO2 and bioprocess wastewaters	€4,929,060	€4,929,060	42	10
RIA-04	BIOPYRANIA	Biobased pyrazine monomers from second generation biomass for high performance polymers, copolymers and blends	€4,999,785	€4,999,785	48	13
RIA-04	POLYMEER	Brewers spent grain as main by-product for development of novel, high-performance bio-based polymers, polymer blends, and co-polymers	€4,878,093	€4,878,093	48	14
RIA-04	Polymers-5B	Synthesis of Bio-based and Biodegradable polymers from monomers from renewable Biowastes via Biocatalysis and Green Chemistry to contribute to European Circular Bioeconomy	€5,264,779	€5,264,779	48	12
CSA-01	COPILOT	CO-creating the next generation platform of PILOT and demo infrastructures, unlocking faster innovation and EU bioeconomy growth	€1,499,578	€1,499,577	30	10
CSA-02	BioINSouth	Supporting regional environmental sustainability assessment for the BIO-based sectors to improve INnovation, INdustries and INclusivity in SOUTH Europe	€2,999,195	€2,999,195	36	15
CSA-01 NEBA	NEBA Alliance	New European Bauhaus Alliance	€1,000,000	€1,000,000	24	14
Total			**€284,735,854**	**€214,607,319**		

Table 7 Overview of projects funded via the 2023 call (including the NEBA 2023-2 call).

Geographical distribution of participants

A total of 439 beneficiaries were awarded grants in the 2023 call and the NEBA 2023-2 call, including multiple participations. These entities were from all Member States except Lithuania. There were also beneficiaries from 6 associated countries (Israel, Norway, Serbia, Switzerland, Türkiye and the United Kingdom) and 3 third countries (China, Japan and South Korea). Among the 27 Member States, Western and Central European countries are the most represented. Spain and Italy take the lead, each with more than 10 % of all beneficiaries in 2023. The pattern is similar to the distribution of BBI JU beneficiaries funded in the calls conducted between 2014 and 2020, with several notable differences. For example, the relative participation of Estonia, Greece, and Ireland in 2023 doubled compared to their participation in BBI JU-funded calls overall, while Germany's participation halved. The fourfold decrease in the UK's participation was a consequence of the UK not being associated with Horizon Europe in 2023.

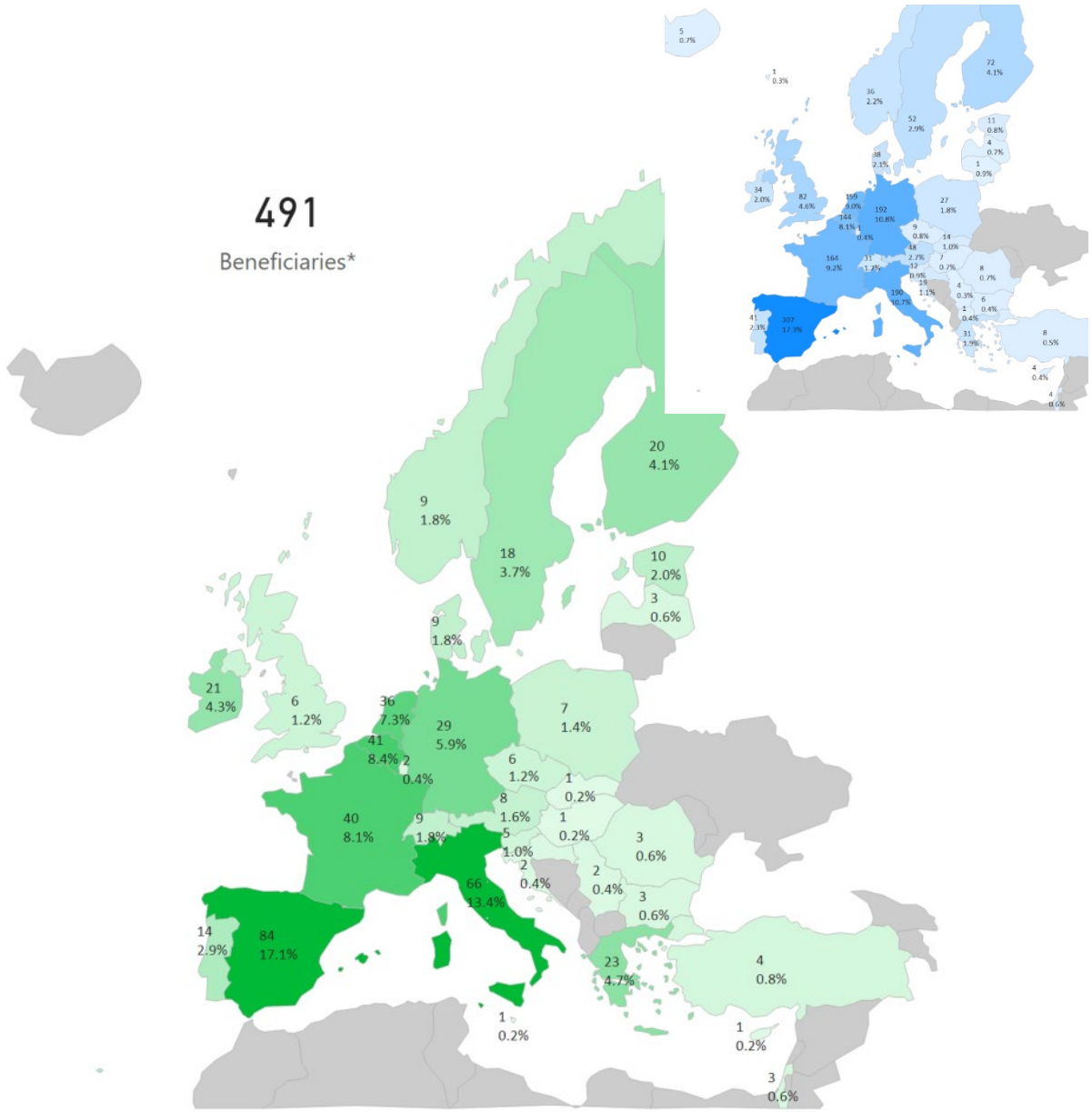


Figure 22 CBE JU 2023 call beneficiary percentage per country, calculated from the total number of beneficiaries (491 beneficiaries, i.e. including multiple counts of entities participating in more than one project) and related number of beneficiaries per country, and comparison with BBI JU calls' total beneficiaries (2014-2020), also as beneficiary percentage per country calculated from the total number of beneficiaries (1 773 beneficiaries, incl. multiple participations).

Types of participants, including SMEs

The entities funded in the 2023 call cover the full spectrum of organisational types: higher education establishments, research centres, public bodies, private, for-profit companies and others. As shown in Figure 23, almost half of the beneficiaries were private for-profit companies and they received exactly half of the total EU contribution (EUR 107 million out of EUR 215 million).

One notable aspect is the high level of participation of SMEs. Nearly a third of the participants were SMEs, and exactly one-third of the funding was allocated to them. This underscores the programme's vital importance for SME.

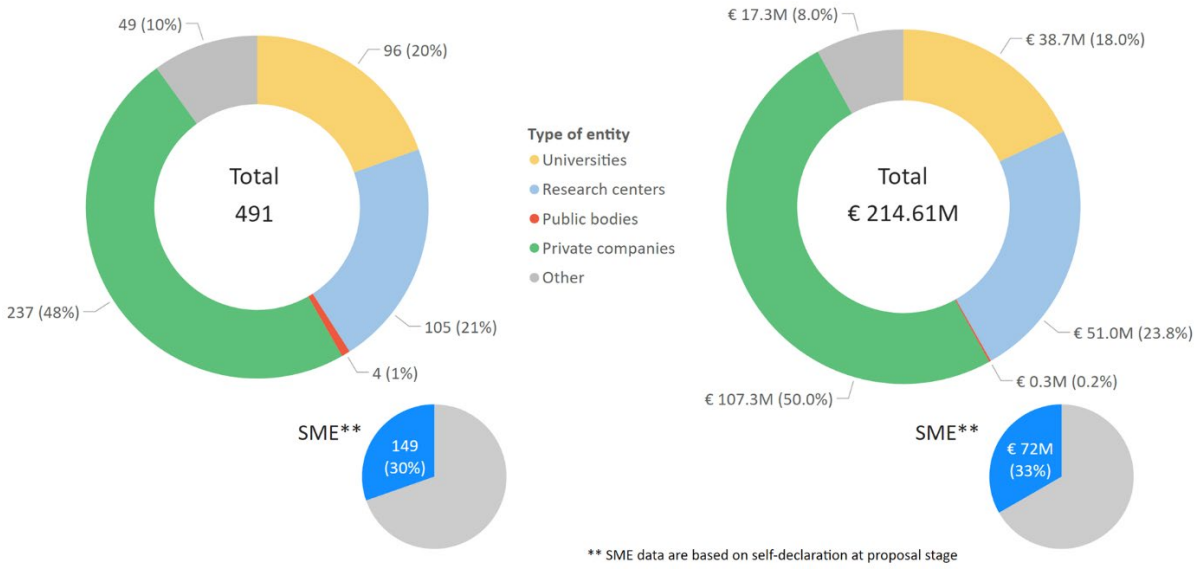


Figure 23 CBE JU 2023 call beneficiaries (left), including multiple participations, and requested EU contribution (right) by type of participant and related percentage calculated from the total.

As shown in Figure 24, more than half (55 %) of all project coordinators in the 2023 call were research centres, more than universities and private companies combined (23 % and 13 % respectively). This shows the leading role of research centres in CBE JU's research and innovation projects, particularly as enablers of technology transfers for industrial uptake. In addition, SMEs are also prepared to take the lead, especially in IA projects, including IA-Flag projects, as one of the four projects is being coordinated by an SME.

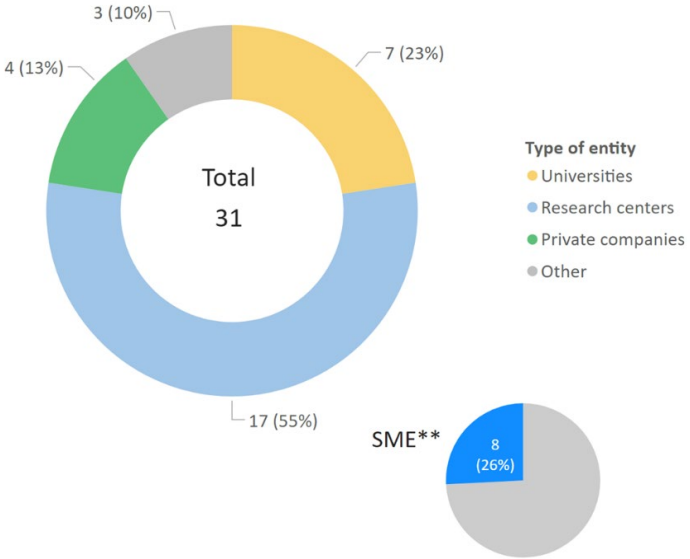


Figure 24 CBE JU 2023 call coordinators by type of participant and related percentage calculated from the total.

Newcomers

More than half (55 %) of all unique beneficiaries in the 2023 call were newcomers, defined as entities not having received funding from BBI/CBE JU in any of the past calls.

Most newcomers to the 2023 call were private for-profit companies. This suggests that the programme remains attractive to the corporate sector. The same is true for SMEs, as more than half of SME beneficiaries are new to the programme.

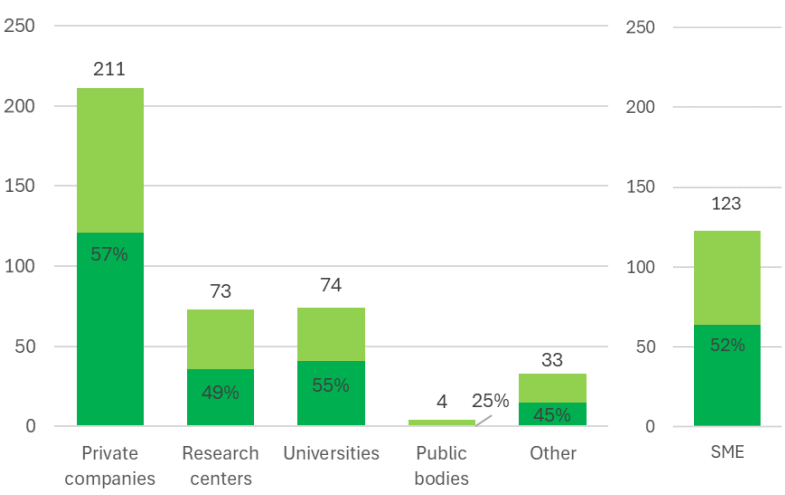


Figure 25 CBE JU 2023 beneficiaries (395 unique beneficiaries) by applicant type, and percentage share of (unique) newcomers (dark green).

BIC members

More than half of the beneficiaries in the 2023 call were BIC members (270 out of 491). Of these, two thirds in IA projects, while one in five was involved in RIA projects. In terms of the requested EU contribution, 84 % of the total EU contribution to BIC members was awarded for IA and IA-Flag projects focused on demonstration and up-scaling, mirroring the substantial private contributions made by these companies.

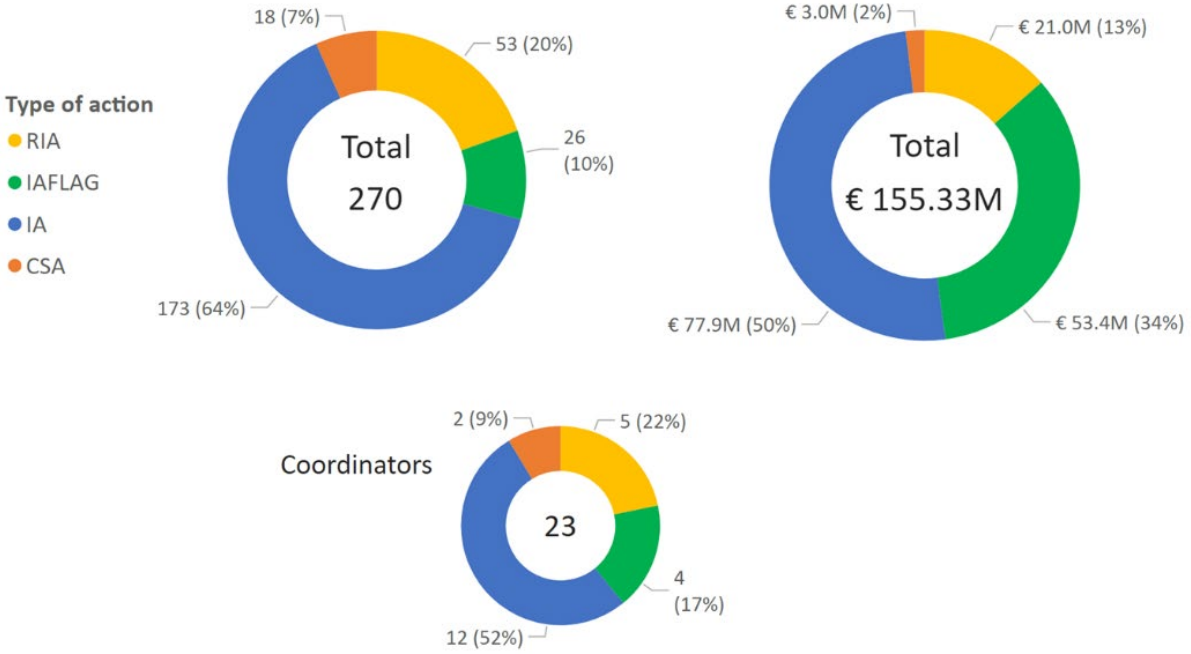


Figure 26 CBE JU 2023 call BIC beneficiaries and coordinators (including multiple participations) and EU contributions requested by BIC beneficiaries (top right) by type of action, as absolute values and related percentage of total.

1.4. EVALUATION PROCEDURES AND OUTCOMES

Below is an overview of the published 2024 call, including details on proposal submission and evaluation processes and key statistics.

1.4.1. CBE JU 2024 call process

In 2024, the CBE JU launched one call for proposals using the Horizon Europe grant lifecycle processes and IT tools. Within this framework, the call followed a structured approach consisting of the following steps.

- **Call publication** on the European Commission's F&T portal. This enabled potential applicants to find CBE JU call topics, proposal templates and guidelines;
- **Submission of proposals.** Before call closure, applicants needed to select topic(s) for which they wished to apply, register all organisations that formed part of their consortium and submit their proposal(s) via the F&T portal;
- **Evaluation of proposals.** All proposals that passed the stage of admissibility and eligibility checks were evaluated by external experts. Within five months of call closure, all applicants received a letter detailing the evaluation results via the F&T portal, along with a decision based on the outcome of the evaluation. Unsuccessful applicants could submit a complaint (and launch the so-called "redress procedure") within 30 days of receiving the letter notifying the evaluation results;
- **Grant Agreement Preparation (GAP).** The highest scoring proposals were invited to proceed to the GAP phase. Grant agreements should be signed within eight months of call closure.

By 31 December 2024, the publication, submission and evaluation of proposals submitted in the 2024 call had concluded. The proposal coordinators received their Evaluation Result Letters (ERLs) on 15 January 2025.

1.4.2. The call publication and proposal submission

The CBE JU published its annual work programme (AWP) for 2024 on the CBE JU website on 19 December 2023, including information about the topics of the 2024 call and the total budget of the call of EUR 213 million. The CBE JU 2024 call was officially launched on 24 April 2024 when it was published on the EU Funding & Tender portal. Before and after its publication, the CBE JU promoted the call during the CBE JU Info & Networking Day in Brussels on 23 April 2024 and at numerous locally organised CBE JU info days. Applicants were invited to submit proposals by 18 September 2024, 17:00 Brussels time, and the CBE JU received 298 project proposals by that deadline. Information about the number of proposals submitted (and the funding requested) per topic was published on the CBE JU website on 19 September 2024 and ranged between 2 and 57 proposals per topic.

1.4.3. The call evaluation

The evaluation of the proposals submitted in the call was based on the award criteria and evaluation rules set out in CBE JU's AWP 2024. In line with the principles of the Horizon Europe programme, all proposals were evaluated as submitted.

Expert types & selection process

After the call was published, the CBE JU invited different experts to express interest in participating in the 2024 call evaluations. Candidates were asked to complete an online expert profile via the relevant section on the Funding & Tender portal. All the experts were selected ensuring a high level of skills, experience and knowledge in the areas of each call topic, including project management, business management, innovation, exploitation, dissemination and communication. Particular attention was paid to achieving an appropriate balance (between skills, experience, knowledge, geographical diversity, gender and private/public sector representation) and rotation of experts, ensuring that experts who never participated as evaluators in Horizon Europe/Horizon2020 were also hired.

Five types of external experts were involved in the evaluation process:

- **Evaluators:** depending on the type of action, each proposal was assessed by 3 to 5 experts (3 for RIA/CSA projects, four for IA projects and five for IA-Flag projects), using the award criteria and evaluation rules set out in the conditions for the CBE JU call set out in the AWP 2024.
- **Rapporteurs:** experts responsible for the drafting of 'Consensus reports', reflecting the discussions during consensus meetings (see next section for more information).
- **Quality controllers:** experts tasked with reading the consensus reports from the consensus meetings and providing feedback to ensure that the final summary evaluation reports are of high quality and the evaluation of each criterion is consistent within and across topics.
- **Ethics experts:** tasked with verifying that proposals comply with the ethical rules and standards of the Horizon Europe programme.
- **Independent observer:** responsible for overseeing the entire evaluation process, this expert had access to all training and meetings. They provided an independent assessment of the conduct and fairness of evaluation sessions, examined how evaluation criteria were applied, and made suggestions for further improvement of the overall evaluation process.

Evaluation process

a) **Admissibility & eligibility:** After call closure, the admissibility and eligibility of all proposals was checked, taking into account the conditions for the CBE JU call and the requirements set out in sections A and B of the Horizon Europe General Annexes 2023-2024. Only proposals that were deemed eligible and admissible proceeded to the next phases of the evaluation.

b) **Proposals assigned to experts:** Each proposal was assigned to a panel of three to five expert evaluators, plus a rapporteur, depending on the type of action, as previously outlined. Contracts were signed with the evaluators and, before commencing their evaluation work, the experts were asked to confirm the absence of any conflict of interest vis-à-vis organisations participating in the assigned proposals, using the Commission's evaluation tool (SEP). For topics with a high volume of submissions — beyond what a single panel could evaluate — multiple topic subpanels were established.

c) **Individual evaluation:** This phase lasted from 7 October until 10 November 2024. Its purpose was twofold: evaluators were required to submit an Individual Evaluation Report (IER) for each assigned proposal through the IT tool SEP. These reports included both comments and scores for each evaluation criterion. Rapporteurs were then asked to draw up a consensus report based on these IERs. On 7 October 2024, the evaluators were briefed via a webinar about the

applicable rules, process, procedures, evaluation criteria, scope and objectives of the call. On 21 October 2024, the CBE JU conducted an additional webinar for the rapporteurs and quality checkers to ensure that they are prepared for the consensus evaluations. All briefings emphasised the requirements for confidentiality and the Horizon Europe rules on conflict of interest. In addition to these webinars, the experts received all necessary guidelines via SEP.

d) **Consensus phase**: This phase took place between 11 and 29 November 2024. During each of these three weeks work consisted of consensus meetings, cross-reading and ranking panels. Additionally, hearings were held for the flagship topics.

- **Briefings**: the following briefings were held during each of the three weeks of the consensus phase:
  - On Monday mornings: a general briefing for all experts, followed by topic-specific briefings for the evaluators and rapporteurs.
  - Tuesday to Friday: daily morning briefings for all experts to ensure the evaluation approach was aligned across the different topics and subpanels.
  - Monday to Thursday: a briefing at noon for the quality controllers to ensure consistent feedback across panels.
  - For each topic with multiple (sub)panels, a briefing was held for panel representatives (evaluators and rapporteurs) to inform the experts about the purpose and outcome of the Evaluation Summary Report, cross-reading and the ranking panel (see below).
- **Consensus meetings**: In each consensus meeting, the expert evaluators discussed the proposals assigned to them in order to reach a common understanding and agree on the comments and scores. These discussions were moderated by CBE JU project officers. The consensus report drafted by the rapporteurs during the individual evaluation phase was then finalised based on the outcome of the consensus discussions, before being double-checked by the quality controllers, and approved (in the SEP IT tool) by the expert-evaluators, the rapporteur and the moderator.
- **Cross-reading, ranking panels and closing meetings**:
  - For all topics where more than one panel of experts evaluated proposals, there was a ranking panel which, among other things, checked the consistency of the scores and comments in the draft Evaluation Summary Reports (ESRs) of the top-ranked proposals and, in case of equal scores, agreed on a priority order. In preparation for these ranking panels, the expert evaluators were shown the highest-scoring proposals from all subpanels and asked to read the draft ESRs to assess whether a consistent evaluation approach was being followed across the subpanels.
  - For all other topics, as only one panel of experts was needed to evaluate all the proposals submitted for each topic, each consensus evaluation week ended with a meeting at which CBE JU staff presented the outcome of topic evaluation to the experts.
- **Hearings**: Hearings were organised for all IA flagship proposals. During these meetings, applicants were invited to clarify their respective business plans. The expert evaluators used this additional input to complete the IA flagship consensus reports.

e) **Proposal ranking & priority:** The AWP 2024 included separate budget lines per topic. For the 3 flagship and 3 CSA topics, there was a budget to fund 1 proposal per topic. For the other 12 topics, the budget was sufficient to fund 2 proposals per topic. The proposals for each topic were ranked on the basis of the ESRs, taking into account the conditions set out in the

AWP 2024. Where scores were equal, tiebreakers, as explained in section F of the Horizon Europe General Annexes 2023-2024, were used to establish a priority order. The CBE JU Programme Office then drew up the "EU call ranked lists" per topic based on the priority order and the available budget and sent them to the CBE JU Governing Board for approval.

These EU ranked lists contained a "main list" of proposals (to be invited to GAP), a "reserve list" of proposals (if any), and a list of proposals that could not be funded because they did not meet the required scoring thresholds and/or the budget available for the topic was not sufficient. These were submitted to the CBE JU Governing Board for approval. In order to maximise the number of proposals funded, and within the 20 % margin of the Horizon Europe budget, surplus budget was used to fund the highest scoring proposals on the reserve lists of topics IA-02 and IA-04.

f) **The ethics evaluation** was conducted between 28 November and December 2024. This phase commenced with a short webinar aligning the Horizon Europe / CBE JU ethics (pre)screening approach, after which all proposals on the main and reserve lists were screened by two ethics experts. Ethics requirements and recommendations (if any) arising from this ethics screening will now be considered during GAP.

Statistics (number of evaluators, gender, area, etc.)

In total, 139 evaluators from 36 different nationalities (not counting second nationalities) assisted in the evaluation of the 2024 call. The majority were from 25 Member States (121 evaluators). A further 15 evaluators were from 8 associated countries and 3 evaluators were from 3 third countries. The gender ratio of experts was 66 women to 73 men.

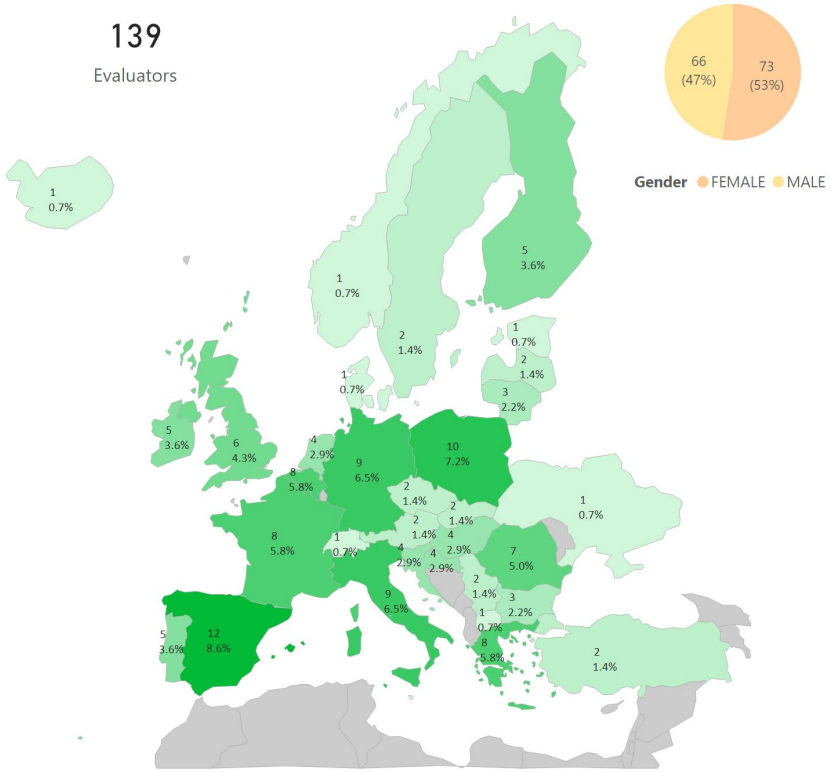


Figure 27 CBE JU 2024 call expert evaluator nationalities per country and gender. Not shown on the map are Australia (1), Brazil (1) and Iran (1).

Redress

For the **2024 call**, the deadline for submitting redress requests fell in 2025. Consequently, the outcomes of any further appeals related to the 2024 call will be addressed in the next AAR.

Regarding the **2023 call**, of three redress cases submitted, none of the appeals was found to have merit and the redress analysis confirmed that the evaluation procedure had been carried out in accordance with the rules, that the original evaluation result stood and that there would be no re-evaluation. These cases were analysed according to the relevant Horizon Europe procedures and processes and the results were communicated to the respective applicants in 2024.

1.5. FOLLOW-UP ACTIVITIES LINKED TO PAST CALLS

This chapter sets out a summary of the key follow-up activities related to the 2023 calls, the main lessons learned from the 2024 call and, more specifically, the work carried out as part of the new CBE JU Widening participation strategy.

1.5.1. Lessons learned from the 2024 call

During the evaluation of the 2024 call, the CBE JU provided external experts three distinct avenues to share their feedback and suggestions for improvement of the evaluation process.

- At the end of the consensus week, where the experts could provide feedback collectively during their panel's closing meeting or the ranking panel meeting;
- Online, via an e-questionnaire, where experts could provide feedback (anonymously and voluntarily);
- Through the independent observer, who participated in consensus meetings of their choice (allowing experts to share their perspectives directly during these sessions), but also encouraged the experts to provide further input individually via e-mail.

The feedback from these three sources confirmed that, overall, the CBE JU evaluation process is of high quality, reliable and consistent, ensuring fairness and impartiality. Notwithstanding this positive assessment, the following areas of improvement were identified:

- Although the guidelines received before and during the evaluation were considered very useful, additional guidance on the requirements at the proposal stage, and/or which elements can still be developed during a project's lifetime would be welcome. For example, more information could be provided about the ex-ante and ex-post environmental analyses, the business case, the economic viability check, risk mitigation, and intellectual property rights (including the freedom to operate);
- The topic texts contained a significant number of requirements in addition to the core technological requirements, and it was not always clear whether/which of these elements were critical, and which were of secondary importance. In addition, overlaps were identified between the CBE JU-specific requirements (defined per type of action) and individual topic texts, particularly in relation to sustainability aspects. The experts suggested trying to keep the requirements to a minimum in order to focus on the most important parts of the evaluation and avoid unnecessary complexity in terms of consortium building, proposal writing and evaluation.

These and other lessons learned will be taken into account in the preparation of future annual work programmes and related calls and have already been partially taken into account in the AWP 2025.

1.5.2. Widening participation strategy

Drawing on the results of the 2022 call submissions, CBE JU developed and launched a CBE JU Widening participation strategy along with an Action Plan for the period 2023-2024. Both endorsed by the CBE JU Governing Board and are available on the CBE JU website.

The widening strategy has a two-fold objective:

- Stepping up the participation of less represented countries and regions in the CBE JU programme and ensuring their meaningful involvement in JU-funded actions;
- Stimulating research and innovation in countries and regions with less mature bio-based systems, as also stated in CBE JU KPI n.10 ("*improve the participation of regions and countries with high unexploited potential and strategic interest to develop it*").

Widening participation strategy Action Plan 2023-2024

2024 was a crucial year for the widening strategy implementation. The key initiatives were:

1) Fostering stakeholder engagement and collaboration

- **On-site CBE JU national info days**: The CBE JU Programme Office strongly encouraged the EU countries targeted by the widening strategy to organise CBE JU national info days in order to increase the knowledge and engagement of local bio-based stakeholders. In cooperation with the members of the states' representatives group (SRG), the CBE JU organised and participated in 13 national info days, seven of which were held in person in Greece, the Czech Republic, Portugal, Slovakia, Latvia, Lithuania and Slovenia. These events were combined with on-site visits to local industries active in the bioeconomy sector. The meetings provided an excellent opportunity to learn first-hand about the needs and opportunities in the respective countries and allowed the CBE JU to tailor its actions and strategies accordingly. The remaining six info days for Poland, Hungary, Estonia, Romania and Turkey were held online.

- **Bilateral dialogues with countries/governments:** The CBE JU Programme Office organised bilateral dialogues with representatives of the Permanent Representations to the EU of widening countries with the aim of exploring strategies for enhancing the involvement of national stakeholders and SRG representatives in the CBE JU programme. In 2024, additional meetings were held with the Czech Republic, Slovakia and Cyprus, with positive outcomes in terms of information exchange, new contacts and an appointment to the CBE JU SRG.

- **CBE JU ad hoc communication campaigns for widening countries:** In the run-up to Info Day 2024, the CBE JU launched ad hoc communication campaigns in widening countries, including Slovenia, Croatia, Poland, Greece, Lithuania and the Czech Republic, focusing on industrial stakeholders. The campaign was conducted on CBE JU's social media, in both English and local languages, and received 850 000 views and 2 700 clicks.

2) Building new stakeholder capacity and raising awareness

- **Reinforced collaboration with National Contact Points (NCPs):** In 2024, cooperation with **Horizon Europe Cluster 6 NCPs (Care4Bio)** was further strengthened by organising a dedicated training on CBE JU's AWP 2024 during the spring, ahead of the launch of the CBE JU call. In addition, a new partnership was established with the **Horizon Europe WIDERA.Net NCPs**, leading to the following joint actions:

- **Dedicated training for the participants from widening countries**: A training for potential applicants from widening countries was organised by CARE4BIO and WIDERA.NET NCPs, in

cooperation with the CBE JU, back-to-back the CBE JU Info Day 2024. The session focused on how to approach a successful proposal in relation to the calls managed by the CBE JU, with some entities from widening countries also sharing their stories of successful participation in the programme. The event was very well attended, with 52 participants, including 42 from 10 different widening countries, representing all types of organisations, including higher education institutions, large private for-profit companies and SMEs.

- **Travel grants for participants from widening countries:** At the request of the CBE JU, the WIDERA.Net extended its travel grant scheme to support the on-site participation of applicants from CBE JU widening participation strategy countries in the CBE JU Info Day 2024. The grant consisted of a lump sum of EUR 1 000 to cover travel and accommodation expenses and was awarded to 63 entities from the countries which applied to participate in the CBE JU Training and Info Day (PL, LT, RO, LV, EL, CY, CR, RS). This approach facilitated networking among participants, helping them forge new connections with potential partners. It thus significantly enhanced their prospects for submitting successful proposals and actively engaging in the programme.

- **Pre-proposal check:** The CBE JU requested and successfully secured the extension of WIDERA.Net's pre-proposal check service to the CBE JU. This enabled CBE JU applicants (proposal coordinators or work package leaders) from eligible countries targeted by the widening participation strategy to submit their proposals for a **professional pre-check and receive recommendations to enhance their quality**, thereby improving their chances of success.

3. Programme-level actions to help implement the Widening strategy

- The CBE JU included in its AWP 2024 a **dedicated CSA topic** (*Mobilising inclusive participation in biobased systems and supporting the CBE JU widening strategy and its action plan*) to support implementation of the Widening strategy. This will provide an important opportunity to further boost the bio-based sector in several key countries and regions.

4. Strengthening synergy with the different networks in widening countries

In 2024, the CBE JU strengthened **cooperation with key networks** including:

- **BIOEAST and BOOST4BIOEAST**: The CBE JU participated in the BIOEAST Bioeconomy Conference in Budapest in March 2024, taking the opportunity to present the widening strategy and the CBE JU programme to stakeholders (research, industry) from the BIOEAST region. The event provided an excellent opportunity for stakeholder engagement and discussion of potential cooperation at national and macro-regional level.
- **CEE2ACT**, which invited the CBE JU to present its objectives and programmes in various workshops organised in the framework of the project.

In addition, in May 2024, the CBE JU and **COST** (a programme funded under the Widening pillar of Horizon Europe, with 50 % of the budget aimed at widening countries) organised a joint event in Brussels, attended by **26 participants from 13 widening countries, to network and exchange information with participants from non-widening** countries in order to build synergies and identify opportunities for mutual learning.

Preliminary outcomes

Increased participation is driven firstly by a higher rate of applications. In this regard, preliminary data may suggest early results of the above actions. In 2024, the number of applications increased markedly more in the 15 widening countries than in the other member states (compared to 2022 and 2023), as can be seen in the following Figure 28. In addition, some widening countries (EL, PL) have also made important progress in terms of their coordination role.

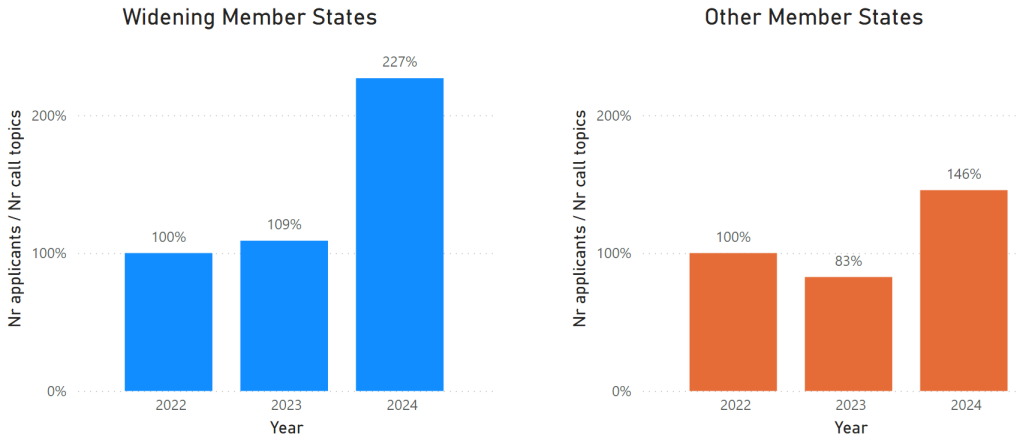


Figure 28 Number of applicants normalised for the number of topics, per year in the period 2022-2024, from widening WPS Member States and other Member States. In each case, the value for 2022 was set at 100 %.

In particular, the travel grants, together with the CBE JU communication campaigns, national info days and other complementary actions leading up to the CBE JU Info Day, contributed to a record-high participation of entities from widening countries in the CBE JU Info Day 2024 (23 % compared to 15% in 2023).

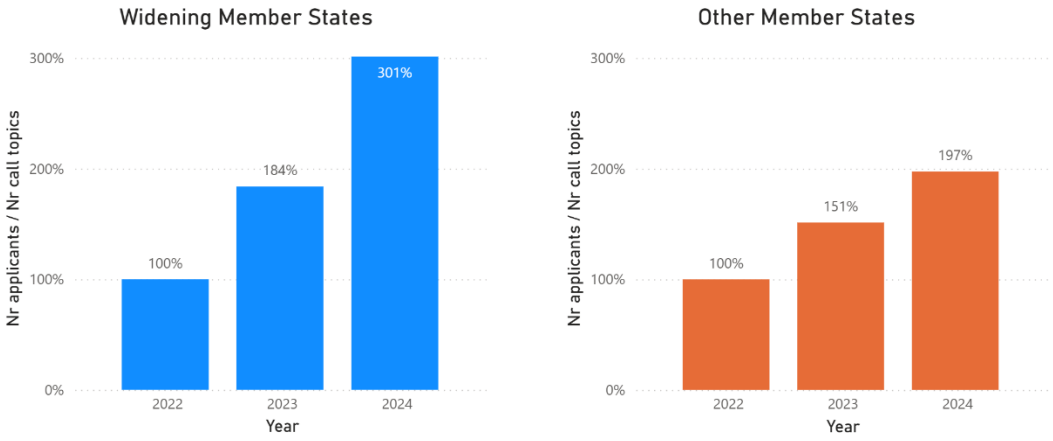


Figure 29 Number of private-for-profit applicants to Innovation Action topics (DEMO and Flagship) normalised per year in the period 2022-2024, from widening WPS Member States and other Member States. In each case, the value for 2022 was set at 100 %.

As reported in the Figure above, the data also suggests that there is an active community of industrial stakeholders in all countries interested in the CBE JU programme and applying to Innovation Actions (DEMO and Flagship) in a comparable way to non-widening countries.

The CBE JU Programme Office will further take stock of these initial results in order to intensify efforts in the widening countries where an additional push is needed by the end of the programme. In particular, for Countries such as Poland, Romania, Hungary, the Czech Republic, Slovakia and Lithuania, where a momentum is being built thanks to CBE and local actor's mobilisation, the focus will be on continuing increasing participation, as well as the countries' success rate in all type of actions. In Bulgaria, stakeholders' mobilisation will still be a priority, while in Slovenia and Croatia a greater industry's involvement could result in their meaningful participation in higher TRL actions. The good results of both Greece and Portugal indicate the focus can be shifted to Flagships, while, Cyprus and Malta will continue to be targeted by actions to ensure they take full advantage of CBE programme and opportunities, in accordance with their national circular bioeconomy priorities.

1.6. OPENNESS, COOPERATION, SYNERGIES AND CROSS-CUTTING THEMES AND ACTIVITIES

1.6.1. Openness

Since its establishment, the CBE JU has operated in accordance with the principles of openness and transparency as laid down in the Council regulation (EU) 2021/2085 establishing the Joint Undertakings. The CBE JU demonstrates openness towards all stakeholders at the different levels of its operations. There were no exceptions to the open call principle, nor were there any restrictions in terms of budget allocation or number of beneficiaries.

When designing the AWP 2024, feedback on the content of the programme was gathered via two consultations with the CBE JU advisory bodies: the States' Representatives Group and the Scientific Committee. Their input helped to identify programme priorities and ensured that a good portfolio of actions was included in the final version of the AWP.

The AWP 2024 was advertised widely and by different means to reach a large and diverse audience of stakeholders and potential applicants. The main channels included the CBE JU website, CBE JU social media (LinkedIn and X) and newsletters. In addition, the **CBE JU Info Day** was held on 23 April 2024 and attracted 460 participants in Brussels and more than 1 500 participants online. 23 % of the in-person attendees came from the widening participation countries targeted by the CBE JU promotion campaign earlier in the year and supported by WIDERA.NET travel grants, and 65 % of registered participants were new to the CBE JU or the BBI JU info days. The event combined an in-depth information session in the morning with extensive matchmaking and networking opportunities in the afternoon. In addition, there were **25 national CBE JU Info Days in 2024**, with several onsite events combining side visits to local industrial facilities.

The CBE JU also developed a detailed set of **FAQs for applicants** [6], explaining specific terminology, rules around consortium building and cost eligibility, among others. The document is continuously updated to reflect incoming questions from applicants and includes a section on topic interpretation, clarifying content-related questions.

An online **CBE JU networking platform** was set up to provide additional opportunities to applicants which remained open until the deadline for submission of project proposals. The services available from the platform included facilitating networking with potential consortium partners, providing a forum to pitch project ideas, creating a space to express interest in a topic or schedule B2B meetings.

For transparency purposes, details about submissions and the evaluation results of the 2024 call were published on the CBE JU website, along with other general information.

The above-mentioned measures contributed significantly to attracting a diverse audience of applicants, as the participation in the main 2024 call shows an increased participation of applicants from widening countries compared to the calls conducted in 2023 and 2022, and confirmed the strong interest of SMEs, which represented a significant share of private applicants, in the CBE JU programme.

[6] The latest version of the FAQs for applicants for call 2024 is available here: CBE JU - FAQ for applicants Call 2024 v7.pdf

1.6.2. Cooperation and synergies

As required by the Council regulation (EU) 2021/2085 of 19 November 2021establishing the Joint Undertaking, the CBE JU is committed to seeking and maximising synergies and closer collaboration with other relevant initiatives at European, regional and national levels to achieve maximum scientific, socio-economic and environmental impact. As such, the CBE JU is expected to foster closer ties:

- **at a European level** with:
    - other parts of Horizon Europe (HE) programme, including Cluster 6 activities, the HE Missions, relevant co-programmed/co-founded and institutionalised partnerships, etc;
    - other Union programmes and funding instruments, especially those supporting the deployment of innovative solutions, education and regional development.
- **at national and regional level** with relevant programmes such as Cohesion Policy Funds, and the national recovery and resilience plans.

In 2024, the CBE JU completed a comprehensive mapping exercise aimed at identifying all relevant initiatives where cooperation should be sought. The mapped initiatives cover different institutional levels, different levels of technological maturity addressed by the initiative as well as initiatives and instruments that are either complementary or adjacent in terms of thematic scope and outlook. Figure 30 below shows the synergy landscape in which the CBE JU operates, which forms the basis for a formal CBE JU Synergy Strategy document, which has been prepared for discussion by the governing bodies of the programme.

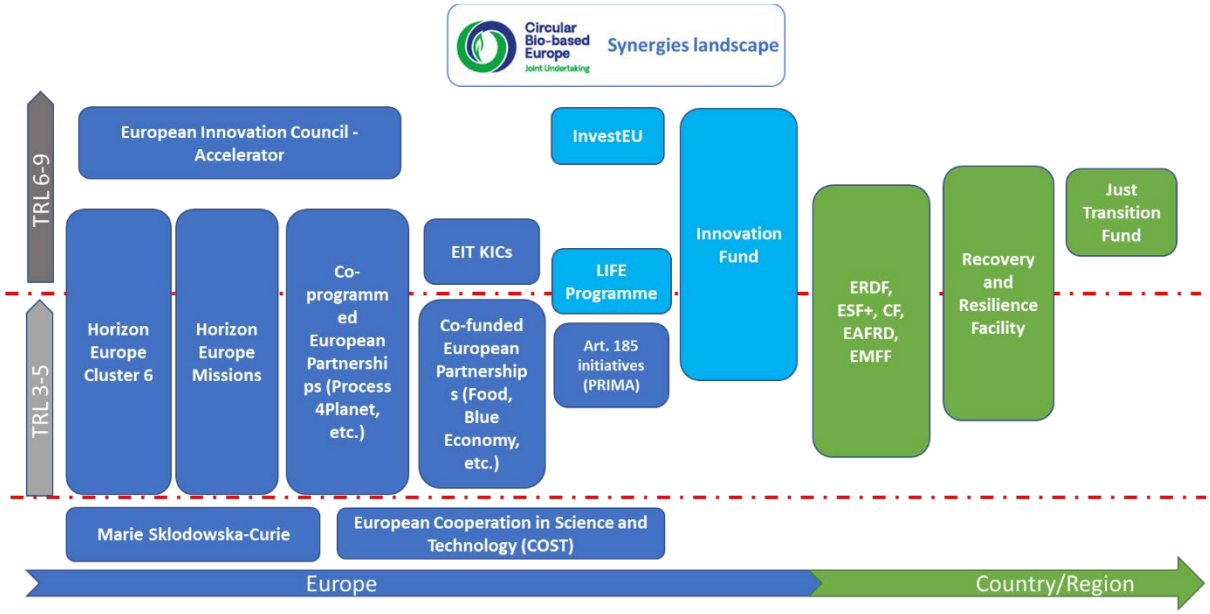


Figure 30 CBE JU synergies landscape.

Synergies at European level

Cooperation with European programmes and/or other EU instruments can take different forms and range from simple information exchange to strategic programming. The likely areas for cooperation identified include high-level strategic planning, coordinated programming, developing synergies at project portfolio level, and joint outreach and dissemination activities.

In 2024, the following actions have been implemented in relation to the actions under the Horizon Europe programme:

- **Pillar I – Marie Skłodowska-Curie Actions Staff Exchange (MSCA SE)**

  The CBE JU and the REA MSCA SE Unit held several coordination meetings to promote the MSCA SE initiative within the CBE JU community through tailored outreach and dissemination activities, such as promoting staff exchange calls, exchanging data about beneficiaries in the respective programmes, featuring MSCA stands at CBE JU's annual info days, etc.

- **Pillar II – Cluster 6 on Food, Bioeconomy, Natural Resources, Agriculture and the Environment**

  Continuous coordinated programming with Cluster 6, to ensure that the annual work programmes of the CBE JU cover complementary themes and do not overlap with the funding of Cluster 6 work programmes and vice versa.

  In 2024, the CBE JU intensified the exchange of information with relevant executive agencies on projects in similar areas of intervention, i.e. the ECOSYSTEX Community of Practice in the textile sector promoted by the REA and supported by HaDEA. The CBE JU is represented on the board of ECOSYSTEX and supports the development of capacity building, knowledge exchange and scientific networking activities between projects funded by the different clusters and the CBE JU and working on different aspects of the textile industry.

  In addition, in the thematic area of textiles, the CBE JU also contributed to the activities of the JRC Knowledge Centre for Bioeconomy by participating in an expert workshop on bio-based textiles and the outcome of the projects was included in the resulting policy factsheet.

- **Pillar III – European Innovation Council**

  The CBE Programme Office, DG RTD's Unit A3 and EISMEA-EIC held coordination meetings with the aim of continuously sharing update on the organisations' project portfolios, focusing on key clusters of common interest (as packaging, bioplastics, bio-based chemicals and construction) and of further exploring common interest/synergy between the two programmes.

- **Horizon Europe Missions**

  The CBE JU and the DG RTD unit responsible for the EU Mission "Restore our Ocean and Waters by 2030" held coordination meetings to foster synergies between the programmes by collaborating on programming. These has led to the establishment of a process for sharing information on respective project portfolios and any events relevant to the mission. The CBE JU project beneficiaries have been informed that they can endorse the mission charter. In addition, in relation to the EU Mission "A Soil Deal for Europe", the CBE JU Programme Office has undertaken a mapping exercise to establish a list of funded projects that contribute to the objectives of the Mission, with a view to a possible knowledge exchange and networking workshop to be organised in 2025.

- **Horizon Europe Partnerships**

  Various work has been carried out with different partnerships such as the Sustainable Blue Economy Partnership, the Sustainable Food Systems Partnership, the Process4Planet Partnership, as well as with the upcoming partnerships on Forests and Forestry for a Sustainable Future, Textile of the Future and Innovative Materials for EU. In particular, the CBE JU Programme Office participates in events organised by the partnerships, such as the Sustainable Blue Economy Partnership Symposium, where new projects funded by the partnership were presented. In some cases, such as the Textiles of the Future partnership, which covers a thematic area where there is a more intense dialogue between the CBE JU and partnership stakeholders, meetings have been organised with relevant policy officers in the responsible DG and partnership chair representatives to foster synergies and complementarities.

- **European Cooperation in Science and Technology – COST**

  Robust synergies have been fostered with the COST programme. A mapping of ongoing COST activities was completed in 2024 and the CBE JU co-organised a COST Connect on Bio-based solutions. The aim of the event was to promote both programmes and create networking opportunities among the respective beneficiaries. A total of 27 projects from COST Actions, CBE JU projects and other related initiatives were presented at the closing event. COST representatives participated in the CBE JU Info Day 2024 for the first time with a stand, and joint actions were implemented on the promotion of the respective programmes through media channels and mutual participation in each other's info days and other relevant events.

Synergies at national and regional level

Research and innovation is a major priority of the European structural and investment funds, and the bioeconomy is a key area of the smart specialisation strategies in most European regions. Increasingly, instruments that are part of the NextGenerationEU programme, such as the Recovery and Resilience Facility and the Just Transition Fund, are funding research and innovation for the twin green and digital transition.

In 2024, the CBE JU continued to gather general input from a variety of local stakeholders on the strengthening of coordination with national and regional initiatives and funding instruments. In 2024 there was an increased mobilisation of national and regional bioeconomy clusters with the aim of creating pan-European coordination mechanisms in the bio-based sector among key local actors.

The overall scenario offers a wealth of opportunities for the regions to join forces with other EU countries and regions in order to address smart specialisation priorities. However, there were some criticisms both at strategic level (i.e. the governance and funding of the bio-based sector at national/regional level varies widely across Europe, leading to the use of different instruments with different rules, objectives and timeframes) and at instrument level (i.e. the difficulty of implementing synergy label mechanisms for complementary funding with ERDF funding).

While in 2024, the primary focus of the CBE JU Programme Office was on completing the mapping exercise at the European level and translating it into a tangible action plan, in 2025 the discussion will centre on robust and forward-thinking activities aimed at fostering national and regional synergies. In this context, the effectiveness of activities outlined in the CBE JU's Widening Participation Strategy, along with a strategic impetus provided by the CBE JU states' representatives group (SRG), will be pivotal in shaping concrete objectives and milestones.

1.7. PROGRESS ON KEY IMPACT PATHWAYS AND JU KEY PERFORMANCE INDICATORS

The progress and performance of the CBE JU programme is monitored, in line with the Horizon Europe framework, through a framework of key impact pathways (KIPs) and key performance indicators (KPIs) defined at the following three levels:

- General Horizon Europe KIPs.
- Horizon Europe Common JU KPIs.
- CBE JU-specific KPIs, as defined in the SRIA.

In addition, the BBI JU-funded projects will continue to contribute to the specific KPIs set out in the Specific Programme implementing Horizon 2020 and to BBI JU-specific KPIs. This section outlines the progress achieved against these KPIs at the different levels, both for the CBE JU programme and the BBI JU.

1.7.1. Progress against Horizon Europe Key Impact Pathways

There is a common set of indicators for all programmes operating under Horizon Europe (HE), including the CBE JU programme. The indicators are structured around three key impact pathways:

- **Scientific Impact Pathway indicators:** The HE programme is expected to have scientific impact by creating high-quality new knowledge, strengthening human capital in R&I and fostering the diffusion of knowledge and open source.
- **Societal Impact Pathway indicators:** The HE programme is expected to have an impact on society by addressing the Union's policy priorities and global challenges, including SDGs, following the principles of the 2030 Agenda and the goals of the Paris Agreement, through R&I. Ultimately, by delivering benefits and making an impact through R&I missions and European partnerships and by strengthening the uptake of innovation in society, Horizon Europe contributes to people's well-being.
- **Technological and Economic Impact Pathway indicators:** The HE programme is expected to have technological and economic impact, especially within the Union, by influencing the creation and growth of companies, especially SMEs, including start-ups, creating direct and indirect jobs within the Union, and by leveraging investments for R&I.

The KIPs are defined for the short, medium and long term. The medium and long-term results will only start to materialise at a later stage, towards the end of the project lifetime and beyond (e.g. number of innovations addressing EU priorities and the long-term effects of their exploitation). Regarding short-term indicators, very few of these are available at the early stage of project implementation (e.g. number of researchers), whereas others will only become available at more advanced stages (e.g. number of innovative products, products and processes).

The list of specific indicators and the results achieved against these in 2024 are set out in Annex 5.6 Scoreboard of Horizon Europe Common Key Impact Pathway indicators. This data has been collected through a centrally managed dashboard for all parts of the Programme developed by the European Commission. The reported results correspond to the 21 projects under the 2022 call (launched in Q2-Q3 2023) and the 30 projects under the 2023 call (launched in Q2-Q3 2024), which are still in the early stages of implementation and therefore their contributions are still limited.

1.7.2. Progress against HE Common JU KPIs

A common framework to monitor the progress of all European Partnerships, including JUs, has been established. It includes the definition of the Partnership Specific Impact Pathway, the main contributions to the UN SDGs and a set of specific partnership indicators related to different criteria.

Horizon Europe Partnership common indicators

There is a set of common indicators identified for all Horizon Europe partnerships, including the CBE JU, around the following criteria: directionality and additionality, coherence and synergies, transparency and openness and international visibility and positioning. Annex 5.7 sets out the indicators linked to these criteria and short description of the most important aspects per criteria is set out below.

- **Directionality and additionality**

The CBE JU funding and project investments contribute fully to the EU priorities as set in the European Green Deal, but also to the resilience and strategic autonomy of the European Union.

a) The overarching objectives of the European Green Deal (climate neutrality and inclusive economic growth decoupled from use of resources) are deeply ingrained in the CBE JU mission and objectives and in its SRIA strategic priorities. The development and deployment of innovative, sustainable and competitive bio-based industries contributes to an inclusive economic growth (creation of skilled jobs, revitalisation of rural areas, reindustrialisation), while the integration of environmental, circular economy and climate considerations ensures that the developed bio-based solutions contribute to climate change mitigation and the substitution of fossil-based products by bio-based products, make better use of natural resources, ensure a better end-of-life of products, reduce pollution of air, soil and water and contribute to the protection of biodiversity.

b) The CBE JU fully contributes to the resilience and strategic autonomy objectives in terms of strengthening the EU's economic and social resilience, but even more in terms of developing strategic capacities in the supply chains. The CBE JU activities actively enhance the resilience of the EU bioeconomy against external shocks in several ways, such as strengthening the EU's autonomy and independence in terms of natural resources and key enabling technologies; supporting the development of local value chains based on locally and sustainably sourced feedstock and short supply chains; engaging all actors in the value chain, from primary producers to technology providers, industries and end users, facilitating growth and diversification of income for primary producers and promoting job creation and capacity building. The CBE JU also makes a strong contribution to the creation of "inclusive growth and new employment opportunities", in particular by devoting around 80 % of the partnership's budget to innovation actions, including flagship projects, which contribute directly to these objectives in the short term. By funding the first-of-their-kind biorefineries in Europe (flagship projects), the CBE JU is helping the bio-based industries sectors become more sustainable and resilient, while creating new direct and indirect green job opportunities, especially in rural and coastal areas. In addition, IA, RIA and CSA projects also contribute to the development of skills, technologies and capacities needed to lay the foundations for the inclusive growth and job opportunities linked to the deployment of future sustainable bio-based industries and solutions.

- ## Coherence and synergies

The CBE JU is seeking **coherence and synergies** with other EU partnerships, programmes and funding by undertaking a number of activities such as:

- Coordination with Partnerships with common strategic or programmatic aspects such as: Process4Planet, Sustainable Blue Economy Partnership, Sustainable Food Systems Partnership, Innovative materials for the EU, Textiles of the Future.
- Collaboration with the EU Oceans and Soil missions, by endorsing their charters and including requirements in the annual work programmes to contribute to their objectives;
- Exploring collaboration with other EU R&I initiatives and programmes, such as the Algae Initiative, JRC KCB, HE Pilar I MSCA-SE, HE Pilar II Cluster 6, HE Pilar II Mission Oceans, European Innovation Council, Innovation Fund, COST, EEN, etc.

Please see section 1.6.2 Cooperation and synergies for more detailed information.

- ## Transparency and openness

The **transparency and openness** of the CBE JU programme is demonstrated by the participation of 3 292 unique applicants from 62 different countries to date, with 214 unique newcomer beneficiaries from 33 different countries participating in the 2023 call. More detailed information can be found in sections 1.6 Openness and 2.1 Communication activities. The activities carried out to support the participation of less active countries and regions are also detailed in the section on the Widening participation strategy.

- ## Outreach and international visibility

A significant number of events have been organised to increase the outreach and **international visibility** of the CBE JU programme at different levels:

- *Global (5 events)***:** CBE JU participation in EU-US workshops on Bioeconomy; 2nd Annual World Biopolymers and Bioplastics Innovation Forum; BIOKET; World Bio Markets; IFIB; Global Bioeconomy Summit;
- *EU (21 events):* organisation and participation in several events, such as the CBE JU Info Day, ECOSYSTEX Insights, BIOEAST Bioeconomy Conference, Bioeconomy Changemakers festival, European Partnership Stakeholder Forum; COST connect: bio-based resources, materials and solutions; EUBCE, European Biotech Week; ECOSYSTEX Conference; the European farmers and agri-cooperatives congress; European Process Industry Conference – A.SPIRE; ECOMONDO, etc.
- *National:* organisation of 25 CBE JU info days across Europe.

Please see section 2.1 Communication activities for more detailed information.

Partnership Specific Impact Pathway (PSIP)

The PSIP map reported in the Figure below shows in a multi-level, cascading structure the links between EU and global policy objectives and the most relevant EU policy initiatives for the CBE JU, the CBE JU impacts, outcomes and resources and the work required.

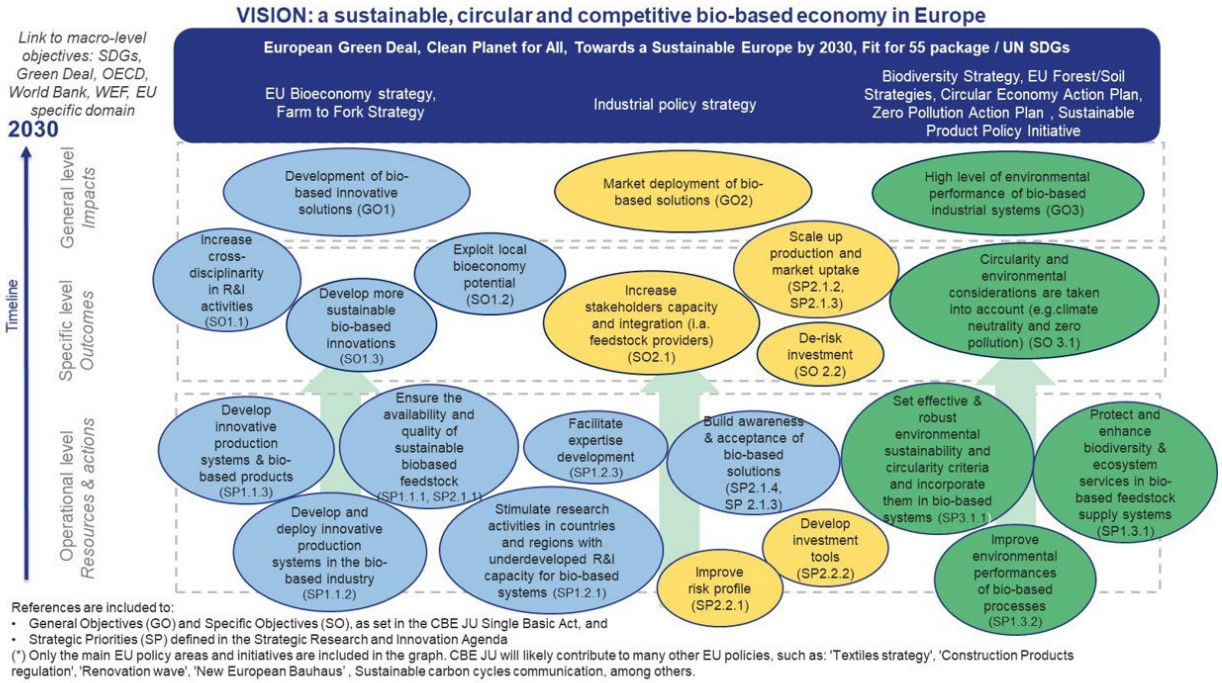


Figure 31 The Partnership Specific Impact Pathway strategic map.

This strategic map highlights the relationship between these different levels, the general and specific objectives of the CBE JU and the strategic priorities set out in the SRIA. Thus, the following levels can be distinguished under the umbrella of the CBE JU vision: a sustainable, circular and competitive bio-based economy in Europe:

- **Macro-level objectives included in global and EU-wide policy initiatives and policy packages**, such as the European Green Deal, Clean Planet for All, Fit for 55 packages, etc.
- **EU level policies most relevant to the CBE JU,** such as the EU Bioeconomy, Farm to Fork, EU Forest Strategy, industrial policy and biodiversity strategies or the Circular Economy Action Plan.
- **General: Impacts related to the CBE JU's General Objectives (GOs),** which aim to promote the development of bio-based solutions, their market deployment and high levels of environmental performance.
- **Specific: Outcomes** linked to the CBE JU Strategic Objectives and the CBE JU GOs.
- **Operational: Resources and activities.** These have been defined to address the strategic priorities set out in the SRIA, which are also linked to the CBE JU's specific objectives above.

Contribution to Sustainable Development Goals (SDGs)

The contribution of the CBE JU/BBI JU project portfolio to the United Nations Sustainable Development Goals (SDGs) is monitored on an annual basis. Looking only at the number of BBI JU projects reporting on their contributions (Figure 32), the CBE/BBI JU programme is making a significant contribution to the following SDGs:

- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
- SDG 12: Ensure sustainable consumption and production patterns
- SDG 13: Take urgent action to combat climate change and its impacts

In addition to the above, the CBE JU programme is also expected to contribute to the following SDGs:

- SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt the reverse land degradation and biodiversity loss

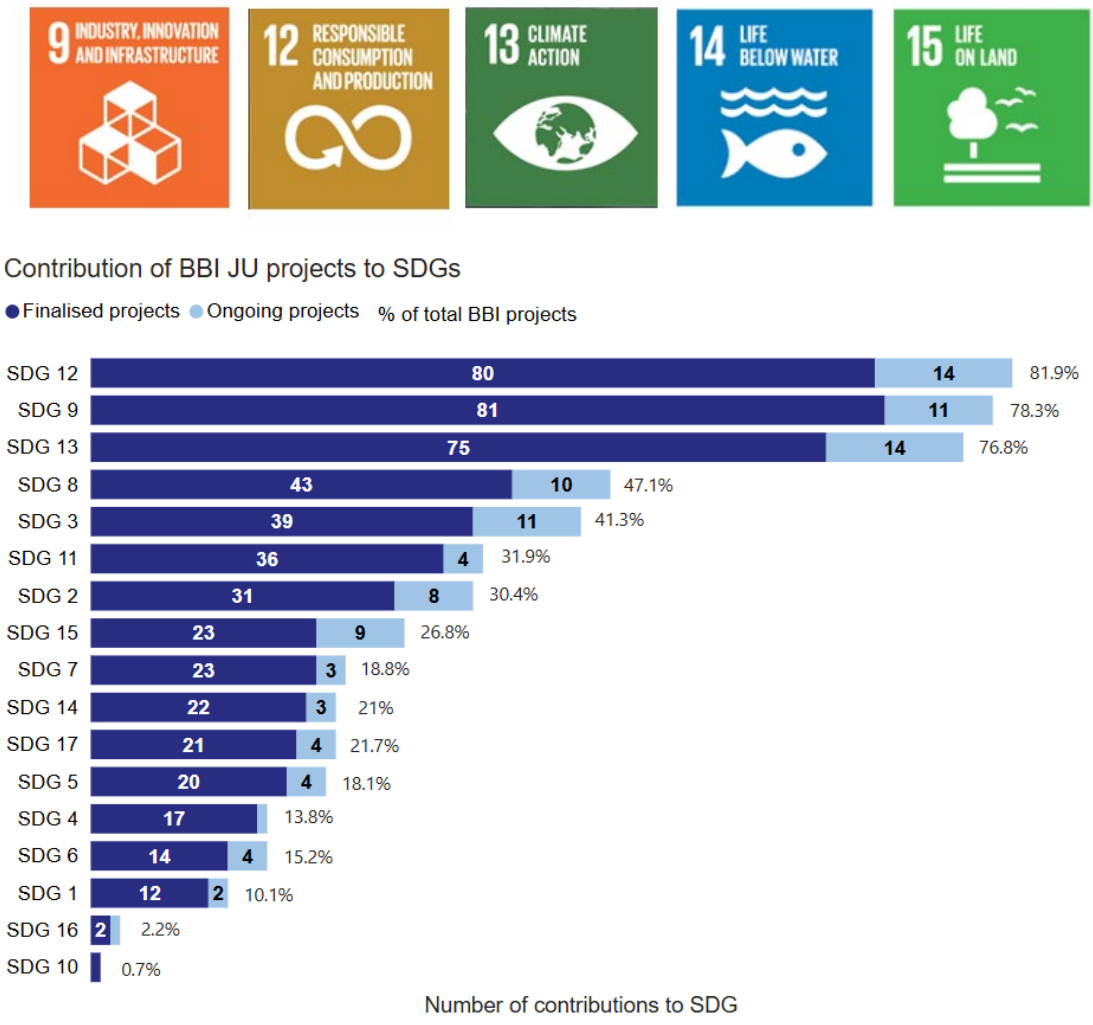


Figure 32 Reported contribution of BBI JU projects towards the different UN SDGs.

1.7.3. Progress against CBE JU-specific KPIs

As required by the Council Regulation establishing the Joint Undertaking, a set of CBE JU key performance indicators (KPIs) have been defined to monitor the progress towards achieving the general and specific objectives of the CBE JU. These KPIs and their respective targets are set out in the CBE JU SRIA and are closely linked to the strategic priorities described therein. Table 8 shows how the 10 KPIs (overarching objective to be measured) are broken down into sub-KPIs (units of measurement), each with specific targets to be achieved by 2031. To facilitate accurate reporting, there is also a handbook that provides definitions of the KPIs and relevant examples of potential contributions[7].

CBE KPIs: Objectives and Units of measurement				2031 targets
1	Strategic participation and integration of feedstock producers and suppliers towards large-scale valorisation of sustainable biomass	1.1	Number of primary producers, involved as project beneficiaries and/or engaged in value chains at project level	100
		1.2	Number of waste management actors, involved as project beneficiaries and/or engaged in value chains at project level	20
2	Unlock sustainable and circular bio-based feedstock for the industry	2	Number of innovative bio-based value chains created or enabled based on sustainably sourced biomass	120
3	Ensure environmental sustainability of feedstock	3.1	Number of projects using feedstock generated with practices that contribute to enhance biodiversity	30
		3.2	Number of projects using feedstock generated with practices aiming at zero-pollution (soil, water, air) and/or at reducing water consumption	40
		3.3	Number of projects using feedstock generated with practices contributing to climate change mitigation and/or adaptation	60
4	Improve environmental sustainability of production processes and value chains	4.1	Number of projects with innovative & sustainable processes that contribute to GHG emission reduction	60
		4.2	Number of projects developing innovative & sustainable processes that improve resource efficiency and zero waste	60
		4.3	Number of projects developing innovative & sustainable processes enabling zero pollution	60
		4.4	Number of projects with innovative & sustainable processes with improved energy efficiency	60
		4.5	Number of products with improved life cycle environmental performance	50
5	Expand circularity in bio-based value chains	5.1	Number of innovative products that are biodegradable, compostable, recyclable, reused or upcycled (circular by design)	100
		5.2	Number projects developing circular production processes (incl. industrial urban symbiosis)	40
6	Increase innovative bio-based outputs and products	6.1	Number of innovative bio-based dedicated outputs, with novel or significantly improved properties vs relevant alternatives	90
		6.2	Number of innovative bio-based drop-in outputs meeting applications requirements	30
7	Improve the market uptake of bio-based products	7	Number of brand owners involved as project partners and/or engaged with other mechanisms	50
8	Attract investment on the bio-based sector	8	Number of actions implemented at project level to attract investment and/or to create awareness in the investment/funding community	30
9	Increase resilience and capacity in the bio-based sector	9	Number of projects contributing to develop the skills and capacity needed by the EU bio-based sector	50
10	Improve participation of regions and countries with high unexploited potential and strategic interest to develop it	10	Number of participants from the underrepresented EU countries and region	150
		10	Number of regional hubs established and operated to process bio-based feedstocks and other aspects	15
		10	Number of projects with synergies with other funding programmes at EU, national or regional level	60

Table 8 CBE JU-specific key performance indicators as set out in the CBE JU SRIA.

[7] CBE JU Key Performance Indicators handbook.

CBE JU-specific KPI reporting

The CBE JU monitors how funded projects contribute to both the CBE JU-specific KPIs and other expected impacts of the programme on an annual basis. In the current reporting year, 52 CBE JU-funded projects from the 2022 and 2023 calls submitted their contribution estimates, calculated using a dedicated reporting webtool developed by the CBE JU Programme Office. This section presents the aggregated results from 2024 reporting for each KPI along with selected examples.

In the following Figure (Figure 33), an overview of the CBE KPIs progression as reported for year 2024 is presented.

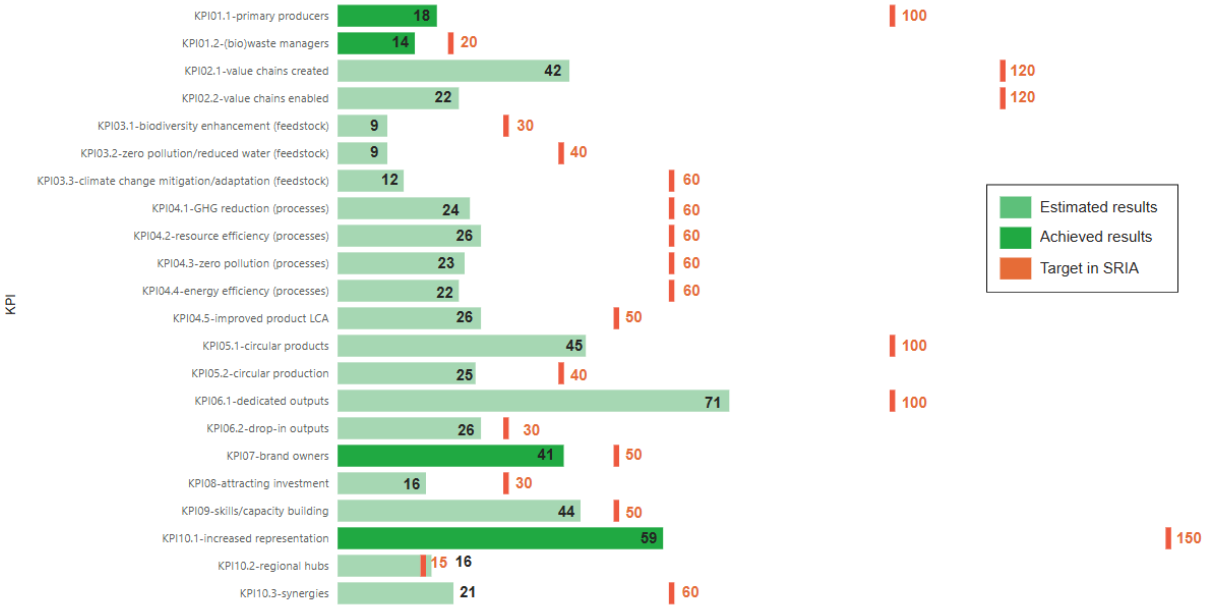


Figure 33 Overview of estimated (light green) and achieved (dark green) contributions to the CBE JU KPIs reported by projects vs. SRIA targets (orange).

When interpreting the aggregated results, it is important to recognise that all CBE JU-funded projects are still in their early phase, with the first projects launched only in 2023. For this reason, the reporting distinguishes between KPIs that monitor the strategic and inclusive involvement of specific parties (KPIs 1.1, 1.2, 7 and 10) and those that relate to project outcomes (all remaining KPIs). The former can be considered as results achieved as their participation is already determined at the time of signature of the grant agreements, while the other KPIs monitor aspects that can only be verified once the project outcomes have been confirmed and reviewed by the CBE JU Programme Office with the help of independent expert reviewers. Therefore, for these KPIs, the data in the following section represents the expected contributions as reported by the project consortia. To visualise these differences, the realised KPI contributions are shown in dark green and the projected contributions are shown in light green.

KPI 1: Strategic participation and integration of feedstock producers and suppliers towards large-scale valorisation of sustainable biomass

In order to achieve maximum impact and take into consideration the entire value chain, the CBE JU encourages **primary producers** [8] to participate in the projects it funds either as project beneficiaries or actors in the projects' value chains (**KPI 1.1,** Figure 34).

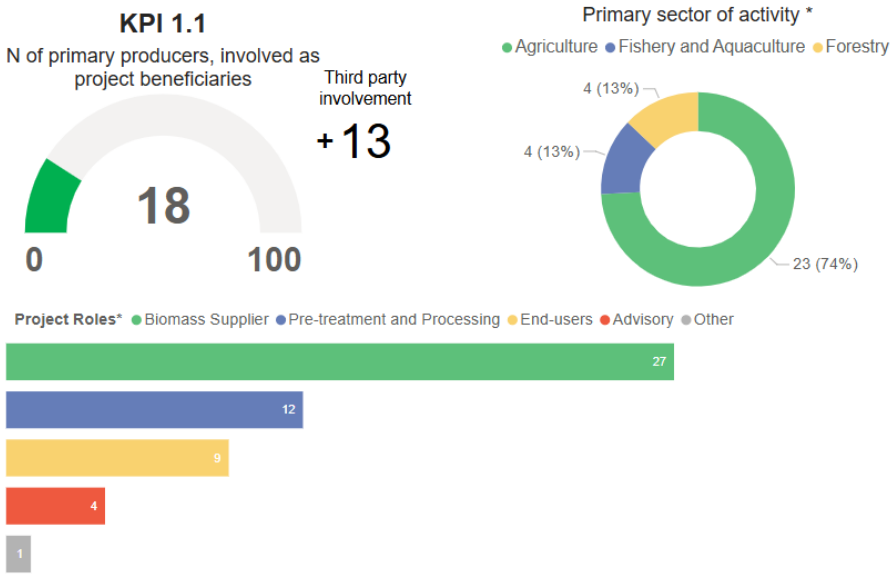


Figure 34 Overall progress towards KPI 1.1 achievement (top left), the main sectors of activity of the primary producers (top right) and the project roles assumed by the primary producers (bottom; multiple roles possible). (*) Including all types of participation (project beneficiaries or third-party involvement).

In total, 31 primary producers [9] are involved in CBE JU projects, of which 18 as project beneficiaries. The remaining 13 are involved as third parties, e.g. members of an advisory board or parties engaged under long-term agreements. A further analysis of their main activities shows that almost 74 % operate in the agricultural sector, while forestry and fisheries and aquaculture together represent 26 %. While primary producers often play the role of biomass suppliers in CBE JU projects, they also play other strategic roles in bio-based value chains, including in the pre-treatment and processing of biomass and as potential end users of bio-based solutions.

BRILIAN (ongoing IA)	This project, which supports the adoption of sustainable, cooperative business models in rural areas, established an Advisory Board of Farmers (including 28 farmers/cooperatives in Spain, Italy and Denmark). This board is a multi-actor collaboration platform established to engage primary producers, cooperatives, agro-industries, policymakers and academia in bioeconomy-related activities to facilitate interaction, knowledge exchange, and cooperative planning.
Rural BioReFarmeries	The Rural BioReFarmeries consortium includes three primary producers as beneficiaries:Carbery (dairy farmer owned), Carhue Piggeries and Barryroe Co-

[8] Primary producers are defined as legal entities operating in one of the primary sectors (agriculture, forestry, fishery and aquaculture), in work related to the production, harvest, handling, and storage of biological resources before these are moved to either processing or distribution. To be considered, producing biological resources should be a key part of its business.

[9] Beneficiaries according to Article 7 of the Model Grant Agreement (MGA) and affiliated entities according to Article 8.

(ongoing IA)	operative (farmer-owned agricultural business). The project aims to demonstrate a novel, small-scale, decentralised, rural green biorefinery value chain that places farmers at the centre of the biomass value creation close to their farms. This will enable farmers to co-produce inputs for their farms alongside additional high value-added intermediates and products developed in collaboration with centralised facilities and downstream industry partners.

Table 9 Examples of strategic involvement of primary producers in CBE JU projects.

Similarly, to enable new value chains based on tertiary biomass, the involvement of (bio)waste managers[10] (**KPI 1.2**) will be encouraged where relevant to the scope of the project.

As shown in Figure 35, 14 (bio)waste managers are involved in the CBE JU projects as beneficiaries and two others are involved as third parties. Bio(waste) managers dealing with municipal solid waste (including the organic fraction) are the most represented category (44 %). However, CBE JU projects also involve operators managing food and feed waste from processing, end-of-life bio-based products and wastewater treatment. The figure below also highlights the strategic role of (bio)waste managers in new bio-based value chains, as the most common role prior to supplying biomass to the project is the pre-treatment and processing of waste to prepare it for further transformation into higher-value products.

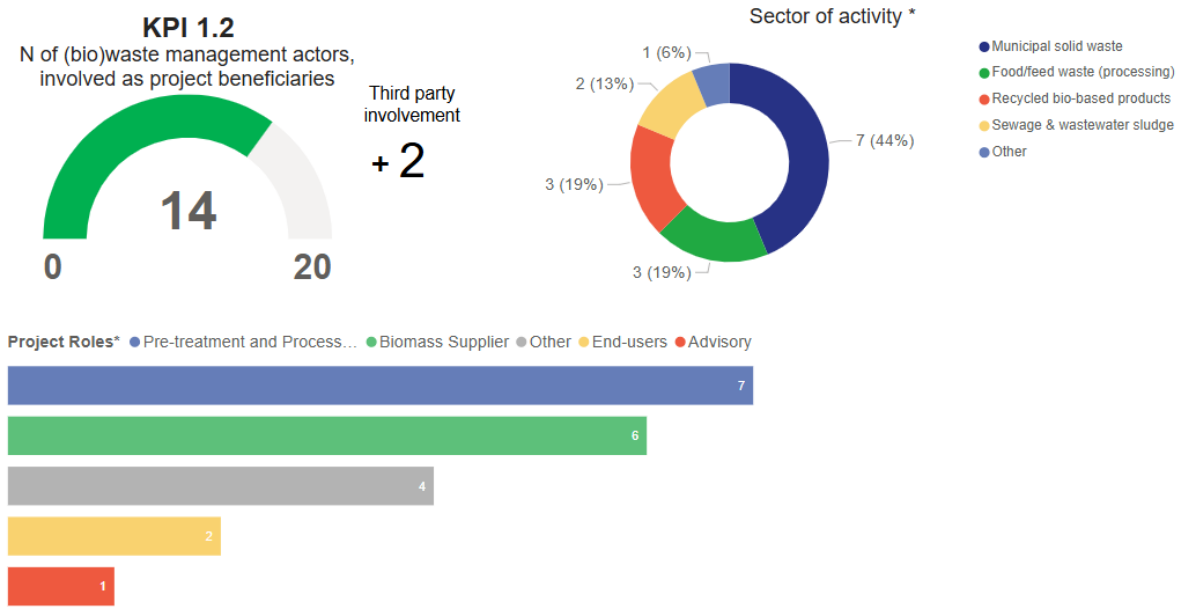


Figure 35 KPI 1.2 Overall progress towards KPI achievement (top left), the main sectors of activity of the (bio)waste managers (top right) and the project roles assumed by the (bio)waste managers (bottom; multiple roles possible). (*) Including all types of participation (project beneficiaries or third party involvement).

ReBioCycle (ongoing IA)	Using innovative recycling technologies, ReBioCycle aims to demonstrate that end-of-life bio-based biodegradable plastics can be used in the circular (bio)economy. Waste management companies, such as IREN SPA and Sociedad Anonima Agricultores De Lavega De Valencia (SAV) are involved as project beneficiaries and play a strategic role in the development of bio-based plastic waste sorting and recycling technologies.

[10] In this context, (bio)waste managers are considered as private companies or municipalities involved in the collecting, sorting, processing and/or recycling of municipal or industrial waste.

CIRCLE (ongoing IA-FLAG)	CIRCLE aims to boost the production of bio-based chemicals in Europe by valorising food waste streams. The project will increase the capacity of an existing biogas plant to convert food waste streams and other biomasses into high-value bio-based chemicals and intermediates such as lactic acid (LA) and its derivatives, including polylactic acid (PLA)-based products. The strategic role of the (bio)waste manager Orgaworld Nederland is underlined by the fact that the flagship plant will be installed on the site of the anaerobic digestion facility.

Table 10 Examples of strategic involvement of (bio)waste managers in CBE JU projects.

KPI 2: Unlock sustainable and circular bio-based feedstocks for the industry

While IAs, and especially flagship projects, look at the whole bio-based value chain, RIAs can be instrumental in creating **new bio-based value chains**[11] by filling gaps in technological innovation. The reporting of this KPI therefore distinguishes between projects that create (IAs, including flagship projects) and those that enable (RIAs) new value chains based on sustainably sourced biomass. Figure 36 outlines the ambition to create 42 and enable 22 innovative bio-based value chains in the current ongoing CBE JU projects.

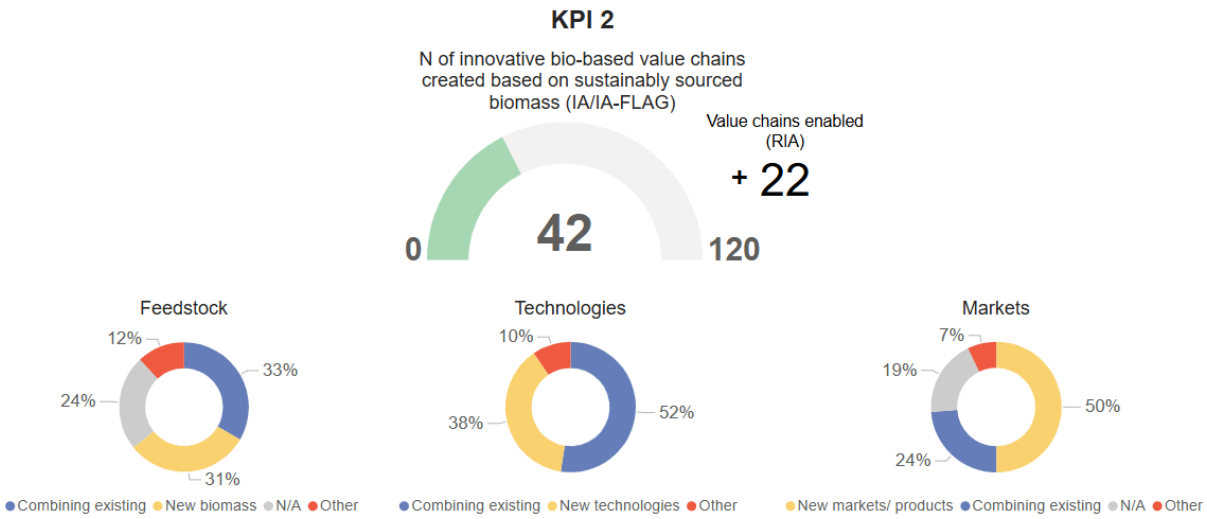


Figure 36 KPI 2 Unlock sustainable and circular bio-based feedstocks – projected number of innovative bio-based value chains created (IA, IA-Flagship) and enabled (RIA) through CBE projects (top) and aspects of innovation of the created value chains (IA, IA-Flagship) with respect to feedstocks, markets and technologies.

SynoProtein (ongoing IA)	The project aims to create new value chains for the forest and feed industries. It will develop innovative processes to recycle low-value by-products (sawmill waste) into high-value bio-based products (single-cell proteins) for use as an alternative fish feed ingredient.
SSUCHY-Next (ongoing IA)	SSUCHY-Next aims to demonstrate new value chains based on hemp fibres. Building on the SSUCHY (RIA) project, the project aims to advance various aspects of the hemp fibre supply chain up to TRL 7, a significant step towards industrial viability. This includes scaling up the production of hemp fibre products,

[11] To be considered a new bio-based value chain, there must be at least one new/innovative element introduced into the value chain. This may be a novel feedstock, new markets targeted by the bio-based solutions and/or innovative technologies for converting sustainable feedstocks into bio-based products.

	starting from the field extraction up to the production of composite materials for building and construction applications.

Table 11 Examples of innovative bio-based value chains created through CBE JU projects.

KPI 3: Ensure environmental sustainability of feedstock

One of the general objectives of the CBE JU is to ensure that bio-based industrial systems have good environmental performance. Fundamental to achieving this objective is ensuring that sufficient quantities of sustainable feedstock are available. KPI 3 monitors progress towards the achievement of these objectives.

KPI 3.1 (reported in Figure 37) monitors the number of CBE JU-funded projects that contribute to **the enhancement of biodiversity**. Projects can contribute to this KPI by developing or improving (integrated) practices and/or methodologies and/or tools to enhance biodiversity in the provision of feedstocks to bio-based systems. These contributions are in addition to the requirements for responsible land use, which are integral to all the CBE JU-funded projects. Most improved practices are in the production and supply of feedstocks in agricultural food production, but projects also report expected contributions biodiversity enhancement in forestry.

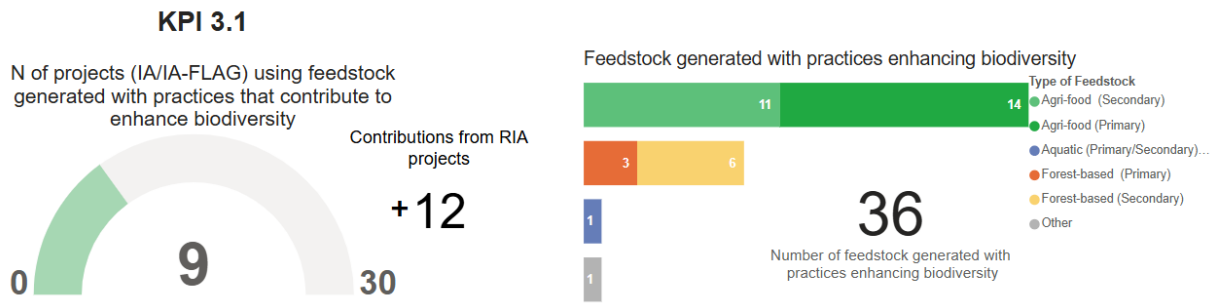


Figure 37 KPI 3.1 Number of projects using feedstock generated with practices that contribute to the enhancement of biodiversity (left) and distribution of feedstock types in IA, IA-Flagship and RIA projects.

SUSTAINEXT (ongoing IA-FLAG)	SUSTAINEXT will drive the transition from monoculture tobacco to multi-cropping with new medicinal and aromatic plants, thereby increasing biodiversity.
SingleTree (ongoing RIA)	The project aims to develop an AI and remote sensing-enabled single-tree focused forest monitoring approach that yields detailed information about tree health status, wood quality and biodiversity. Measurement of biodiversity and conservation value of trees will feed into the single-tree optimisation.

Table 12 Examples of feedstock production and supply practices that contribute to the enhancement of biodiversity in CBE JU projects.

KPI 3.2 monitors the number of the CBE JU-funded projects that **reduce pollution (soil, water, air) and/or water consumption** by improving feedstock production and supply practices. Similar to KPI 3.1, a significant proportion of the improved practices reported relate to the production and/or supply of feedstocks for (primary and secondary) agricultural food production. Other projects, although fewer in number, are aiming to reduce the waste and water consumption associated with the production of forest-based (primary and secondary) and aquatic (micro- and macroalgae) feedstocks.

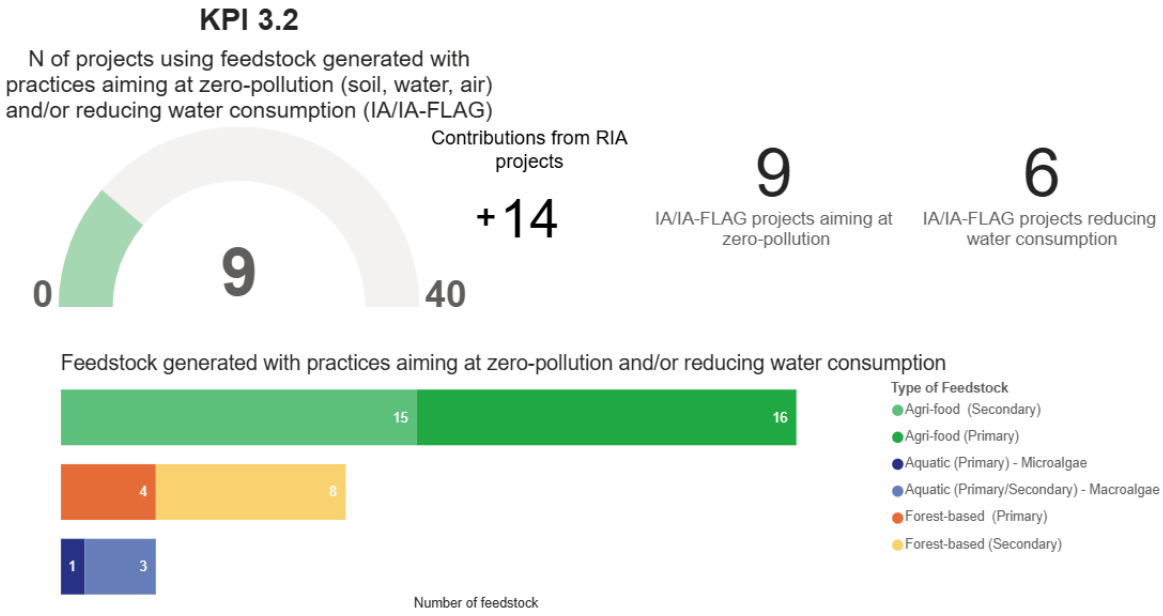


Figure 38 KPI 3.2 Number of projects using feedstocks produced with practices aiming at zero pollution (soil, water, air) and/or reduced water consumption (top left), number of projects addressing the specific objectives (zero pollution and/or reduced water consumption; top right) and distribution of feedstock types produced with improved practices in IA, IA-flagship and RIA projects (bottom).

pHYBi (ongoing RIA) zero pollution	The pHYBi project aims to test, optimise and validate a set of phytomanagement strategies based on woody and herbaceous industrial crops in selected field sites (e.g. polluted and salt-affected soils). The selected crops have demonstrated their ability to thrive in environments with a variety of contaminants and, more importantly, to remediate soil pollutants through methods such as phytoextraction, phytostabilisation, or phytoattenuation. Thus, these bioremediation strategies will contribute to the reduction of soil pollution.
BRILIAN (ongoing IA) zero pollution/ reduced water consumption	The BRILIAN project utilises several low-input feedstocks grown on marginal land using sustainable agricultural practices. For example, safflower feedstock is grown in a way that minimises the use of synthetic fertilisers and pesticides (reducing soil, water and air pollution). In addition, the safflower's deep taproot system accesses water stored in deeper soil layers, making it ideal for arid and semi-arid regions and reducing irrigation requirements and overall water consumption. When grown in rotation with other crops, it improves soil structure, reduces the need for fertilisers and supports sustainable farming practices. Safflower is also valued as a cover crop, helping to suppress weeds and reduce soil-borne diseases, further minimising chemical inputs.

Table 13 Examples of feedstock production and supply practices aiming at zero pollution (soil, water, air) and/or reduced water consumption in the CBE JU projects.

KPI 3.3 monitors the number of the CBE JU-funded projects that contribute to **improved climate-related impacts**, including ILUC impacts, through improved feedstock production and supply practices (including feedstock pre-processing prior to storage and transportation). Practices that contribute to climate change mitigation are the most commonly reported, and three IAs (and nine RIAs) also report contributions to climate change adaptation in the context of feedstock production and/or supply.

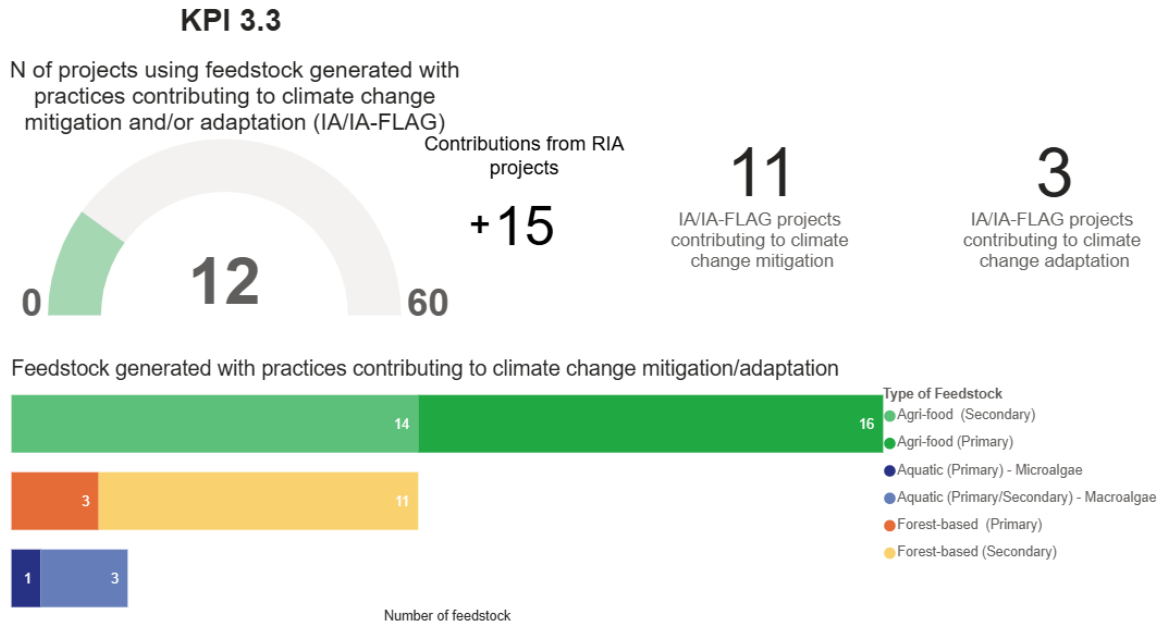


Figure 39 KPI 3.3 Number of projects using feedstock produced with practices that contribute to climate change mitigation and/or adaptation (top left), number of projects addressing the specific aims (climate change mitigation and/or adaptation; top right) and distribution of feedstock types produced through improved practices in IA, IA-Flagship and RIA projects (bottom).

OptiForValue (ongoing RIA) climate change mitigation and adaptation	OptiForValue integrates innovative silviculture and forest management strategies designed to build resilient forest-based value chains that address climate challenges. These adaptive practices span the entire regeneration cycle, from tree breeding and natural regeneration to mature stand management, ensuring a new generation of resilient forests. Key adaptation strategies include the optimal use of genetically improved seedlings, the promotion of species mixtures, and the reduction of growing stock through targeted thinning. Multifunctional forest management will be tested to balance potential conflicts between adaptation and mitigation, promoting both ecological resilience and carbon sequestration.
FIBSUN (ongoing RIA)	The FIBSUN project has established cattail and reed sites on drained peat soils that have been rewetted. Rewetting significantly reduces CO_2 and N_2O emissions (70-90 %) and is classified by the EU as a carbon farming practice (Sustainable Carbon Cycles Initiative).

Table 14 Examples of feedstock production and supply practices aiming at zero pollution (soil, water, air) and/or reduced water consumption in the CBE JU projects.

KPI 4: Improve the environmental sustainability of bio-based production processes and value chains

The CBE JU SRIA identifies the enhancement of the environmental performance of bio-based processes as a priority area for further research and innovation (SP 1.3.2). Accordingly, KPI 4 has been introduced to track the contributions of CBE JU-funded projects towards achieving more energy- carbon- and resource-efficient processes, while minimising pollution and waste.

KPI 4 includes five KPIs to monitor these environmental aspects separately. The most significant impact is expected from IAs, including flagship projects, as these represent process improvements that have been demonstrated in a relevant/operational environment. However, RIA projects can also contribute by validating improvements at laboratory scale or in a relevant environment. The first four KPIs take a holistic view of the projects' processes (Figure 40), while KPI 4.5 evaluates the environmental performance of the entire value chain, extending to the final bio-based product (Figure 41). More specifically:

- **KPI 4.1** monitors the number of the CBE JU-funded projects that develop, demonstrate or scale up bio-based processes with a **reduced carbon footprint** compared to the current benchmark(s). 24 IA projects report that they expect to make a positive contribution with a reduced carbon footprint through the use of more efficient processes and/or the use of processes that capture and use of (biogenic) CO_2.
- **KPI 4.2** monitors the number of the CBE JU-funded projects that develop, demonstrate or scale up more resource efficient bio-based processes and produce less waste than the current benchmark(s). 26 IAs report that they will develop innovative processes that enable, for example, the cascading use of waste streams.
- **KPI 4.3** monitors the number of the CBE JU-funded projects that develop, demonstrate or scale up bio-based processes that contribute to zero pollution targets. 23 IAs report a positive contribution, e.g. by reducing or eliminating the use of hazardous materials and chemicals.
- **KPI 4.4** tracks the number of the CBE JU-funded projects that develop, demonstrate or scale up bio-based processes that are more energy efficient than current processes (the benchmark(s) may be addressing fossil-based or bio-based feedstocks). 22 IA projects expect to make a positive contribution to this KPI.

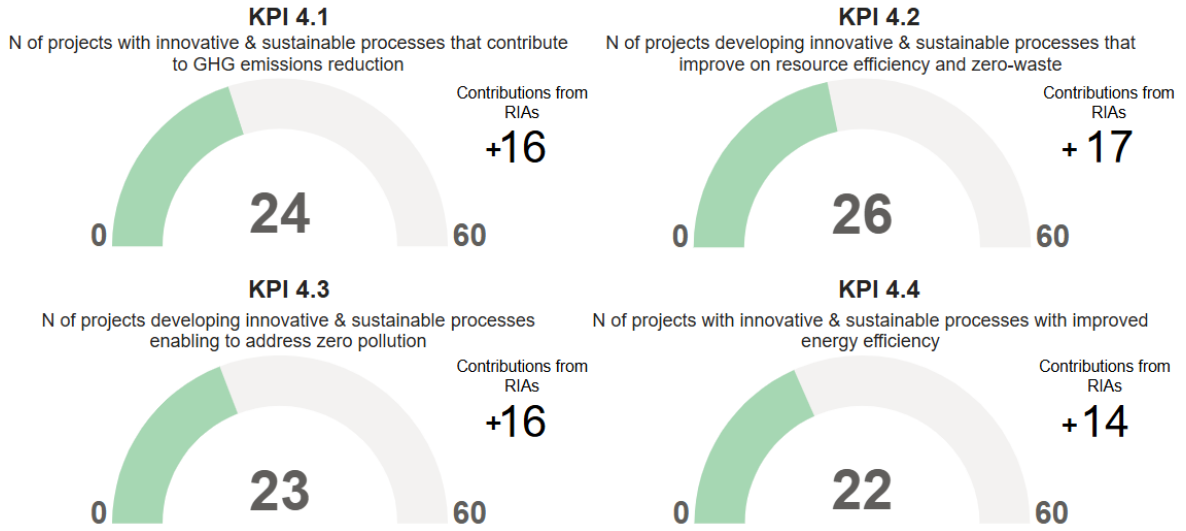


Figure 40 KPIs 4.1, 4.2, 4.3, 4.4 Improve environmental sustainability of bio-based production processes and value chains.

- **KPI 4.5** monitors the number of bio-based products developed, demonstrated or scaled up in the CBE JU-funded projects that improve environmental performance compared to the current (fossil-based and/or bio-based) benchmarks (Figure 41). Overall, the IA projects report a total of 26 (consumer) products that are expected to have an improved lifecycle performance, which will be further verified by LCA and other analyses. As improved lifecycle performance of other outputs (building blocks, materials) has the potential to improve the LCA of the final product (e.g. in the case of drop-in solutions), this dimension is also monitored.

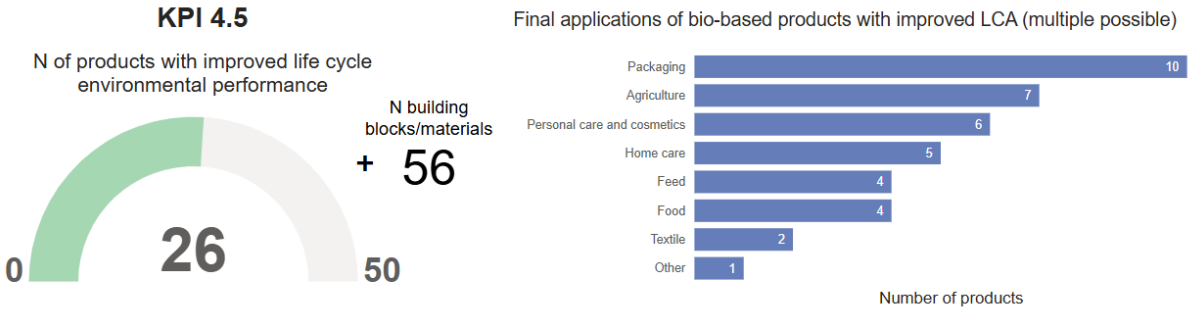


Figure 41 KPI 4.5 Number of products (and other outputs) with improved lifecycle environmental performance demonstrated in IA/IA-Flagship projects (left). Final applications of the bio-based products (right).

HICCUPS (ongoing IA) GHG reduction	The HICCUPS project captures and utilises CO_2 (CCU) produced during wastewater treatment to generate a valuable building block that can be used as a monomer for the bio-based polymer PLGA.
SUSTAINEXT (ongoing IA-FLAG) GHG reduction, energy efficiency and zero pollution	This project will contribute to the reduction of GHG emissions through the implementation of an agri-voltaic system, including the production of solar photovoltaic energy. Energy efficient systems will also be implemented, including a new biomass boiler for energy cogeneration. The SUSTAINEXT process will also contribute to zero pollution goals by avoiding hazardous substances and toxic chemicals in the process and reducing emission of VOCs, NOXs, SO_2 and other particles through treatment with filters.
FLEXIZYME (ongoing RIA) energy efficiency	The enzymatic biotechnology platform developed by FLEXIZYME for the production of bio-based fatty amines from side streams offers a more environmentally friendly alternative to traditional chemical processes, which often involve harsh reaction conditions. The use of enzymes allows for milder reaction conditions, lower energy consumption and the avoidance of toxic catalysts.
ZEST (ongoing IA) resource efficiency, zerowaste and zero pollution	The ZEST project, which aims to harness fungi-based protein production technologies, is developing a fermentation process that reuses filtrate from downstream processing, reduces the risk of contamination and minimises the use of cleaning chemicals. It also implements a cascading use approach, extracting multiple valuable components (proteins, chitins, mannans) from the biomass and exploring applications for residual components in food, feed and cosmetics.
PROSPER (ongoing IA) resource efficiency and zero waste	The PROSPER recycling process will utilise green solvents following internal recycling to minimise waste and ensure a sustainable and efficient approach. Improved sorting efficiency will increase capture rates and reduce the current loss of bio-based materials as residues due to the limitations of conventional sorting technologies.
MOEBIOS (ongoing IA) improved life cycle environmental performance	The MOEBIOS project focuses on enhancing waste management for bio-based plastics and promoting upcycling in the packaging, textile and agricultural sectors. By optimising the recycling process, the project aims to develop packaging for cooked and/or ready-to-eat food with better environmental performance compared with fossil-based and non-recycled bio-based alternatives.

Table 15 Examples of innovative & sustainable processes in the CBE JU projects for all KPIs 4.

KPI 5: Expand circularity in bio-based value chains

In order to maximise the positive impact of the products developed under CBE JU-funded projects, it is crucial to monitor their end-of-life options compared to current fossil and/or bio-based benchmarks. Although the focus of **KPI 5.1** is on bio-based end products, building blocks and materials with improved circularity aspects are also monitored.

In total, the CBE JU-funded projects intend to develop 45 innovative products that have at least one element of circularity, including biodegradability, composability, recyclability, reusability or 'upcyclability', as shown in Figure 42. Products designed for biodegradability and recyclability are particularly well represented, as are circular products for the packaging and agriculture. The circular design strategy is generally in line with the end use and typical EoL of the product. For example, the reported products for agricultural application — where release into the open environment is often unavoidable and recovery for reuse or recycling are typically not feasible[12] — will be designed for biodegradability. The most common characteristics of the circular products intended for packaging applications are biodegradability (79 %) and recyclability (86 %).

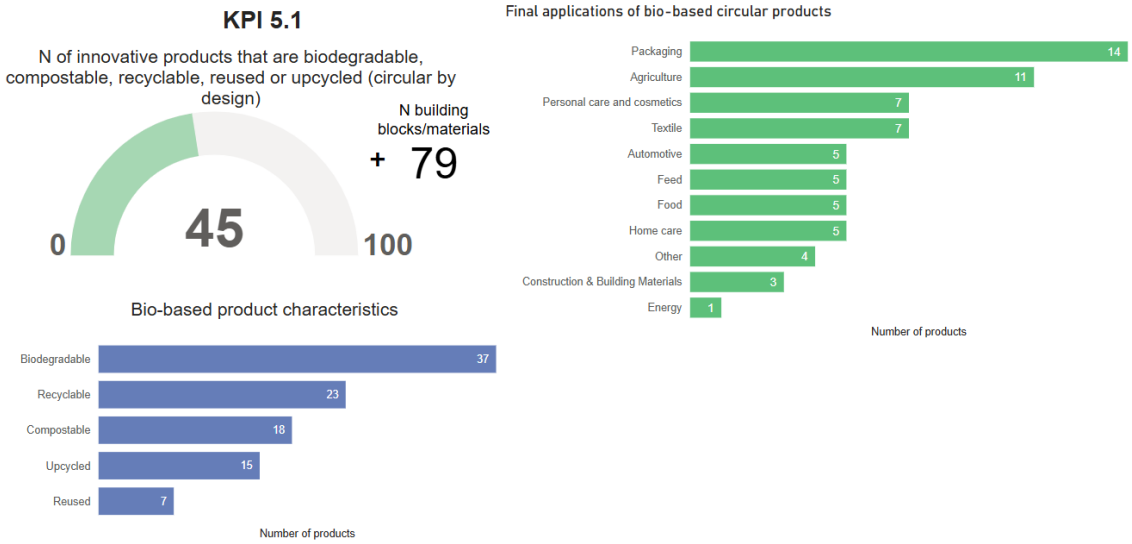


Figure 42 KPI 5.1 Expansion of circularity in bio-based value chains and the breakdown by product characteristics. Number of innovative circular products developed, demonstrated and/or up-scaled in RIA, IA and IA-Flagship projects (top left). Final applications of bio-based circular products (top right). Characteristics of the circular bio-based products (bottom).

REDYSIGN (ongoing RIA)	The REDYSIGN project aims to develop circular, fibre-based fresh meat packaging to replace non-circular, plastic products. The project will also design an efficient process for recycling packaging contaminated with organic waste into new packaging using the recycled fibres.
POLYMEER (ongoing RIA)	POLYMER is developing new bio-based polymers, copolymers, and polymer blends based on brewers' spent grain. The project will develop bio-based plastics designed for recyclability and/or biodegradability using vitrimer technology to facilitate reprocessing (packaging) and copolymers with phosphate units to facilitate tailored biodegradability and fertiliser release into the soil (plastic mulch films).

Table 16 Examples of products that are biodegradable, compostable, recyclable, reused or upcyclable (circular-by-design) developed under CBE JU projects.

[12] Biodegradability of plastics in the open environment - Publications Office of the EU.

KPI 5.2 focuses on the number of the CBE JU-funded projects developing bio-based value chains that close the loop by minimising resource input requirements (e.g. feedstock, process auxiliaries, etc.) and consumption as well as waste generation (outputs) of production processes. This includes industrial and industrial-urban symbiosis, where waste or by-products of an industrial process or an (peri-)urban environment become the raw material or input for (another) industrial process. Across all IAs, 25 projects report the development of circular production processes (Figure 43).

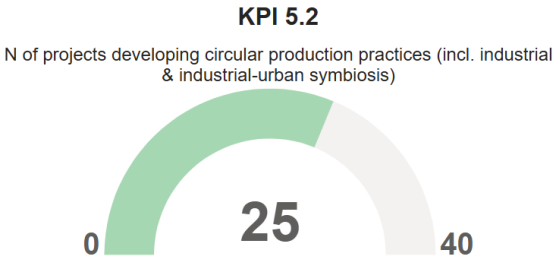


Figure 43 Number of projects (IA/IA-FLAG) developing circular production practices (incl. industrial & industrial urban symbiosis)

ReBioCycle (ongoing IA)	ReBioCyle recycles bio-based plastics from urban waste streams into new bioplastics using different recycling techniques (mechanical, chemical and biological).
ReLeaf (ongoing IA)	ReLeaf aims to recycle locally produced biowastes to ensure the affordability and availability of innovative bio-based fertilisers. Specifically, processes to recover nutrients and biopolymers from waste generated by wastewater treatment plants, technical agriculture, the fish processing industry, and the HORECA sector will be used as a secondary feedstock for the fertiliser industry.

Table 17 Examples of circular production practices (incl. industrial and industrial-urban symbiosis) developed in CBE JU projects.

KPI 6: Increase innovative bio-based outputs and products

KPI 6 has been developed in line with CBE JU SP 1.1.3 (Develop innovative bio-based products) and SP 2.1.3 (Scale up production and market uptake of innovative bio-based products). This KPI monitors two main areas of innovation for demonstration or upscaling: bio-based outputs with novel or significantly improved properties compared to relevant alternatives (**KPI 6.1**) and bio-based drop-in outputs that meet application requirements (**KPI 6.2**).

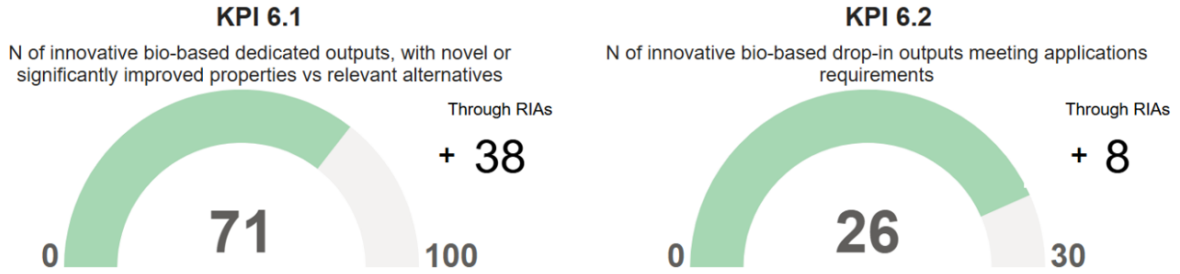


Figure 44 KPI 6 Increase innovative bio-based outputs and products.

As shown in Figure 44, for KPI 6.1, there are 71 outputs (including bio-based products, materials and building blocks) with novel or significantly improved properties whereas, while for KPI 6.2, the target is 26 drop-in outputs that meet application requirements.

To gain a clearer understanding of the nature of these innovative outputs and their final applications, further details are provided in Figure 45.

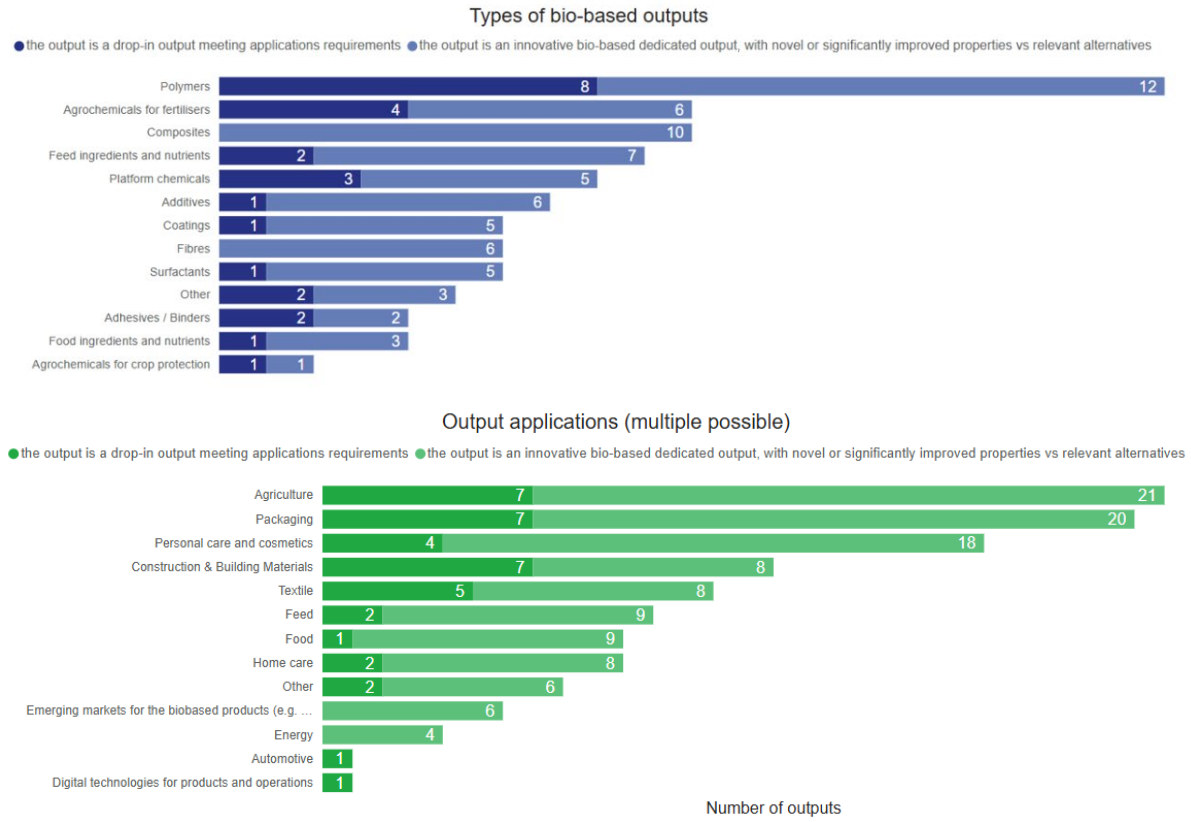


Figure 45 The two graphs show the different types of bio-based outputs from all different types of action and their main application areas.

GoodByO (ongoing RIA) drop-in output	GoodByO is developing a new generation multi-purpose biorefinery with technologies that use carbon and waste-based processes to produce novel, cost-effective and sustainable bio-based products. These products include the drop-in chemicals bio-octanoic acid and bio-hexanol.
SuperBark (ongoing RIA) dedicated output	SuperBark will use natural components of softwood bark, a major side stream of the forest industry, to develop bio-based adhesives and coatings for wood products and paper packaging that meet the performance, safety and sustainability requirements of industry and consumers. Specifically, it will utilise polyphenols extracted from softwood bark by alkaline extraction and bark-based cellulose nanofibrils (CNF).

Table 18 Examples of innovative bio-based dedicated outputs and drop-in outputs in the CBE JU projects.

KPI 7: Improve the market uptake of bio-based products

In order to stimulate the market uptake of bio-based solutions and in line with the multi-actor approach, the CBE JU encourages the strategic involvement of brand owners[13] in the projects it funds. The genuine involvement of brand owners - either as project participants, or through other mechanisms (e.g. through a different form of contract or as a member of the advisory board) - is expected to increase consumer awareness and the overall uptake of bio-based products.

Figure 46 shows the progress towards engaging business-to-consumer (B2C) **brand owners** as project beneficiaries against the target to be achieved by 2031. These includes companies that sell cars, home and personal care products, or food and feed products directly to consumers. Of the 41 brand owners involved as beneficiaries and therefore directly participating in project activities[14], 17 are currently involved in IA-Flag projects (TRL 8 projects aimed at supporting the first application/take-up of bio-based solutions in the EU market).

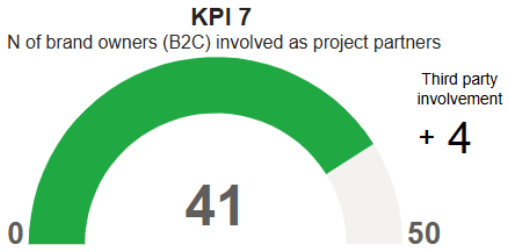


Figure 46 KPI 7 Improve the market uptake of bio-based products

CIRCLE (ongoing IA-Flagship)	The CIRCLE flagship project aims to upgrade the capacity of an existing biogas plant to convert food waste streams and other biomasses into high-value bio-based chemicals and intermediates such as lactic acid (LA) and its derivatives, including those based on polylactic acid (PLA). To demonstrate the broad applicability of these intermediates for fully marketable and socially acceptable products (e.g. cosmetics, detergents and packaging products and in the automotive sector), the consortium includes B2C brand owners from the automotive (VW), home care (Ecover) and personal care/cosmetics (Davines) sectors, among others.
NEXT-STEP (ongoing IA)	NEXT-STEP aims to develop a new chemical platform, the 3-methyl-d-valerolactone (3MdVL), which will improve the sustainability and recyclability of polyurethane (PU) products and open up new engineering plastics applications for polylactic acid (PLA) copolymers. The project will develop materials for shoe soles, among other applications. The consortium includes the sports manufacturer ADIDAS AG.

Table 19 Examples of brand owner (B2C) involvement in CBE JU projects.

[13] Refers to industrial stakeholders selling commodities under a registered brand. They may be existing or new stakeholders of bio-based value chains, contributing to the market uptake of bio-based products.

[14] Including Beneficiaries (Article 7 of the MGA) and Affiliated Entities (Article 8 of the MGA).

KPI 8: Attract investment to the bio-based sector

In line with SRIA priority 2.2.2, which aims to improve the interaction between those involved in circular bio-based systems and the investment sector, this KPI monitors the activities under CBE JU-funded projects that contribute to increased awareness of opportunities in the bio-based sector and/or increased investment in the bio-based sector.

The number of projects that plan to implement actions in this area is reported. Planned actions include participation in pitch events and the organisation of workshops and webinars aiming to increase the investment/financing community's awareness of the potential applications of innovative bio-based solutions.

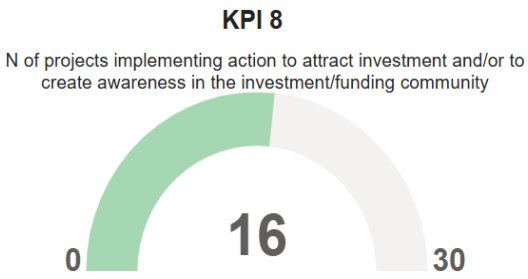


Figure 47 KPI 8 Attract investment to the bio-based sector.

COPILOT (ongoing CSA)	COPILOT co-organised the Pitch Perfect and Boost the EU Bioeconomy events, which were attended by 51 investors. The events included two pitch sessions tailored to distinct funding stages: 31 bio-innovators seeking pre-seed, angel, or seed financing, and 27 presenting Series A or B/C scale-up plans. COPILOT also hosted a webinar with three bioeconomy investors who shared practical insights on pitching strategies, investor expectations, and effective communication.
BRILLIAN (ongoing IA)	BRILIAN is working with the Bioeconomy Ventures (BV) project, which supports bioeconomy start-ups, spin-offs and SMEs in accessing finance, by connecting stakeholders (including primary producers and cooperatives) to the platform. Capacity building is also planned in the form of webinars and workshops to prepare stakeholders to access finance.

Table 20 Examples of actions to attract investment in CBE JU projects.

KPI 9: Increase resilience and capacity in the bio-based sector

A specific objective of the CBE JU initiative is to strengthen and integrate the research and innovation capacity of stakeholders across the Union (CBE JU SO 1.2). As such, the SRIA outlines actions under strategic priority 1.2.3 – *Facilitate the development of expertise in bio-based fields by improving higher education and skills development* and includes a KPI to monitor the number of projects contributing to this objective.

The number of projects that plan to increase skills and capacity in the bio-based sector is reported in Figure 48. Some concrete actions include training programmes for different target groups, including industry stakeholders and PhD students. Examples of the CBE JU projects that develop the skills and capacity needed by the EU bio-based sector:

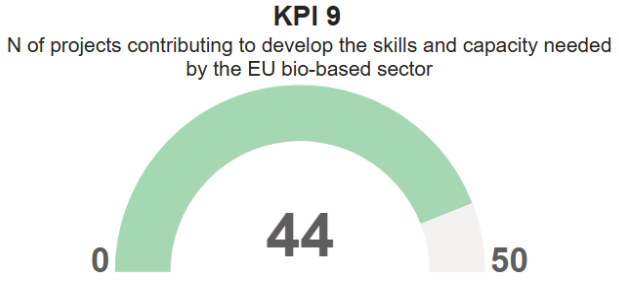


Figure 48 KPI 9 Increase resilience and capacity in the bio-based sector

BIORADAR	BioRADAR is developing a replication facility – a collaborative platform to disseminate project outcomes, showcase tools, and transfer knowledge to

(ongoing CSA)	stakeholders. This facility aims to foster collaboration in industrial bio-based systems, scale up best practices, integrate newly acquired knowledge, and translate complex scientific findings into accessible language. The BioRADAR replication facility will also host a massive open online course (MOOC) for companies, government agencies and other stakeholders involved in material circularity and environmental and social impact assessments of industrial bio-based systems.
NEBA Alliance (ongoing CSA)	The New European Bauhaus Academy (NEBA) Alliance aims to democratise access to high-quality training in sustainable construction, addressing an important skills gap — as more than 75 % of EU companies report difficulties in this area. The project will initiate and codesign the NEB Academy with relevant education stakeholders and training providers. It will create an online collaborative platform for the NEBA Community of Practice (CoP) to share knowledge and training resources on circular, bio-based processes, enabling collaboration between educators, practitioners, and decision-makers to co-create innovative training approaches and match learners with trainers.

Table 21 Examples of projects for KPI 9: Increase resilience and capacity in the bio-based sector.

KPI 10: Improve participation of regions and countries with high unexploited potential and a strategic interest in its development

In line with the objectives of the CBE JU, and in particular objective 1.2, which aims to strengthen and integrate the research and innovation capacity of stakeholders across the Union, and SRIA priority *1.2.1 Stimulate research activities in countries and regions with underdeveloped R&I capacity for bio-based systems*, KPI 10 has been designed to monitor the impact of the programme for countries and regions with high but untapped bioeconomy potential.

KPI 10.1 is an indicator of how inclusive participation in the CBE JU projects has improved compared to the BBI JU programme as a benchmark. Figure 49 shows the number of distinct newcomer participants from underrepresented countries and/or regions, as defined in the CBE JU KPI Handbook, and also shows the distribution between newcomers at country and regional level.

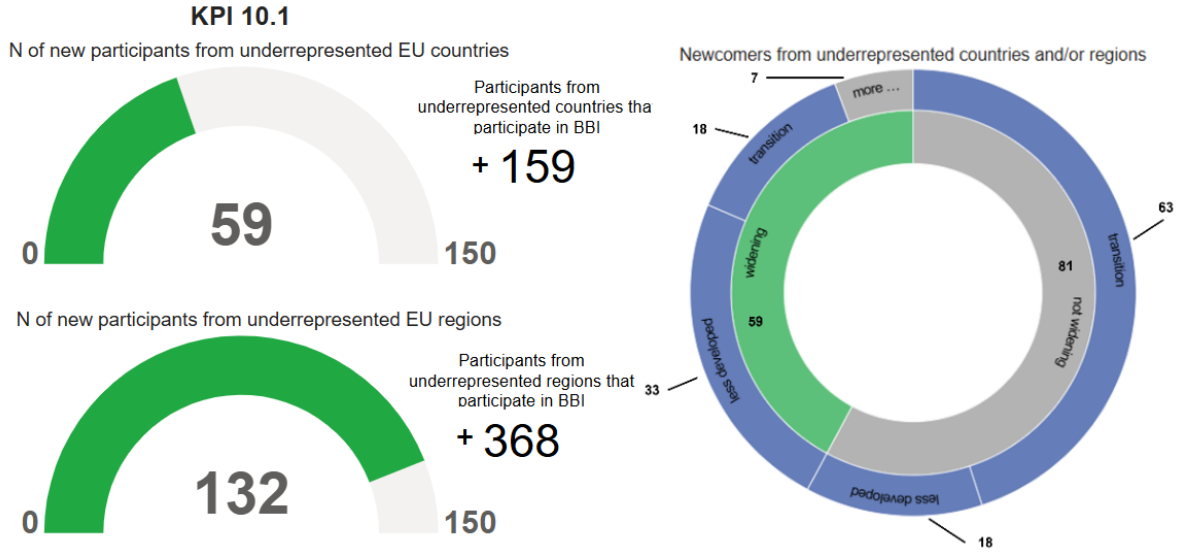


Figure 49 Progress towards KPI 10.1 (country level, top left). Number of newcomer beneficiaries from underrepresented EU regions (bottom left). Combined country and regional dimension (number of newcomer participants, right; underrepresented regions in blue and countries in green).

In Figure 50 reported below, **KPI 10.2** focuses on the objective of contributing to capacity building in the regions. To this end, it monitors the establishment of regional hubs as platforms for cooperation, information and collaboration and for bringing stakeholders together. **KPI 10.3** monitors the number of CBE JU-funded projects that benefit from complementary funding from the EU, national or regional funds, such as funding for regional infrastructure/facilities.

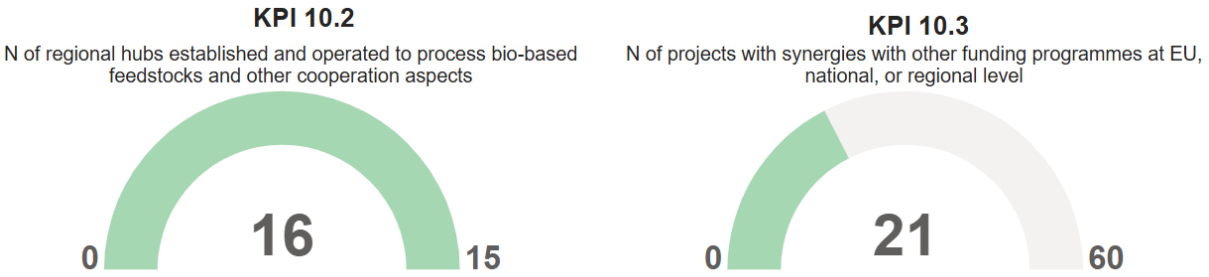


Figure 50 *Improve participation of regions and countries with high unexploited potential and strategic interest to develop it.*

BioINSouth (CSA)	This project aims to establish eight regional HUBs to serve as innovation ecosystems for advancing bio-based feedstock processing and fostering multi-stakeholder collaboration. The main objectives of these HUBs are to promote sustainable practices, enhance regional innovation capacity and support the integration of bioeconomy strategies aligned with ecological limits and circularity principles.
Rural BioReFarmeries (IA)	The Irish Rural BioReFarmeries demonstration plant received infrastructure funding from Ireland's Dept of Agriculture, Food and the Marine.

Table 22 Examples of regional hubs established under CBE JU-funded projects and synergies with other funding programmes.

In addition, Table 23 and Table 24 compare how the participation of underrepresented countries and regions is evolving compared to the BBI JU programme as a benchmark.

Country	Number of participations in BBI JU projects	Number of participations in CBE JU projects	Number of newcomers to CBE JU projects
PT	42	22	11
EL	32	33	17
PL	28	10	7
HR	19	5	0
EE	14	13	5
SI	12	8	5
SK	12	1	1
CZ	10	9	3
HU	10	2	0
RO	8	3	3
BG	6	3	3
CY	4	1	1
LV	4	4	2
LT	1	0	0
MT	0	1	1

Table 23 Participation of underrepresented countries in CBE JU projects compared to the benchmark for BBI JU projects. Number of newcomers refers to distinct participants who have never participated in a BBI JU programme.

NUTS 2 code	Region	Number of participations in BBI JU projects	Number of participations in CBE JU projects	Number of newcomers to CBE JU projects
ES52	Comunidad Valenciana	47	25	11
ES61	Andalucía	27	12	5
FRL0	Provence-Alpes-Côte d'Azur	19	1	1
ES41	Castilla y León	15	13	5
PT16	Centro	14	13	6
EE00	Eesti	14	13	5
ES11	Galicia	14	5	4
EL30	Attiki	13	15	6
HR03	Jadranska Hrvatska	13	4	0
EL52	Kentriki Makedonia	12	8	5
FRH0	Bretagne	11	4	3
FRJ1	Languedoc-Roussillon	11	2	1
FRE2	Picardie	11	3	0
BE33	Liège	10	3	1
FRG0	Pays de la Loire	10	1	0
ITF3	Campania	9	7	1
FI1C	Etelä-Suomi	9	6	3
PT11	Norte	9	6	4
ES23	La Rioja	8	7	3
FI1D	Pohjois- ja Itä-Suomi	8	4	2
ES62	Región de Murcia	8	3	1
BE22	Limburg	7	1	0
FRF1	Alsace	6	3	1
FRK1	Auvergne	6	1	1
BE32	Hainaut	6	6	3
FRJ2	Midi-Pyrénées	6	4	3
ES42	Castilla-La Mancha	5	3	1
PL71	Łódzkie	5	1	1
FRD1	Basse-Normandie	4	2	1
PL51	Dolnośląskie	4	1	1
EL53	Dytiki Makedonia	4	5	3
CZ06	Jihovýchod	4	3	1
CY00	Kýpros	4	1	1
FI19	Länsi-Suomi	4	2	2
LV00	Latvija	4	4	2
SE31	Norra Mellansverige	4	1	0
IE04	Northern and Western	4	3	2
DK02	Sjælland	4	1	1
BG41	Yugozapaden	4	2	2
ES43	Extremadura	3	13	8

HR05	Kontinentalna Hrvatska	3	1	0
DE93	Lüneburg	3	3	2
DE80	Mecklenburg-Vorpommern	3	1	0
PL42	Zachodniopomorskie	3	1	1
HU33	Dél-Alföld	2	1	0
FRC2	Franche-Comté	2	3	0
NL12	Friesland	2	3	2
EL43	Kriti	2	3	1
ITI3	Marche	2	4	1
PL41	Wielkopolskie	2	2	1
FRI1	Aquitaine	1	5	5
FRC1	Bourgogne	1	1	1
PL81	Lubelskie	1	3	2
ITF4	Puglia	1	2	2
ITI2	Umbria	1	2	0
SK04	Východné Slovensko	1	1	1
SI03	Vzhodna Slovenija	1	2	2
BG42	Yuzhen tsentralen	1	1	1
EL63	Dytiki Ellada	0	1	1
FRD2	Haute-Normandie	0	2	2
PL21	Małopolskie	0	1	1
MT00	Malta	0	1	1
EL65	Peloponnisos	0	1	1
ES12	Principado de Asturias	0	2	1
ITG1	Sicilia	0	1	1
CZ07	Střední Morava	0	1	1

Table 24 Participation of underrepresented regions in CBE JU projects compared to the benchmark for BBI JU projects. Number of newcomers refers to distinct participants who have never participated in a BBI JU programme. NUTS 2 codes are according to NUTS 2021 classification.

1.7.4. BBI JU legacy: Progress against Horizon 2020 KPIs and BBI JU-specific KPIs

The Horizon 2020 key performance indicators were defined to assess the impact and performance of the programme under which the BBI JU was operating. The relevant Horizon 2020 indicators are set out in Annex 5.5.

The contribution of the BBI JU to the Horizon 2020 **Industrial leadership** pillar was monitored by the number of SMEs introducing innovations in the company (a total of 199) or in the markets (a total of 240), as well as by the cumulative figures for SME turnover (EUR 14.3 billion) and employees by the end of 2024. The impact of the BBI JU on **societal challenges** Horizon 2020 seeks to address has been monitored through a set of indicators related to the number of publications in peer-reviewed high-impact journals (a total of 859 publications), patent applications a (total of 149) and patents granted (a total of 26), the number of prototypes and testing activities (more than 1 400), the number of number of joint public-private publications in projects (a total of 310) and the number of new products (total of 106), processes (a total of 92) and methods (a total of 56) brought to the market. Please see also section on *BBI JU legacy: BBI JU-specific KPIs* to gain a better understanding of the nature and applications of these new solutions.

The contribution of ongoing and completed BBI JU projects to **BBI JU-specific KPIs** – as set out in the BBI JU SIRA 2017 – is monitored through an annual survey submitted by the projects. For the 2024 reporting year, the survey, which was launched in September 2024 collected data from 34 BBI JU projects, of which 20 are still ongoing and 14 were completed in 2024. The survey, now embedded in the KPI & Impact web tool developed for the purpose of CBE JU reporting, collected both quantitative and qualitative information on KPI results and expected project impacts.

The Figure below summarises the cumulative contributions of BBI JU KPIs against the targets set in the SIRA. For ongoing projects, the figure refers to expected contributions, while for completed projects, the data is actual. In particular, the results reported per completed project show that the BBI JU has met and exceeded the targets for all KPIs linked to project outputs (KPIs 1, 2, 4, 5, 6, and 8).

Figure 51 2024 BBI JU KPIs: results vs. SIRA targets

The status of each KPI and project examples can be found in the next sections.

BBI JU KPI 1 and 2: New interconnections and value chains

BBI JU KPIs 1 and 2 monitor the new interconnections and value chains established by RIA and IA projects.

Interconnections refer to the cooperation between companies and other actors across different sectors. A new interconnection is established when the parties involved had no prior engagement before the project. These new interconnections contribute to the creation of new value chains.

A ***new value chain*** is one in which at least one part is new: the biomass feedstock, the processing technology, the end product or its application.

Figure 53 and Figure 54 provide a close-up view of the progress of KPI 1 and KPI 2 against their targets, with some examples from the projects below.

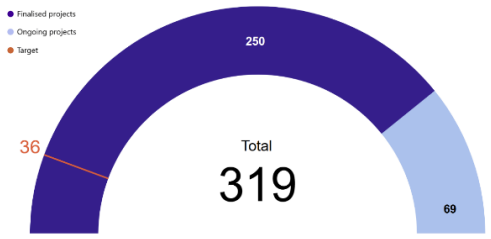


Figure 53 KPI 1 - New cross-sector interconnections in the bio-based.

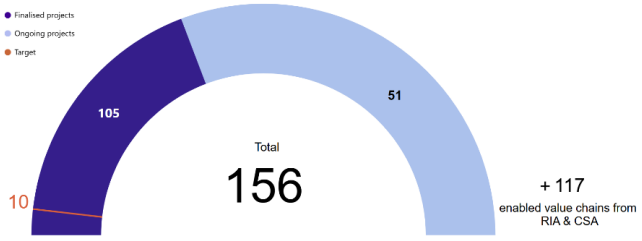


Figure 52 KPI 2 - New bio-based value chains economy (RIAs and IAs).

DEEP PURPLE (completed IA)	DEEP PURPLE has established interconnections between biowaste management and the construction, cosmetics and bioplastics sectors, creating a new value chain by developing a new technology to convert urban biowaste into purple photosynthetic bacteria biomass. This biomass, in turn, is a novel feedstock for bioplastic production. Combined with cellulose, it resulted in a new composite for the above-mentioned sectors.
PHENOLEXA (completed RIA)	PHENOLEXA has established new interconnections between the agricultural and cosmetics sectors, developing a new value chain using vineyard residues, onion and chicory waste have been employed to produce anti-inflammatory cosmetics.

Table 25 Examples of regional hubs established under CBE JU-funded projects and synergies with other funding programmes.

BBI JU KPI 4 and 5: new building blocks and new bio-based materials

The newly established value chains introduce new and different bio-based building blocks and materials with varying levels of innovation. The Figures below further elaborate on BBI JU KPI 4 and show the innovation intensity and the feedstock composition of the building blocks developed by RIA and IA projects.

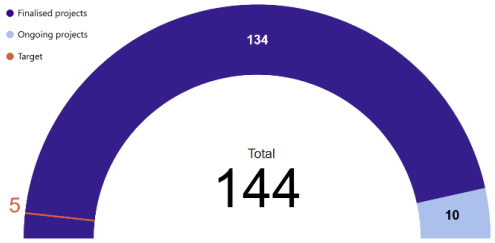


Figure 54 KPI 4 – Number of bio-based building blocks.

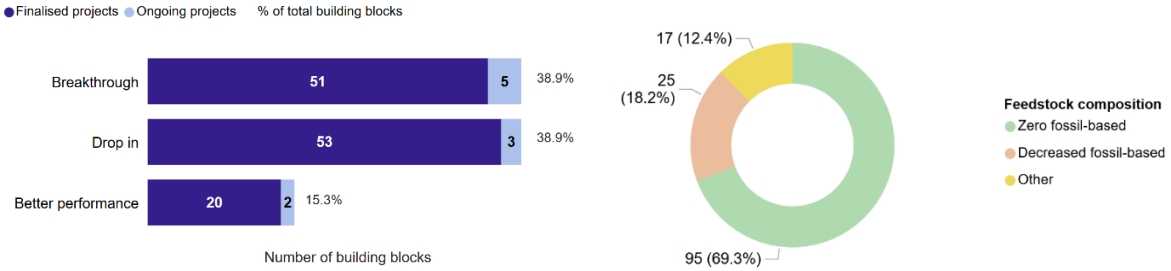


Figure 55 Innovation intensity of new bio-based building blocks and their feedstock composition.

PERFECOAT (completed RIA)	PERFECOAT produced breakthrough microbial- and biomass-derived biopolymers (e.g. alginate, xylan) that have no defined fossil-based counterpart.
AFTERBIOCHEM (ongoing FLAG)	AFTERBIOCHEM aims at developing seven drop in biobased carboxylic acids and four derivatives that can replace their fossil-based equivalents with identical level of performance.
PEFerence (ongoing FLAG)	PEFerence produces FDCA (furan dicarboxylic acid) from sugars derived from wheat starch and biomass. This building block is used to produce furan-based polyesters, which can replace fossil-based polyesters, such as polyethylene terephthalate (PET) and packaging materials such as glass and metal.

Table 26 Examples of new bio-based building blocks in BBI projects.

The figures below further elaborate on BBI JU KPI 5, showing the innovation intensity and the feedstock composition of the materials developed by RIA and IA projects.

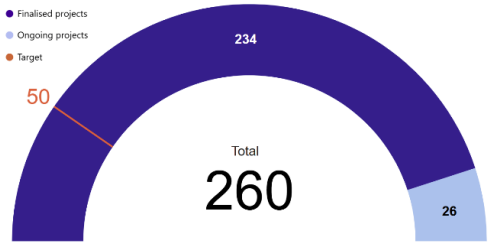


Figure 56 KPI 5 – Number of bio-based materials.

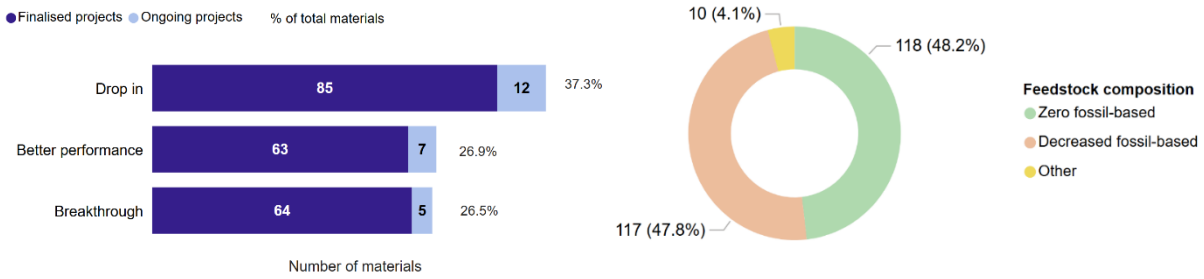


Figure 57 Innovation intensity of new bio-based materials and their feedstock composition.

BeonNAT (ongoing RIA)	BeonNAT is developing a breakthrough activated carbon from underutilised tree and shrub species. Compared to conventional coconut shell activated carbon, this material has higher adsorption capacity, is less expensive and is locally sourced in Europe.
BioSupPack (ongoing IA)	BioSupPack is developing drop-in PHB-based coatings and polymers that can replace fossil-based materials used in packaging applications.
Glaukos (completed RIA)	Glaukos has developed textile fibres and textile coatings – with a particular focus on fishing gear and clothing – that meet the standard performance requirements and are biodegradable.

Table 27 Examples of new materials developed in BBI JU projects.

KPI 6: new bio-based products

BBI JU KPI 6 monitors the new bio-based consumer products developed by BBI JU IA projects, which amount to 141 products. Figure 58 shows the progress of KPI 6 against the target, while Table 27 shows the end use sectors of the products developed by BBI JU IA projects.

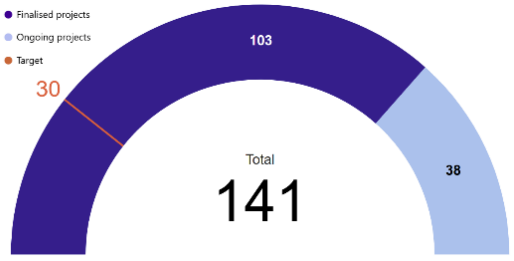


Figure 58 KPI 6 – Number of bio-based consumer products

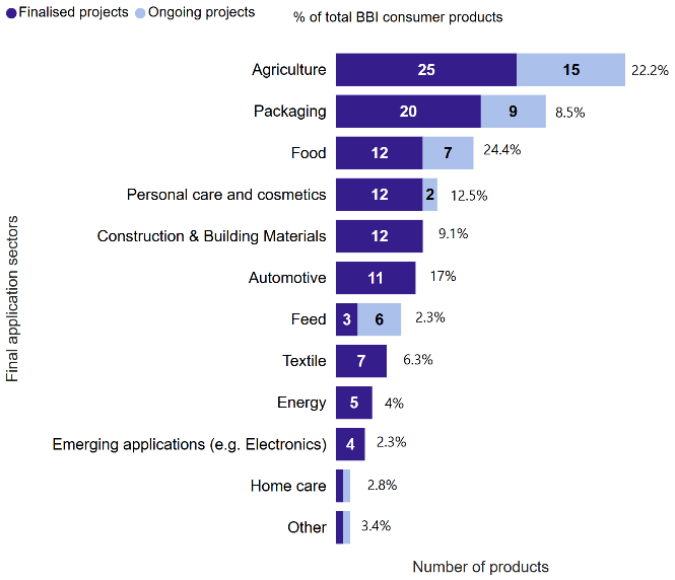


Figure 59 New bio-based consumer products dev eloped by BBI JU Innovation Action projects per final application sectors.

Examples of new products developed in BBI JU projects by final application sector are reported below.

Agriculture	
BIOVEXO (ongoing IA)	BIOVEXO uses vegetable extracts and microbial resources to produce biopesticides against Xylella fastidiosa and its insect vector.
UNLOCK (ongoing IA)	UNLOCK extracts keratin from waste feathers from the poultry sector and uses it in bioplastics for agricultural applications. The mulch films produced by UNLOCK are more biodegradable and release nitrogen into the soil (better performance).
B-FERST (ongoing IA) **RECOVER** (completed RIA)	B-FERST and RECOVER produce fertilisers from biowaste and insect frass respectively.
Packaging	
NENU2PHAR (completed RIA) **BioSupPack** (ongoing IA)	NENU2PHAR and BioSupPack are developing compostable food packaging that is identical to non-renewable counterparts. The former uses microalgae as feedstock, the latter brews spent grains.
Food	
ALEHOOP (ongoing IA)	ALEHOOP recovers low-cost dietary proteins from seaweed and the by-products of legume production. These proteins can be used, for example, in meat analogues and sports drinks.
AFTERBIOCHEM (ongoing FLAG)	AFTERBIOCHEM converts sidestream from the sugar industry into organic acids and esters to be used as preservative in food and feed.
Personal care	
BeonNaT (ongoing RIA)	BeonNaT is testing the extraction of functional botanical health ingredients from forestry feedstock.
PHENOLEXA (completed RIA)	PHENOLEXA extracted bioactive compounds from agricultural side streams and tested them in two hair care products.

Table 28 Examples of projects for KPI 6: new bio-based products.

Figure 60 shows the different aspects of novelty of the developed bio-based products compared to the benchmark. In particular, the bio-based feedstock and the new processes result in consumer products with improved environmental, economic and functional performance.

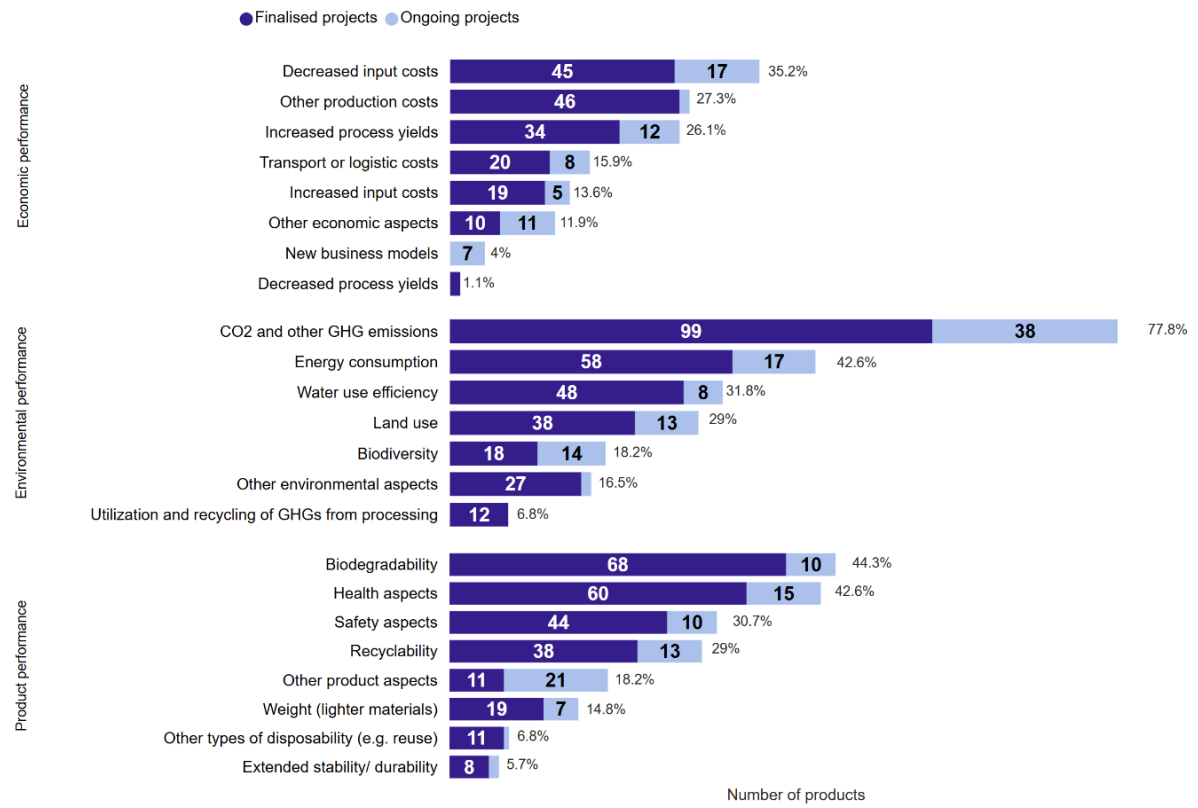


Figure 60 Main aspects of novelty in new bio-based products developed by BBI JU Innovation Action projects.

Including all output categories (i.e. building blocks, materials, consumer products), Figure 61 and Figure 62 provide an overview of the type of outputs produced by all BBI JU projects and their final applications. Polymers and platform chemicals together account for around 40 % of total outputs, with packaging being the most common end application.

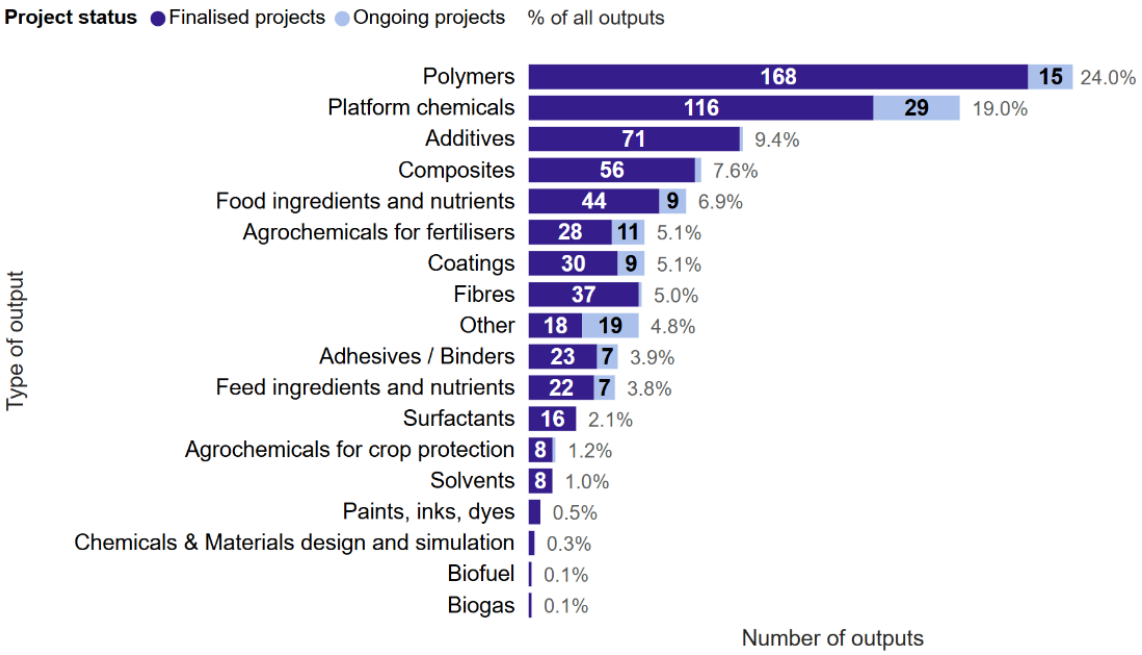


Figure 61 Distribution of outputs from all BBI JU projects per type of output. The figure comprises the three output categories (building blocks, materials, products).

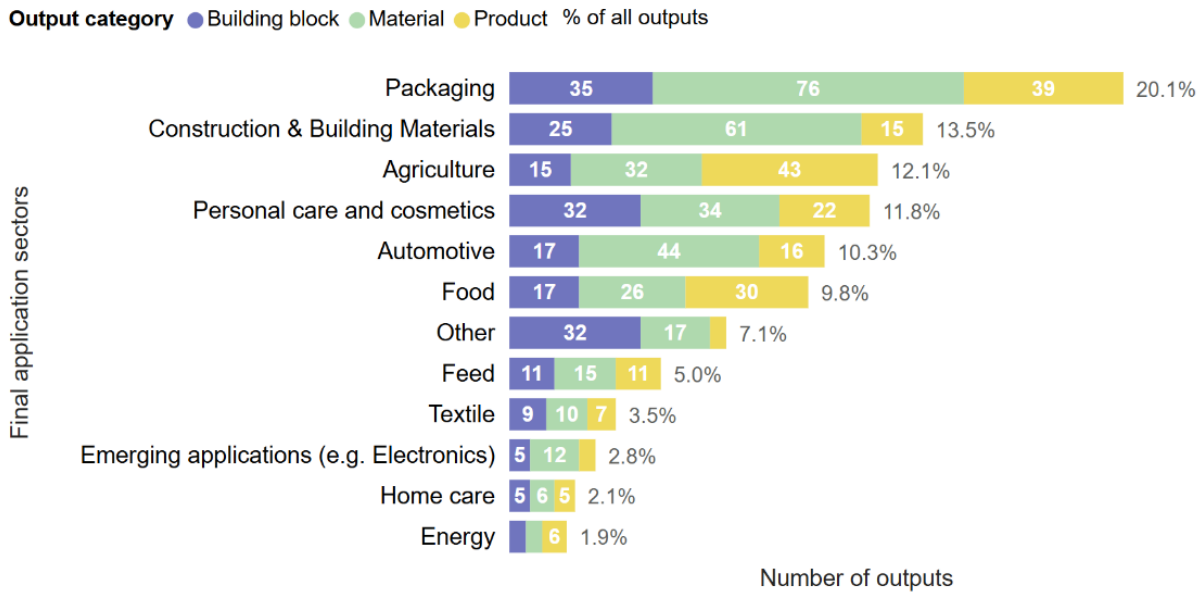


Figure 62 Distribution of outputs from all BBI JU projects per final application sector and by output categories.

BBI JU KPI 6: TRL gains

By validating, demonstrating and scaling up innovative processing technologies, BBI JU projects contribute to closing technology gaps in bio-based value chains. RIA projects provide the basis for further upscaling, demonstration (IA-demo) and integration (IA-flagship) into larger scale industrial facilities. KPI 8 monitors the gain in TRL achieved by the technologies developed in BBI JU projects (Figure 63).

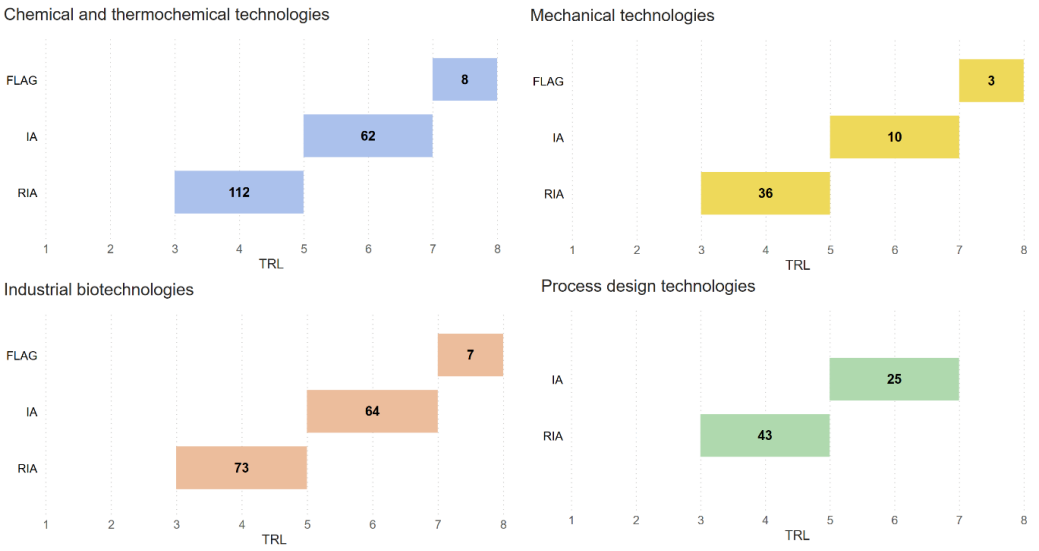


Figure 63 KPI 8: Number of technologies per type of actions and TRL increase by type of conversion process.

BBI JU projects' expected environmental and socio-economic impact

While there are no specific KPIs and targets for socio-economic and environmental impacts, the survey collects quantitative and qualitative information on the various social, economic, and environmental impacts outlined in the SIRA 2017, as well as the projects' contribution to the SDGs.

Figure 64 highlights the positive contribution of a number of BBI JU projects to the inclusion and support of primary producers.

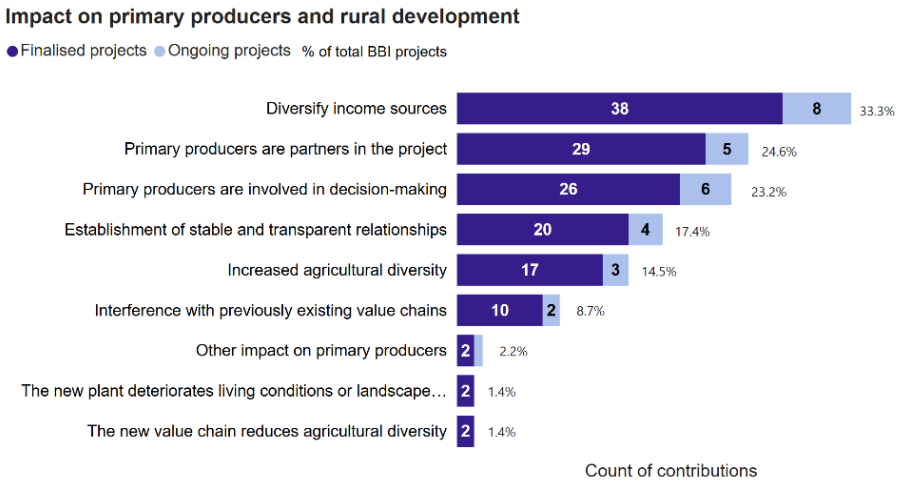


Figure 64 Socio-economic impacts of BBI JU projects (all actions) on primary producers and rural development.

OLEAF4VALUE (completed RIA)	OLEAF4VALUE involved stakeholders from the entire value chain, starting with the primary sector including partners specialised in biomass and by-products of the olive value chain. In addition, by studying the agronomic parameters that affect feedstock characteristics and their impact on the final product quality, producers have learned about the importance of plant phytochemical composition during the agricultural phase for the quality of bioproducts.
BeonNAT (ongoing RIA)	BeonNAT helps producers to understand how to diversify their income by establishing alternative land use options for marginal and underutilised lands. Intercropping cultivations is also being explored to improve agricultural diversity.
B-FERST (ongoing IA)	B-FERST establishes long-term contracts between farmers and fertiliser companies to ensure the supply and logistics of the new raw materials. In this way, the recycling of biowaste will become a new source of income for farmers.

Table 29 Examples of impacts on primary producers reported by projects.

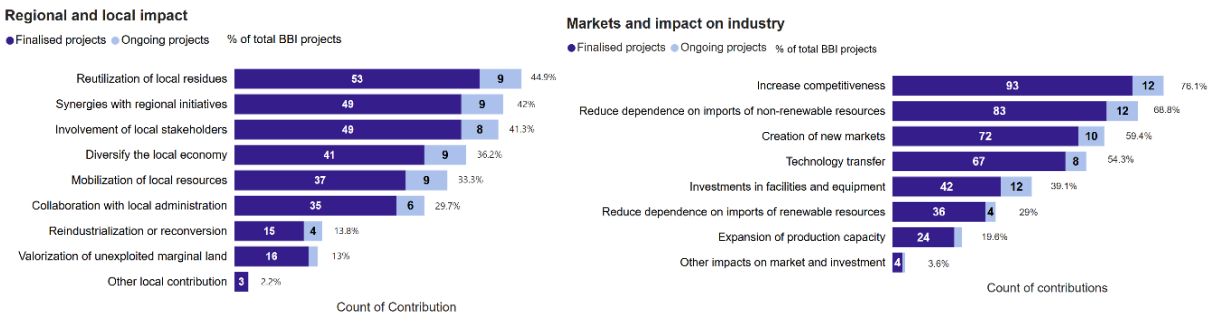


Figure 65 Socio-economic impacts of BBI JU projects (all actions) related to regional and local impact and markets and industry.

Figure 65 shows how the BBI JU projects are working with the regions to source biomass sustainably and invest in the development and deployment of innovative technologies for the bio-based industries.

BIObec (completed CSA)	BIObec collaborated directly with local administrations to ensure that regional specificities, priorities and training needs, e.g. on bioeconomy policies, were taken into account in project development.
FRACTION (completed RIA)	FRACTION involved local stakeholders, such as feedstock suppliers and bio-based companies, by organising roundtables and workshops in different European countries.
MULTI-STR3AM (ongoing IA) **NENU2PHAR** (completed RIA)	MULTI-STR3AM and NENU2PHAR contribute to increasing the European production capacity of a new competitive bio-based feedstock, i.e. microalgae, and reducing import dependency.

Table 30 Examples of local and market impacts reported by projects.

Reducing the environmental impact of industrial processes and products is one of the core objectives of BBI JU projects. In line with this objective, a significant number of projects report positive contributions (Figure 66).

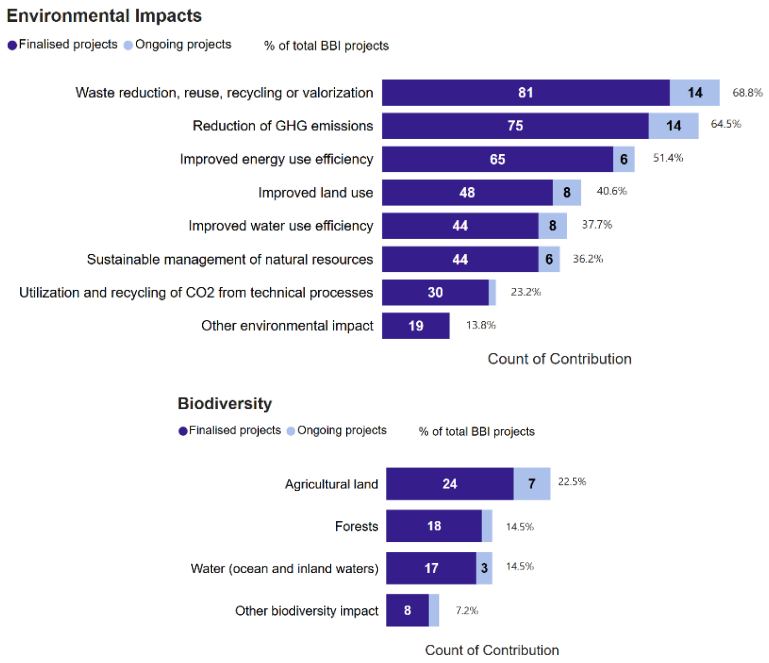


Figure 66 Environmental impacts of BBI JU projects on environmental impact and biodiversity.

VIBES (ongoing RIA)	VIBES eeks to achieve at least 22 % reduction in CO_2 emissions compared to existing composite recycling technologies, while lowering the overall energy required for the recycling process. The projects will also help to reduce the amount of non-biodegradable polymers sent to landfill and incineration.
AFTERBIOCHEM (ongoing FLAG)	AFTERBIOCHEM will stimulate innovation for the recovery and recycling of organic waste by testing alternative feedstocks, i.e. biowaste and the organic fraction of household waste.
UP4HEALTH (ongoing IA-demo)	UP4HEALTH valorises commonly discarded food streams, such as by-products of olive and grape production, to recover valuable biomolecules and produce four organic, natural, sustainable and healthy ingredients for the nutraceutical and cosmetic sectors.

Table 31 Examples of environmental impacts reported by projects.

BBI JU projects report that they are also making a positive contribution to knowledge creation and transfer, raising awareness and understanding of the bio-based economy, increasing standardisation and improving regulation, and developing safer processes and end products (Figure 67 and Figure 68).

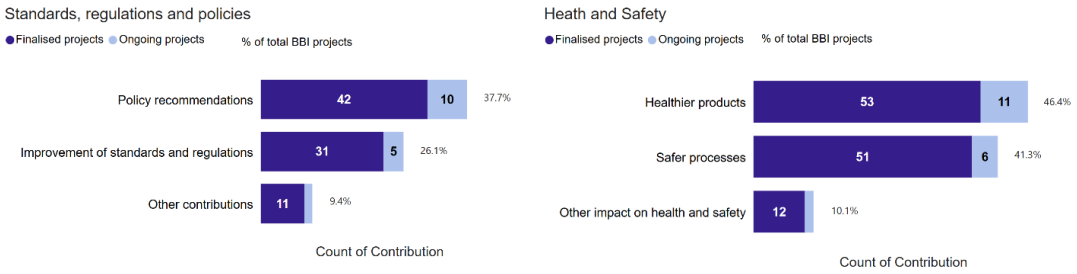


Figure 67 Additional impacts of BBI JU projects on health and safety, standards, regulations and policies.

LIGNICOAT (ongoing RIA)	LIGNICOAT is developing safer production processes for lignin-based coatings. This will reduce workplace risks, such as explosive atmospheres and chemical exposure. By eliminating toxic chemicals, the coatings will reduce exposure to harmful substances, improving the health of both consumers and workers. The addition of antimicrobial properties further enhances safety and product longevity.

Table 32 Example of impacts on health and safety.

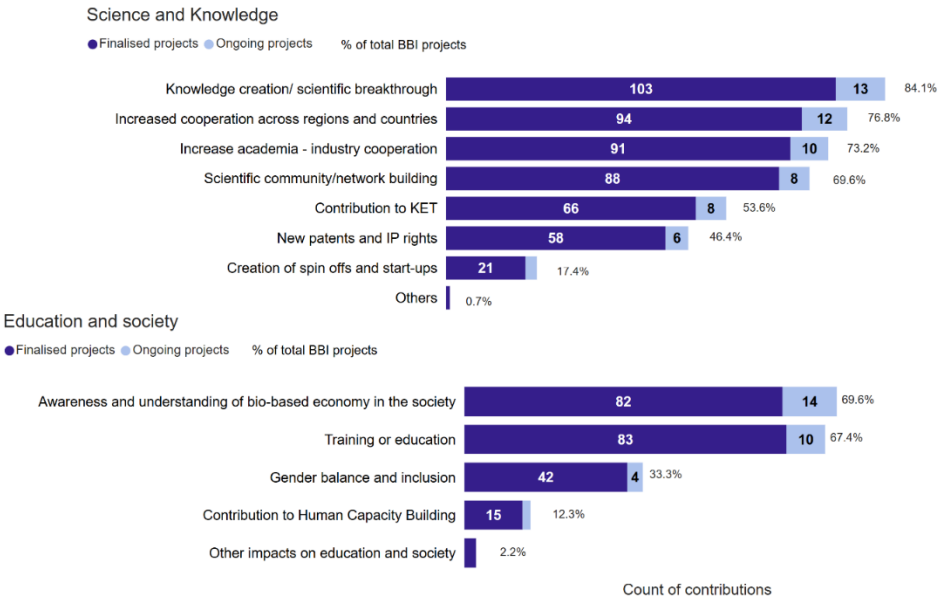


Figure 68 Additional impact from BBI JU projects on contribution to science and knowledge, education and society.

BIObec (completed CSA)	BIObec promoted cross-border learning and cooperation through workshops and guidelines organised under the project, especially in the Mediterranean and Eastern Europe. The project created six Bio-Based Education Centres (BBECs), which act as knowledge hubs bridging the gap between academic institutions, students, innovation entities and policy makers, and responding to the needs of industry and the surrounding ecosystem at local, regional and national levels.
OLEAF4VALUE (finalised RIA)	OLEAF4VALUE has led to new scientific and technological advances, resulting in new patents and contributing to the advancement of knowledge and economic growth in the biorefinery sector in Spain. In addition, by fostering cooperation between regions and countries, it has facilitated the exchange of knowledge and experience and promoted a culture of collaborative learning.

Table 33 Example of impacts on science, knowledge, education and society.

1.8. DISSEMINATION AND INFORMATION ABOUT PROJECT RESULTS

According to data provided by the project beneficiaries through the "continuous reporting" IT module of the EU Funding & Tenders portal, a total of 72 new publications were reported in 2024.

Between 2015 and 2024, the BBI JU projects obtained or registered 44 patents, one registered design and two trademarks. For CBE JU projects, the earliest deadline for submission of the first reports (containing the first reliable data on dissemination and communication) for the 2022 call projects was 31 December 2024. Therefore, next year's AAR will be the first to include information about the dissemination and communication activities implemented under CBE JU projects.

The two tables below set out a summary of the dissemination and communication activities implemented under BBI JU projects (calls organised between 2014 and 2020) and their cumulative increase over the last five years (since 2020). A detailed overview of the publications and the different forms of intellectual property described in the reports is set out in Annexes 5.3 and 5.4.

Types of dissemination & communication activities	2020	2021	2022	2023	2024
Organisation of a conference	120	200	234	292	328
Organisation of a workshop	196	311	415	550	573
Press releases	407	635	686	790	797
Non-scientific, non-peer-reviewed publications	1 314	2 225	2 351	2 946	2985
Exhibitions	258	306	361	419	432
Flyers	24 762	37 816	40 178	44 316	44 264
Training	171	276	336	419	492
Social media	15 187	23 172	27 872	34 597	35 654
Website	31 984	55 035	102 143	218 699	218 726
Communication campaigns (e.g. radio or TV)	181	296	360	557	552
Attending a conference	1 653	2 146	2 562	3 011	3 157
Attending a workshop	424	619	715	921	953
Taking part in events other than conferences or workshops	487	674	776	968	978
Video films	244	444	590	791	801
Pitch events	108	150	165	230	236
Trade fairs	189	254	271	340	365
Taking part in activities organised jointly with other Horizon 2020 projects	189	254	305	362	419
Other	554	59 782	1 979	4 057	4 680

Table 34 Number of examples of dissemination and communication activities reported by all CBE JU projects via the Funding & Tenders Portal (2020-2024; total/cumulative amounts). These figures are based solely on raw data reported by projects and outliers with later corrections, resulting from e.g. misinterpretations on how to fill in certain fields, were kept in the table.

	2020	2021	2022	2023	2024
Scientific community (higher education, research)	3 185 837	19 985 654	20 779 521	27 878435	28 234 487
Industry	4 273 681	6 059571	4 936 636	17 431024	17797 669
Civil society	10 015 569	38 598 871	34 102 215	34 220 046	34 329 584
General Public	5 220 177	225 888 130	193 009 146	216 132 249	217 069 338
Policymakers	557 980	309 671	289 518	388 381	406 661
Media	2 037 192	2 388 378	1 997 842	2 142 036	2 152 296
Investors	371 216	107 710	107 693	185 781	198 142
Customers	787 993	528 179	564 753	656 218	643 730

Table 35 Estimated number of people reached, reported by all CBE JU projects via the Funding & Tenders Portal (2020-2024; total/cumulative amounts). These figures are based solely on raw data reported by projects and outliers with later corrections, resulting from e.g. misinterpretations on how to fill in certain fields, were kept in the table.

2. SUPPORT TO OPERATIONS

2.1 COMMUNICATION ACTIVITIES

CBE JU's communication focused on three priorities:

1. Promoting the funding opportunities available from the CBE JU.
2. Showcasing CBE JU's achievements.
3. Highlighting the impacts of CBE JU projects.

The promotion of the funding opportunities available from the CBE JU supports the core business of the organisation. Raising awareness of the 2024 call for proposals, publicising the results of the previous call and announcing the 2025 call were at the heart of this first priority. Communication targeting applicants from countries that are less represented in the programme supported CBE JU's efforts to increase their participation (please see section 2.1.1 for more details).

CBE JU's Programme Office engaged with existing and new audiences through digital campaigns, events and publications to support the second and third priorities. In particular, campaigns promoting bio-based products to consumers and showcasing the people driving the CBE JU-funded projects helped raise awareness of the contribution of the bio-based economy to sustainable growth in Europe. The CBE JU also increased its participation in key bioeconomy events and fairs to promote the industrial uptake of bio-based solutions developed through its projects. The partnership supported several of these projects in promoting major milestones, such as the opening of the biorefineries SWEETWOODS (Imavere, Estonia), CIRCULAR BIOCARBON (Zaragoza, Spain) and PEFerence (Delfzijl, the Netherlands). In November, the CBE JU celebrated its third anniversary with a campaign highlighting the achievements of the partnership over this period.

2.1.1. Promoting CBE JU funding opportunities

The **CBE JU 2024 Info Day** on 23 April in Brussels attracted 460 face-to-face participants and more than 1 500 online participants, an increase of almost 50 % compared to 2023. 23 % of the face-to-face attendees were from less represented countries, which were targeted by the CBE JU promotion campaign earlier in the year and supported by WIDERA.NET travel grants.

65 % of registered participants were newcomers to the CBE JU/BBI JU info days, demonstrating for the second year running a wide reach and interest beyond the established partnership community.

1 300 networking meetings (almost 200 % increase compared to 2023) were held on-site, with many more planned online. Nearly 1 500 potential applicants were actively engaged on the CBE JU networking platform, demonstrating its effectiveness for the community.

Info day statistics /year	2024	2023	Change
Number of on-site participants	460	310	+48 %
Number of online participants	1 515	1 023	+48 %
Percentage of first-time participants to CBE JU info days	65 %	65 %	same
Number of onsite networking meetings	1 300	460	+182 %
Number of online networking meetings	1 500	680	+120 %

Table 36 Comparison of main CBE JU Info Day statistics 2024-2023.

78 % of participants responded to the event satisfaction survey, rating the event highly in terms of usefulness and indicating a wide dissemination potential.

Response /year	2024	2023
% received answers to their questions about the CBE JU call	90 %	100 %
% will share the information received with other people	98 %	92 %

Figure 69 Comparison of CBE JU Info Day participant survey responses 2024-2023.

The CBE JU promoted national information days in 13 countries, in cooperation with local organisers, with the aim of attracting new applicants.

The CBE JU published a total of nine communications on the launch, submission, results and project details, covering different phases of the **2023, 2024 and 2025 calls**. Three highlights:

- **Details about the CBE JU 2024 call** were prominently featured in an earned media **article by Science Business**.
- **31 new projects** selected in the 2023 call were promoted on CBE JU's digital channels throughout the summer, attracting more than 32 000 views on social media.
- In December, the CBE JU published **2025 Funding Opportunities** as part of its Annual Work Programme and the communication received almost 30 000 views across all channels combined, a 50 % increase compared to 2024.

2.1.2. Promoting the achievements and impacts of CBE JU-funded projects

With a strong portfolio of more than 190 CBE JU-funded projects driving Europe's circular bio-based economy, the CBE JU focused on showcasing their achievements and impacts through video clips, publications, campaigns and events:

- The CBE JU brought a **travelling exhibition of innovative bio-based solutions** stemming from CBE JU-funded projects to four key bioeconomy events: BIOKET, ECOMONDO, the Greener Manufacturing Show and the Global Bioeconomy Summit.
- A **publication dedicated to CBE JU-funded projects**, with a focus on 19 flagship first-of-their-kind biorefineries across Europe accompanied the exhibition.
- The partnership also published and promoted **25 project success stories**:

Year	Stories published	Website views	LinkedIn views	Twitter views
2024	25	5 500	103 000	Not available
2023	20	3 800	71 000	6 400
change	*+25 %*	*+45 %*	*+45 %*	

Table 37 Statistics on the project achievement stories published in 2024.

- The #CBEfaces series of **interviews with project representatives** highlighted the impact of projects and the diversity of careers in the bio-based sector.

- **Two videos** highlighted the milestones achieved during the first three years of the CBE JU operation and promoted the benefits and opportunities of CBE JU-funded bio-based products.

- In 2024, the CBE JU closely followed EU policy developments and showcased the **partnership's contribution to the competitive sustainable growth of the EU**, e.g. in the context of the Commission's communication *Building the future with nature* and the EU Council's Conclusions *A competitive European industry driving our green, digital and resilient industrial future*.

- CBE JU's contribution to the greening of the textile sector was highlighted in the Die Welt's thematic supplement on sustainable fashion, with a potential reach of over one million readers, print and digital versions combined.

- A major milestone in 2024 was the **opening of three CBE JU-funded industrial biorefineries.** The news and articles generated 90 000 views across all channels, with SWEETWOODS being the most viewed. CBE JU-funded biorefineries were featured in the **top two Spanish newspapers** EL PAÍS & EL MUNDO in November.

- The CBE JU ran the #GoForBiobased campaign to raise awareness among European customers of **available bio-based solutions**, which generated 150 000 views.

- The Joint Undertaking ran **three digital campaigns** promoting the CBE JU's results and achievements, with the one dedicated to biorefineries attracting the most attention. A separate campaign presented the new projects selected in the 2023 call.

- The CBE JU showcased its achievements and impact at **key bioeconomy events,** such as the Bioeconomy Changemakers Festival, BIOKET, EUBCE, World Bio Markets, IFIB, Global Bioeconomy Summit, Ecomondo and Sustainable Industry Week. In total, the CBE JU participated in 43 events, delivering presentations at 34.

- As part of the CBE JU's support for the EU Contest for Young Scientists (EUCYS), we organised a visit of the Bioeconomy prize winner to Brussels, where they met and discussed their research project with policymakers from EU institutions (European Parliament, European Commission, CBE JU) and representatives of the Member States.

- CBE JU published a **leaflet for primary producers**. The new publication raises awareness of the benefits of participating in CBE JU-funded projects and gives detailed examples.

- Pages of completed flagship projects were **updated on the CBE JU website**, including their achievements and impacts.

- The CBE JU provided important administrative and governance updates: Nicoló Giacomuzzi-Moore was appointed Executive Director and the CBE JU to establish a working group on primary producers.

Overview of digital campaigns in 2024

Campaign	LinkedIn: views per message	LinkedIn: engagement per message	Twitter: views per message	Newsletter: total opens	Website: article views
CBESF23 wrap-up	2 900	100	1 600	4 700	330
2023 call selected projects	6 200	190	2 200	4 800	1 840
New Executive Director	2 800	240	1 200	4 800	180
#CBEbiorefineries	4 200	2 150	500	3 800	990
Biotech & biomanufacturing initiative	2 700	160	300	4 200	680
#CBEInfoDay	8 200	240	400	n.a.	n.a.
2024 call	6 900	60	4 300	n.a.	5 860
New 2023 call projects (announcement)	6 900	430	3 400	6 100	3 180
SWEETWOODS inauguration	8 900	690	300	n.a.	480
#EUElections2024	1300	70	300	n.a.	n.a.
AAR 2023	3 700	1 050	1 800	6 500	890
World Bioproducts Day	8 000	3 970	200	n.a.	n.a.
#CBEfaces	1 800	140	200	n.a.	n.a.
New 2023 call projects (one by one)	1 900	100	n.a.	n.a.	n.a.
Evaluation report on CBE JU	3 500	750	600	n.a.	230
2024 call submission	7 600	2 560	800	6000	2 850
CIRCULAR BIOCARBON inauguration	4 900	720	100	3700	300
PEFerence inauguration	5 700	490	200	n.a.	300
#GoForBiobased	13 300	310	400	n.a.	1 760
CBE JU's 3rd anniversary	1 800	230	900	4400	220
2025 call announcement	12 700	3 280	800	11 500	2 810
Season's greetings	1 500	150	200	n.a.	n.a.
#CBEtop2024	2 600	570	200	n.a.	n.a.
2024 campaign average	5 200	800	950	5 500	1 400
2023 campaign average	4 700	420	2 700	5 400	n.a.
Change	*+11 %*	*+90 %*	*-65 %*	*+2 %*	*n.a.*

Table 38 Digital campaigns in 2024: statistics.

#CBEresearch: this is the hashtag that the CBE JU uses on social media to share scientific articles stemming from CBE JU-funded projects. Many of these articles are also featured in CBE JU's newsletter.

Year	Messages	LinkedIn views	Twitter views
2024	34	65 000	8 600
2023	29	66 000	8 500
change	+17 %	-1 %	+1 %

Table 39 #CBEresearch statistics.

2.1.3. Boosting communication channels and tools

Website

In 2024, the CBE JU improved its website by:

- Increasing the efficiency and accuracy of importing project data from the CORDIS database;
- Featuring photo galleries on project pages;
- including events on the homepage and improving the layout of event pages;
- Opening the publications section;
- Enhancing contact form security.

	Visits	Page views	Actions per visit	Average session (in mins)	Bounce rate	New users	Downloaded documents
2024	189 000	368 000	2.40	02:25	69 %	58 %	27 000
2023	124 900	261 800	2.57	02:37	64 %	56 %	19 188
change	*+51 %*	*+41 %*	*-7 %*	*-8 %*	*+7 %*	*+3 %*	*+41 %*

Table 40 Website statistics in 2024.

Traffic to the CBE JU website increased substantially in 2024, reaching 189 000 visits and 368 000 page views, an increase of 51 % and 41 % respectively compared to 2023. Visits from widening participation countries increased at a higher rate (+59 %) compared to those from non-widening participation countries. While engagement metrics such as average session duration and actions per visit decreased slightly, the significant increase in document downloads to 27 000 (+41 % compared to 2023) indicates greater interest in programme documentation and resources.

April and May 2024 were the peak traffic months, with more than 24 000 visits each, coinciding with the CBE JU Info Day 2024, the launch of the 2024 call and the launch of the new projects from the 2023 call. The steady increase in new users by 58 % indicates that the programme is successfully capturing the interest of an increasingly diverse audience.

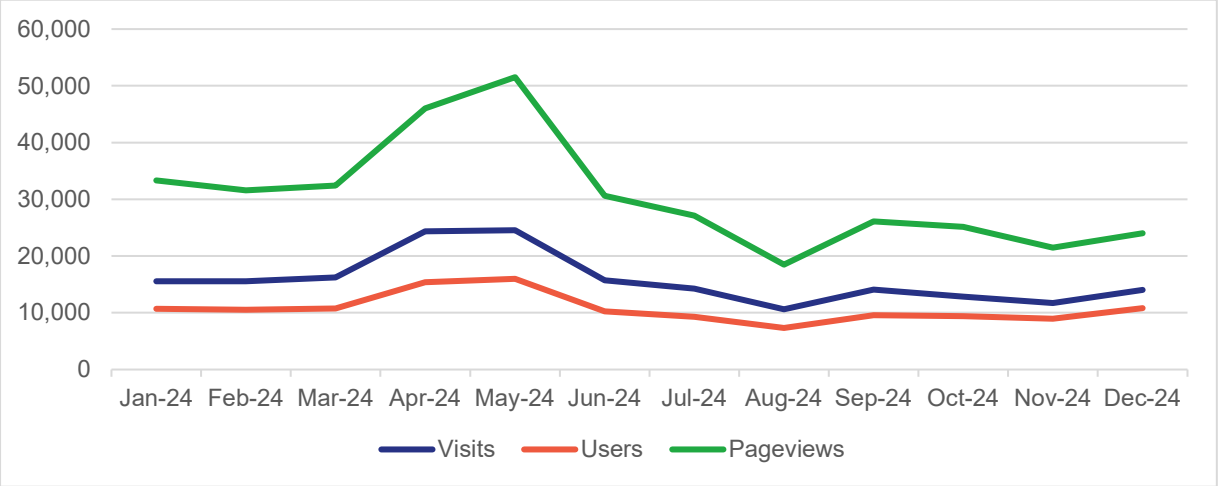


Figure 70 Website statistics in 2024.

80 % of the visitors to the CBE JU website came from Europe. Belgium (11 %), Spain (11 %), the United States (9 %), Italy (8 %), Germany (6 %), France (5 %), the United Kingdom (4 %), the Netherlands (4 %), Greece (3 %) and Portugal (3 %) were the top 10 sources of visits. 18 countries were the source of more than 1 000 visits, a sharp increase from 11 countries in 2023.

The most visited pages of the CBE JU website were:

- Open call for proposals with 49 000 views;
- Vacancies with 18 000 views;
- Projects with 14 000 views;
- CBE JU Info Day 2024 with 14 000 views;
- News article on the 2024 call topics with 12 000 views.

Social media

LinkedIn

In 2023, the CBE JU continued to grow its presence on this professional channel, where its following increased by 32 % to reach 22 000 followers.

	Views	Profile visits	Followers	Clicks	Reactions	Comments	Reposts	Engagement rate
2024	1 116 116	20 747	22 068	75 966	15 584	314	386	8.99 %
2023	767 901	16 252	16 758	46 762	13 111	315	1 084	7.6 %
change	*+45 %*	*+28 %*	*+32 %*	*+63 %*	*+19 %*	*-0.3 %*	*-64 %*	*+17 %*

Table 41 LinkedIn statistics.

The CBE JU's LinkedIn presence showed remarkable growth in 2024, with total views exceeding 1.1 million (+45 % compared to 2023), 300 000 of which from sponsored campaigns. Profile visits (+28 %) and followers (+32 %) also increased significantly. User engagement improved significantly too, with clicks up 63 % to almost 76 000 and reactions up 19 %. While comments remained stable, there was a notable drop in reposts (-64 %) due to the nature of the algorithm, which penalises them. The overall engagement rate improved to 8.99 % (+17 % compared to 2023), indicating a stronger connection with the audience and content relevance.

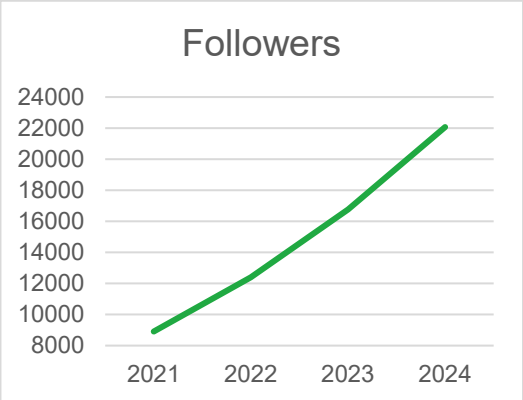


Figure 71 Number of LinkedIn followers.

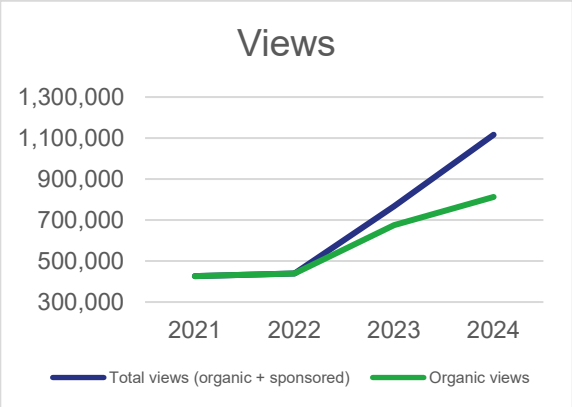


Figure 72 Number of views on LinkedIn.

As in previous years, 5 % of the visits to the CBE JU website came from LinkedIn, making it the main source of traffic after Google and the newsletter. The three most viewed messages were the promotion of the 2024 call (38 000 views), the promotion of the networking platform (31 000 views) and the promotion of the CBE JU Info Day 2024 (24 000 views). Two messages received more than 10 000 views, and 29 received more than 5 000 views.

In 2024, CBE JU also strengthened the presence of the staff on the social network through training and continuous support.

X

Although the number of CBE JU followers on this platform grew by 2.5 %, changes to the platform, combined with technical issues and a sharp drop in users, have made it difficult to use X for corporate communication purposes. Since June 2024, the CBE JU has been unable to access platform's analytics along with other free accounts. The CBE JU's digital communication plan has been adapted accordingly to reflect the partnership's reduced presence on the social media channel.

Facebook

The CBE JU maintained its recently launched Facebook page. The page was instrumental in generating 342 000 views in less represented countries through sponsored campaigns.

	Followers	New followers	Posts	Views	Engagements	Page views
2024	128	101	361	416 273	9 450	2 315

Table 42 CBE JU's presence on Facebook in 2024.

Newsletter

In 2024, the CBE JU distributed 15 newsletters to its community, achieving a 17% increase in subscribers and bringing the total to 6 665. Engagement indicators remained consistently strong, with outreach metrics reflecting significant audience growth.

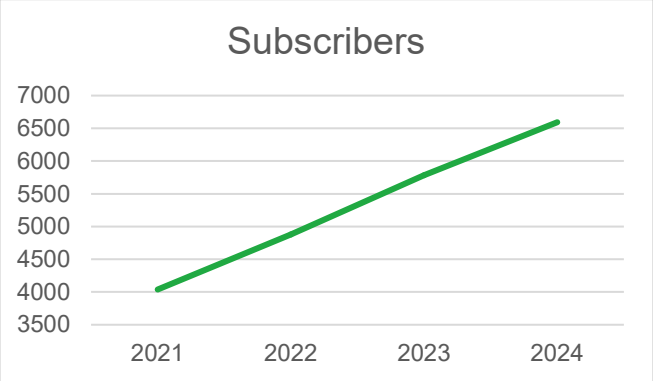


Figure 73 Newsletter subscribers.

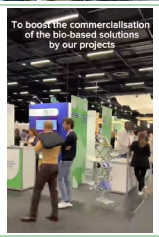
The most successful issue was the 2025 call topics announcement, with a record 11 400 total opens. The second most read issue was the launch of the 2024 call for proposals, with 6 900 total opens. These figures show that recipients shared the information they received from CBE JU within their community.

	Open	Open rate %	Total opens	Clicks	Click rate %
2024 average	2 331	38.8 %	5 153	506	8.7 %
2023 average	1 898	36.5 %	4 729	539	10.3 %
change	*+23 %*	*+6 %*	*+9 %*	*-6 %*	*-16 %*

Table 43 Newsletter statistics.

The newsletter became the second largest source of traffic to the CBE JU website, generating 11 400 visits (+106 % compared to 2023).

Videos

Thumbnail	Title and views
	CBE JU Stakeholder Forum 2023 session recordings 1 400 views
	CBE JU Stakeholder Forum 2023 after movie 2 000 views
	CBE JU Stakeholder Forum 2024 interviews: Philippe Mangin, Helena Vieira, Peep Pitk, Craig Johnston, Sari Tasa and Maria Da Graça Carvalho 8 000 views
	Nicoló Giacomuzzi-Moore is the new CBE JU's Executive Director 2 100 views
	Empowering women in science: a conversation with SCALE project coordinator Julie Person 940 views
	Unlock the future of the circular bioeconomy in Europe (updated) 300 views
	#CBEfaces interview series 3 700 views
	CBE JU: what we achieved in the bio-based sector (updated) 150 views
	CBE JU at the Greener Manufacturing Conference & Expo 1 700 views

	How can we produce and consume more sustainably in Europe? 3 100 views
	CBE JU celebrates three years of driving green growth 1 400 views
	Warm wishes for a sustainable 2025 930 views

Table 44 Videos produced in 2024.

2.2 LEGAL AND FINANCIAL FRAMEWORK

In 2024, the CBE JU continued to manage projects under Council Regulation (EU) 2021/2085 establishing the Joint Undertakings under Horizon Europe), while continuing to manage projects funded by its predecessor, the BBI JU, under the Horizon 2020 programme in compliance with Council Regulation (EU) 560/2014 establishing the Bio-based Industries Joint Undertaking. There were no changes to the legal and financial framework during this period.

2.3 BUDGETARY AND FINANCIAL MANAGEMENT

2.3.1. Overview

2024 was the third year in which there was a combined budget for both the CBE JU (Horizon Europe) and the BBI JU (Horizon 2020) legacy. On the administrative side, 2024 was the last year for BBI JU legacy budget execution, while final payments to the last ongoing BBI JU projects expected to continue be made until (at least) the end of 2027. The Governing Board adopted the 2024 budget on 14 December 2023 and its total amount was kEUR 221 898 in commitment appropriations (CA) and kEUR 190 228 in payment appropriations (PA), including unused re-activated (C2) appropriations from the previous year. The budget was amended twice: in February 2024 to reactivate administrative appropriations in order to ensure maximum execution of the BBI JU budget, and in October 2024 to transfer commitment appropriations from Title 2 to Title 1 to cover additional needs.

The total amended budget (including previous year's reactivations) then amounted to CA kEUR 222 538 and PA kEUR 191 275. The total amended C1 (new budget), excluding the previous year's reactivations, was kEUR 151 028 in CA and kEUR 160 910 in PA. Large amounts of appropriations from previous years were reactivated as follows:

- Administrative
  BBI JU : CA kEUR 1 448; PA kEUR 2 465
  CBE JU : CA kEUR 1 379; PA kEUR 782
- Operational
  BBI JU : CA kEUR 23 147; PA kEUR 26 590
  CBE JU : PA kEUR 45 536; PA kEUR 529

The operational CA of the BBI JU have been reactivated from Horizon 2020 to Horizon Europe in accordance with the Council Regulation establishing the Joint Undertakings under Horizon Europe. They are considered part of the global envelope and not an addition to it.

The re-activated appropriations have been prioritised as far as possible in accordance with Article 6(5) of the CBE's Financial Regulation, reaching 95 % consumption on the administrative CA side, 91 % on the administrative PA side, 99 % on the operational CA side and 72 % on the operational PA side by the end of the year.

At the end of 2024, the BBI JU had a total remaining surplus of unused appropriations of:

- kEUR 311 in administrative CA (including C8 decommitted RAL) and kEUR 275 in administrative PA;
- kEUR 399 in operational CA and kEUR 7 509 in operational PA.

A decision on how best to deal with the remaining BBI JU administrative appropriations will be taken in early 2025.

The CBE JU showed a much stronger budget execution than in the previous years, especially on the administrative side, where the BBI JU legacy budget was running out.

The total C1 administrative budget for CBE JU in CA and PA was kEUR 3 502. Of this amount, kEUR 2 704 or 77 % was executed in CA, and kEUR 2 847 or 81 % in PA.

On the operational side, the operational CA available for the CBE JU 2024 call, including kEUR 68 683 from prior year reactivations, totalled kEUR 214 680 (this excludes kEUR 1 529 in the operational budget for call's expert evaluators). The call was launched for EUR 213 million and as the amount committed to the call following the evaluations was kEUR 206 680, EUR 7 million was decommitted for reactivation in the 2025 call in accordance with the CBE JU Financial Rules. However, a further EUR 7.5 million will also be decommitted in 2025 (for reactivation in the 2026 call). This means that the total operational execution of the CA was 93 %.

A Governing Board decision was taken at the end of 2024 to reactivate in the 2025 budget of CBE JU:

- Administrative:
  CA: kEUR 2 071 from 2023 and 2024
  PA: kEUR 2 371 from 2022 and 2023

- Operational:
  CA: kEUR 23 638 in CA from 2022 and 2023 (of which kEUR 5 from the BBI JU)
  PA: kEUR 21 495 from 2022, 2023 and 2024 (of which kEUR 13 948 from the BBI JU and kEUR 7 547 from the CBE JU).

2.3.2. Administrative expenditure

In 2024, the total administrative budget execution was 85 % for CA and 86 % for PA, a significant improvement compared to 2023. For the BBI JU, in the last year of budget execution, the rates were 99 % for CA and 89 % for PA.

Title 1:

For CA, overall execution for staff-related costs was 95 % (for the BBI JU, total T1 execution was 100 %). For the CBE JU, 93 % of its salary only budget of kEUR 2 037 was executed. On the BBI JU side, there was full execution in terms of salary costs (total budget of kEUR 1 005). The rate of execution for all Title 1 chapters was more than 90 % except for teambuilding expenses (kEUR 11, 71 %) and miscellaneous recruitment costs for the CBE JU (kEUR 13, 31 %).
The overall PA rate of execution for Title 1 is 94 %, of which 96 % for the BBI JU and 93 % for the CBE JU.

Title 2:

In 2024, the rate of execution of the infrastructure budget in terms of CA was 72 %. For the BBI JU (budget kEUR 1 440), the total was 99 %, and the rate of execution for all Title 2 chapters was more than 80 %, with the exception of:

- CBE rentals (kEUR 778, 21 %). This account was used to consolidate additional appropriations (kEUR 413) in the re-balancing exercise carried out in Q4 2024 (including a budgetary amendment) in order to facilitate the execution of a very tight budget, and not all credits carried over were eventually needed
- CBE IT equipment purchases (kEUR 551, 75 %)

- CBE formal meetings (kEUR 49, 69 %)
- CBE studies and consultancy (kEUR 51, 75 %).

The overall rate of execution of PA for Title 2 chapters is 78 %. For the BBI JU, this figure is 83 %. For the BBI JU, the rate of execution for all chapters was 100 %, except for rental costs (total kEUR 397, 43 % execution). For the CBE JU, the rate of execution for all T2 chapters was around 80 %, with the exception of the following (taking the more significant amounts):

- Purchase of IT equipment (kEUR 557, 76 %)
- Communication materials (kEUR 110, 27 %)
- Audit costs (kEUR 51, 3 %)
- External staff (kEUR 283, 79 %)
- Expert reviewers (kEUR 150, 53 %).

For these chapters, invoices are expected to be received early in 2025.

2.3.3. Operational expenditure

CA The CBE JU 2024 call was launched in April 2024 for a total amount of EUR 213 million, of which accepted proposals amounted to kEUR 197 509. The GAP has been launched and is expected to be completed by the end of May 2025.

In May 2024, the GAP of the two CBE JU 2023 calls (with a total budget of EUR 216.5 million) was completed and the 30 pre-financing payments related to these calls were made between March and November.

PA

BBI JU. For the ongoing BBI projects, the Programme Office achieved an overall rate of execution of 72 %, with payments of 36 interim and final periodic reports for grants from the previous BBI JU calls (total kEUR 19 479 out of the total Title 3 BBI JU projects budget of kEUR 26 988). This lower than expected execution was the result of a small number of payments expected towards the end of the year being delayed until 2025, as well as the announced termination of one of the older flagship projects, for which a large payment was forecast in 2024, which there will instead be recovered in 2025. The remaining BBI JU project payments are expected to continue until at least 2027.

CBE JU The pre-financing payments for the CBE JU call 2023 (totalling kEUR 132 149) reached 84 %. No interim payments are due for the first CBE JU calls until 2025.

2.3.4. KPI performance

Overall, the financial KPIs showed a strong performance in 2024: the 36 validated interim and final cost claims were paid on time. The average Time To Pay (TTP) was 64 days for interim payments and 60 days for final payments. The overall average TTP was 61 days.

Concerning the Time to Pay for administrative payments, out of a total of 654 payments, a delay occurred in making 63 payments (9.6 %). The average TTP was 19 days, late payments included.

A weekly monitoring system was set up during the last quarter of 2024 to ensure that administrative payments are handled in a timely manner.

Statement of revenue

Statement of revenue	Voted budget 2024		Amended budget 2024	
Heading	Commitment appropriations (EUR)	Payment appropriations (EUR)	Commitment appropriations (EUR)	Payment appropriations (in EUR)
EU contribution excl. EFTA [15]	**144,173,389**	**153,717,118**	**144,173,389**	**153,717,118**
of which Administrative BBI	0	0	0	0
of which Administrative CBE	1,691,126	1,691,126	1,691,126	1,691,126
of which Operational BBI	0	0	0	0
of which Operational CBE	142,482,263	152,025,992	142,482,263	152,025,992
Third countries contribution including EFTA	**5,103,738**	**5,441,586**	**5,103,738**	**5,441,586**
of which Administrative (BBI)	0	0	0	0
of which Administrative (CBE)	59,866	59,866	59,866	59,866
of which Operational (BBI)	0	0	0	0
of which Operational (CBE)	5,043,872	5,381,720	5,043,872	5,381,720
Industry financial contribution	**1,750,991**	**1,750,991**	**1,750,991**	**1,750,991**
of which Administrative (BBI)	0	0	0	0
of which Administrative (CBE)	1,750,991	1,750,991	1,750,991	1,750,991
of which Operational	0	0	0	0
SUB-TOTAL REVENUES	**151,028,118**	**160,909,694**	**151,029,118**	**160,909,694**

[15] The total fresh contributions from members to the CBE JU (Horizon Europe) for 2024, as the remaining administrative and operational appropriations needed for the BBI JU are all from previous year reactivations. 2024 was the last year of execution of the administrative budget of the BBI JU.

Other revenues arising during the year [16]	0	0	**462,273**	**462,273**
Administrative	0	0	63,736	63,736
Operational	0	0	398,537	398,537
Reactivation of unused appropriations from administrative expenditure [17]	**2,186,852**	**2,199,957**	**2,823,379**	**3,246,795**
Of which from 2021 (BBI)	*78,155*	*269,769*	*78,155*	*269,769*
Of which from 2022 (BBI)	*726,860*	*1,148,627*	*726,860*	*1,148,627*
Of which from 2022 (CBE)	*922,832*	*312,452*	*922,832*	*312,452*
Of which from 2022 (CBE)	56,005	69,149	56,005	69,149
Of which from 2023 (BBI)	0	0	639,527	1,046,798
Of which from 2023 (CBE)	400,000	400,000	400,000	400,000
Reactivations of unused appropriations from operational expenditure	**68,683,112**	**27,118,677**	**68,683,112**	**27,118,677**
Of which from 2021 (BBI)	18,679,114	18,589,502	18,679,114	18,589,502
Of which from 2022 (BBI)	3,703,998	8,000,000	3,703,998	8,000,000
Of which from 2022 (CBE)	43,700,000	529,175	43,700,000	529,175
Of which from 2023 (BBI)	763,799	0	763,799	0
Of which from 2023 (CBE)	0	30,000,000	0	30,000,000
Of which from 2022 (voted) (CBE)	1,863,201	0	1,863,201	0
SUB-TOTAL reactivations	**70,869,964**	**29,318,674**	**71,376,853**	**30,184,408**
TOTAL	**221,898,082**	**190,228,368**	**222,999,882**	**191,737,441**

Table 45 Statement of revenue.

[16] These are ad hoc recoveries arising during the budget year, which can be used for the execution of expenditure. On the administrative side they are mainly recharges (to other JUs) relating to contracts for which CBE is the lead JU. On the operational side they are mainly recoveries arising from ex-post audit adjustments on (BBI JU) projects.

[17] The reactivations of unused administrative expenditure are shown in italics where they are included in the expenditure lines at chapter level. Figures not in italics are additional reactivations that can be executed if necessary.

Statement of expenditure

The expenditure budget is complicated by the fact that there is still a split between (1) the BBI JU and CBE JU budgets and, as usual, (2) C1 (fresh budget), C2 (unused budget from previous years) and a small amount of C4 appropriations (ad hoc revenue arising during the year).

The appropriations are prioritised as follows: (i) BBI JU reactivated (C2) previous years' administrative appropriations for which 2024 was the last year of execution; (ii) BBI JU C2 operational payment appropriations; (iii) CBE JU previous years' reactivated appropriations; and (iv) C1 fresh CBE JU budget. C4 credits should also be executed within the same year if possible (but any unused amounts can be reactivated in up to 3 future years, as with other types of funds.

For the administrative budget, the first column displays the actual needs voted by budget chapter (voted amended budget), while the reactivated appropriations (C2) are shown separately. The second column reflects the fact that the uploaded budget, at chapter level, is composed of: (i) a mix of C1 and C2 reactivations for the CBE JU; and (ii) the remaining C2 reactivations for the BBI JU. The third column shows the execution of the total available budget (C1, C2, C4) at chapter level. The breakdown of execution between the BBI JU and the CBE JU is shown in the additional tables under the statement of expenditure.

2.3.5. Commitment appropriations

Title/ Chapter	Statement of Expenditure (Commitment Appropriations)	Amended Budget 2024 CA (voted)	Amended Budget CA 2024 after transfers	Executed Budget 2024 CA [18]	%	Carry over to 2025	Available for future use (N+3 rule) [19]
1	**STAFF EXPENDITURE**	**3,402,938**	**3,470,609**	**3,311,902**	**95%**	**162,461**	**158,706**
11	Staff in active employment	2,993,038	3,065,984	2,920,011	95%	11,511	145,973
12	Staff recruitment / Miscellaneous expenditure	75,000	12,992	3,977	31%	3,000	9,015
13	Mission and duty travels	60,000	117,797	117,797	100%	55,391	0
14	Other staff costs (socio-medical structure)	264,900	262,901	262,346	100%	91,679	0.554
15	Entertainment and representation expenses	10,000	10,935	7,771	71%	0.880	3,164
2	**OTHER ADMINISTRATIVE EXPENDITURE**	**1,962,530**	**2,921,489**	**2,095,248**	**72%**	**653,120**	**826,242**
20	Rental of buildings and associated costs	365,000	948,175 [20]	333,754	35%	0.518	614,421
21	Administrative information technology)	449,983	840,706	666,975	79%	341,824	173,732
22	Movable property and associated costs	5,000	0	0	0%	0	0
23	Current administrative expenditure	35,000	13,418	11,418	32%	0	2,000
24	Telecommunications and postal charges	26,000	9,420	9,420	100%	0	0
25	Expenditure on formal meetings	49,800	48,731	33,715	69%	0.751	15,016

[18] Includes the execution of C2 reactivated and C4 assigned, at chapter level

[19] As, in Q4 2024, the revised forecasts for the 2025 administrative budget showed a need for additional appropriations, exceeding the total in the LFS, an amount of estimated unused CA totalling EUR 850 000 was already included for reactivation in the voted 2025 budget, and is expected to be fully executed.

[20] In the first budgetary amendment, EUR 413 000 of reactivated CA for CBE JU, was transferred to this line, for subsequent re-allocation/execution within Title 2, according to needs during the year. Please refer to footnote 15 regarding the non-executed amount.

26	External communication, information, publicity	423,500	482,263	473,915	98%	80,003	8,348
27	Service contracts	408,247	378,776	366,051	97%	103,409	12,725
28	Experts' contracts and evaluations	0	0	0	0	0	0
29	Expert reviewers	200,000	200,000	200,000	100%	119,780	0
	REACTIVATIONS OF PRIOR YEAR UNUSED ADMINISTRATIVE BUDGET [21]	**2,826,379**	0	0	0	0	0
	of which from 2021 (BBI)	*78,155*	0	0	0	0	0
	of which from 2022 (BBI)	*729,860*	0	0	0	0	0
	of which from 2022 (CBE)	*922,832*	0	0	0	0	0
	of which from 2022 (CBE)	56,005	0	0	0	0	0
	of which from 2023 (BBI)	639,527	0	0	0	0	0
	of which from 2023 (CBE)	400,000	0	0	0	0	0
	OTHER REVENUE (BBI)	0	**0**	0	0	0	0
3	OPERATIONAL EXPENDITURE	**147,526,135**	**216,607,784**	**208,398,637**	**98%**	**206,882,072** [22]	**8,209,417**
30	Previous years' calls	0	0	0	0	0	0
31	Current year call BBI	0	0	0	96%	0	0
31	Current year's call (s) CBE	146,526,135	215,078,609	207,680,072	97%[23]	0	7,398,537
32	Evaluators' contract CBE	1,000,000	1,529,175	718,565	47%	0	810,610

[21] The unused administrative appropriations from the previous year were reactivated at chapter level and reached a total 95 % of CA execution.

[22] Commitments carried forward from the previous year – EUR 304 099 003. Total commitments carried forward – EUR 356 713 233.

[23] The real execution after the 2025 GAP is EUR 197.539 thousand (a decommitment of EUR 7.5 million will be made in 2025 for reactivation in Call 2026). The execution rate is therefore 92%.

	REACTIVATIONS OF PRIOR YEAR UNUSED OPERATIONAL BUDGET [24]	**68,683,112**	**0**	0	0	0	0
	of which from 2021 (BBI)	18,679,114	0	0	0	0	0
	of which from 2022 (BBI)	3,703,998	0	0	0	0	0
	of which from 2022 (CBE)	43,700,000	0	0	0	0	0
	of which from 2023 (BBI)	763,799	0	0	0	0	0
	of which from 2023 (CBE)	1,836,201	0	0	0	0	0
	SUB-TOTAL REACTIVATIONS	**71,509,491**	**0**	0	0	0	0
	Other revenues arising during the year (included at chapter level) [25]	**0**	***462,273***	**0**	**0**	0	0
	Administrative	**0**	*63,736*	0	0	0	0
	Operational	0	*398,537*	0	0	0	0
	TOTAL EXPENDITURE	**222,537,609**	**222,999,882**	**213,805,787**	**96%**	**207,672,800 [26]**	**9,194,096**

Table 46 Commitment appropriations.

[24] The prior year unused CA reactivated in Title 3 and committed for the 2024 call for proposals, reaching a rate of execution of 99 %.

[25] These are ad hoc recoveries arising during the budget year, which can be used for the execution of expenditure. On the administrative side they are mainly recharges (to other JUs) relating to contracts for which CBE is the lead JU. On the operational side, these are mainly recoveries resulting from ex-post audit adjustments on (BBI JU) projects. They were fully utilised at chapter level during the year.

[26] Commitments carried forward from previous year – EUR 149 856 014. Total commitments carried forward – EUR 357 528 814.

2.3.6. Payment appropriations

Title/Chapter	Statement of Expenditure (Payment Appropriations)	Amended budget 2024 PA (voted)	Amended budget 2024 PA (after transfers)	Executed budget (PA) [27]	%	Available for future use (N+3 rule)
1	**STAFF EXPENDITURE**	**3,920,300** [28]	**3,401,021**	**3,185,466**	**94%**	**215,555**
11	**Staff in active employment**	3,510,400	2,993,519	2,911,811	97%	81,708
12	**Staff recruitment / Miscellaneous expenditure**	75,000	32,992	0.997	3%	32,015
13	**Mission and duty travels**	60,000	80,072	64,650	81%	15,422
14	**Other staff costs (socio-medical structure)**	264,900	284,095	200,227	70%	83,868
15	**Entertainment and representation expenses**	10,000	10,343	7,800	75%	2,543
2	**OTHER ADMNISTRATIVE EXPENDITURE**	**1,493,380**	**3,411,494**	**2,648,554**	**78%**	**762,940**
20	**Rental of buildings and associated costs**	365,000	560,348	333,236	59%	227,112
21	**Administrative information technology)**	449,983	928,918	777,258	84%	151,660
22	**Movable property and associated costs**	5,000	0	0	0	0
23	**Current administrative expenditure**	35,000	40,336	13,724	34%	26,611

[27] Includes the execution of C2 reactivated and C4 assigned, at chapter level.

[28] Includes a transfer of kEUR 650 from Title 2 (kEUR 469) and the BBI JU reactivated administrative appropriations (kEUR 181), (voted in the second budgetary amendment in Q4, to ensure payment of the last two months' salaries following very tight execution.

24	**Telecommunications and postal charges**	26,000	20,345	2,969	15%	17,376
25	**Expenditure on formal meetings**	49,800	39,800	32,964	83%	6,836
26	**External communication, information, publicity**	423,500	1,109,306	1,009,260	91%	100,046
27	**Service contracts**	408,247	495,576	332,057	67%	163,519
28	**Experts' contracts and evaluations**	0	0	0	0	0
29	**Expert reviewers**	200,000	216,865	147,085	53%	69,780
	Transfer of PA to T1 (AMD 2) - various lines [29]	-469,150	0	0	0	0
	REACTIVATIONS OF PRIOR YEAR UNUSED ADMINISTRATIVE BUDGET [30]	3,065,945	0	0	0	0
	of which from 2021 (BBI)	*269,769*	*0*	*0*	*0*	*0*
	of which from 2022 (BBI)	*1,148,627*	*0*	*0*	*0*	*0*
	of which from 2022 (CBE)	*312,452*	*0*	*0*	*0*	*0*
	of which from 2022 (CBE)	69,149	0	0	0	0
	of which from 2023 (BBI)	1,046,798	0	0	0	0
	of which from 2023 (CBE)	400,000	1,000,000	0	0	0

[29] The 2nd budget amendment was made in the last quarter of 2024 to transfer administrative PA from several Title 2 lines to Title 1 in order to ensure the payment of salaries until the end of the year as the budget was tight and also to cover an exceptional indexation in December. The transfer is reflected in the T1 budget in column 2.

[30] The unused administrative appropriations from the previous year were reactivated at chapter level and the total rate of execution for PA was 91 %.

	Transfer of PA to T1 (AMD 2) – various lines [31]	-180,000	0	0	0	0
3	**OPERATIONAL EXPENDITURE**	**157,407,712**	**184,924,926**	**152,346,864**	**82%**	**32,578,062**
30	**Previous years' calls CBE**	0	0	0	0	0
30	**Previous years' calls BBI**	0	26,988,039	19,479,004	72%	6,623,834
31	**Current year's call CBE[32]**	156,407,712	156,936,887	132,149,295	84%	25,672,793
31	**Current year call BBI**	**0**	**0**	**0**	**0**	**0**
32	**Evaluators' contract CBE**	1,000,000	1,000,000	718,565	72%	281,435
	REACTIVATIONS OF PRIOR YEAR UNUSED OPERATIONAL BUDGET [33]	**27,118,677**	**0**	0	0	0
	of which from 2021 (BBI)	*18,589,502*	0	0	0	0
	of which from 2022 (BBI)	*8,000,000*	0	0	0	0
	of which from 2022 (CBE)	*529,175*	0	0	0	0
	SUB-TOTAL REACTIVATIONS	**30,184,622**	**0**	0	0	0

[31] The 2nd budget amendment was made in the last quarter of 2024 to transfer administrative PA from several Title 2 lines to Title 1 in order to ensure the payment of salaries until the end of the year as the budget was tight and also to cover an exceptional indexation in December. The transfer is reflected in the T1 budget in column 2.

[32] PA on this line relate to the prefinancing of prior year call 2023.

[33] The unused PA from previous years reactivated under Title 3 had a rate of execution of 72 %. This is due to the fact that all reactivations concerned the legacy BBI JU Horizon 2020, for which certain project payments expected before the end of the year were delayed to 2025, and in the case of two flagships in difficulty, will actually close with recoveries.

	Other revenues arising during the year (included at chapter level) [34]	0	***462,273***	0	0	0
	Administrative	0	*63,736*	0	0	0
	Operational	0	*398,537*	0	0	0
	TOTAL EXPENDITURE	**191,275,166**	**191,737,441**	**158,180,884**	**82%**	**33,556,557**

Table 47 Payment appropriations.

[34] These are ad hoc recoveries arising during the budget year, which can be used for the execution of expenditure. On the administrative side, they are mainly recharges (to other JUs) relating to contracts for which CBE is the lead JU. On the operational side they are mainly recoveries resulting from ex-post audit adjustments on (BBI JU) projects. They were fully utilised at chapter level during the year.

Budget implementation split between BBI JU and CBE JU

Commitment appropriations

	Commitment appropriations kEUR						
Fund source	**C1**	**C2**	**C4**	**Transfers**	**Total**	**Execution**	**%**
Title 1 BBI	0	1,004	1	0	1,005	1,005	100%
Title 1 CBE	1,539	923	4	0	2,465	2,307	94%
Total	**1,539**	**1,927**	**5**	**0**	**3,471**	**3,312**	**95%**
Title 2 BBI	0	443	0	0	443	435	98%
Title 2 CBE	1,963	456	60	0	2,479	1,660	67%
Total	**1,963**	**899**	**60**	**0**	**2,922**	**2,095**	**72%**
T1+T2 BBI	0	1,448	1	0	1,448	1,440	100%
T1+T2 CBE	3,502	1,379	63	0	4,944	3,967	80%
Total	**3,502**	**2,826**	**64**	**0**	**6,392**	**5,407**	**85%**
Title 3 BBI	0	0	399	0	399	0	0%
Title 3 CBE	147,526	68,683	0	0	216,209	208,399	96%
Total	**147,526**	**68,683**	**399**	**0**	**216,608**	**208,399**	**96%**
GRAND TOTALS	**151,028**	**71,509**	**462**	**0**	**223,000**	**213,806**	**96%**
BBI	0	1,448	399	0	1,847	1,440	82%
CBE	151,028	70,062	63	0	221,153	212,366	96%
C1+C2 only (per voted budget)					**222,538**	**213,788**	**96%**

Table 48 Budget implementation split between BBI JU and CBE JU - commitment appropriations.

Payment appropriations

Fund source	Payment appropriations kEUR						
	C1	C2	C4	Transfers	Total	Execution	%
Title 1 BBI	0	1,076	1	0	1,077	1,036	96%
Title 1 CBE	2,009	312	4	0	2,324	2,150	92%
Total	**2,009**	**1,389**	**5**	**0**	**3,401**	**3,185**	**94%**
Title 2 BBI	0	1,401	0	12	1,413	1,179	83%
Title 2 CBE	1,493	457	60	-12	1,998	1,470	74%
Total	**1,493**	1,858	**60**	**0**	**3,412**	**2,649**	**78%**
T1+T2 BBI	0	2,477	1	12	2,490	2,215	89%
T1+T2 CBE	3,502	769	63	-12	4,323	3,619	84%
Total	**3,502**	**3,247**	**64**	**0**	**6,813**	**5,834**	**86%**
Title 3 BBI	0	26,590	399	0	26,988	19,479	72%
Title 3 CBE	157,408	529	0	0	157,937	132,868	84%
Total	**157,408**	**27,119**	**399**	**0**	**184,925**	**152,347**	**82%**
GRAND TOTALS	**160,910**	**30,365**	**462**	**0**	**191,737**	**158,181**	**82%**
BBI	0	29,067	399	0	29,478	43,466	74%
CBE	160,910	1,299	63	0	162,260	136,487	84%
C1+C2 only (per voted budget)					**191,275**	**157,761**	**82%**

Table 49 Budget implementation split between BBI JU and CBE JU - payment appropriations.

2.4 FINANCIAL AND IN-KIND CONTRIBUTION FROM MEMBERS OTHER THAN THE UNION

Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe sets new targets for the financial contributions to be made by the two members of the CBE JU under the new Horizon Europe programme. The members of the Joint Undertaking are the Bio-based Industries Consortium (BIC) and the European Commission, the latter representing the European Union in the partnership.

In this section, the CBE JU reports on the progress of the contributions by the BIC constituent or affiliated entities to the operational expenditure and to the additional activities associated with the CBE initiative under both the Horizon Europe and the Horizon 2020 framework programmes.

2.4.1 Contributions under Horizon Europe

According to Article 50 of Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe, the BIC is expected to ensure that their constituent or affiliated entities (hereafter referred to as BIC members) make a total contribution to the CBE initiative of at least EUR 1 billion, including up to EUR 23.5 million for administrative costs by 2031.

The remaining amount of EUR 976.5 million is to be covered by in-kind contributions from the BIC to operational activities (IKOP) or additional activities (IKAA) that are closely related to the implementation of CBE JU projects. At the end of 2024, no periodic reports on CBE JU grants were received and therefore no certified figures on in-kind contributions from BIC members are available. The first certified figures are expected around 2027.

In-kind contributions to operational activities (IKOP)

In accordance with Article 2(8) of Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe, the IKOP is defined as the difference between eligible project costs incurred by BIC constituent or affiliated entities, international organisations, or contributing partners in implementing the projects and the contribution from the CBE JU to these costs.

The IKOP to be provided by BIC members is estimated at the closure of each CBE JU call for proposals. The conditions for CBE JU calls and the participation of BIC members have a direct impact on the resulting IKOP.

Reference of the Project-Call	Total amount of IKOP planned for the project	Amount of IKOP reported before 2024	Amount of IKOP reported in 2024	Total Amount of IKOP certified until 2024
CBE JU 2022 call	25,466,909			NA
CBE JU 2023 call	63,413,499			NA
TOTAL	**88,880,408**			NA

Table 50 IKOP values in CBE JU grant agreements.

The continuous monitoring and annual reporting of the CBE JU IKOP is based on the most recent data available in the corporate e-Grants management tools at the time of project completion.

IKOP reporting is measured at different points in time:

- **An initial cumulative IKOP estimation** is made at the time of signature of the grants agreements;
- On the basis of updated data made available in e-Grants, the CBE JU calculates each year the **IKOP already incurred by BIC members in projects but not yet certified** (amounts also reported under liabilities in Annex 5.10 to the certified accounts of the CBE JU);
- At the end of the projects or as a result of ex-post audit controls, CBE JU calculates **the cumulative values of IKOP contributions certified by BIC members** (amounts also reported under net assets in Annex 5.10 the certified accounts of the CBE JU).

Based on the above information, the CBE JU calculates the rate of implementation of these types of contributions. By 2024, with two calls for proposals implemented (52 projects launched in the second half of 2024), the following has been reported:

	2022 and 2023 call	Implementation of estimated IKOP
Estimation of IKOP	EUR 88 880 408	
IKOP already incurred, not yet certified	EUR 19 858 738	**22 %**
IKOP certified	EUR 0	**0 %**
2024 estimated result	**EUR 19 858 738**	**22 %**

Table 51 Actual IKOP values.

According to the available data from CBE JU grant agreements and the progression of projects at the end of 2024, the level of IKOP expected by BIC members is in line with the expectations.

In-kind contributions to additional activities (IKAA)

In accordance with Articles 2(10) and 51 of Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe, the IKAA contributions made by BIC members consist of the costs incurred by the latter in implementing additional activities as defined in Article 2(9) of Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe less any contribution to those costs received from the EU.

Additional activities are planned and included in a dedicated annex to the CBE JU work programmes. They contribute to the objectives of the CBE JU and are directly linked to the uptake of results from the project portfolio managed by the CBE JU, including the projects funded under the BBI JU mandate.

These additional activities are directly linked to CBE JU projects and activities, and more specifically:

(a) investment in new facilities demonstrating a new value chain, including investments in durable equipment, tools and supporting infrastructure, in particular related to regional deployment and its sustainability verification;

(b) investment in a new innovative and sustainable production plant or flagship;

(c) investment in new research and innovation and justified infrastructure, including facilities, tools, durable equipment or pilot plants (research centres);

(d) standardisation activities;

(e) communication, dissemination and awareness-raising activities.

The investments directly linked to projects are:

(a) non-eligible investments necessary for the implementation of a CBE JU project during the duration of the project;

(b) investments made in parallel with a CBE JU project, which complement the results of the project and bring it to a higher TRL;

(c) investments necessary for deployment of the results of a CBE JU project following the project completion until the winding-up of the CBE JU. In justified cases, investments in the deployment of the results of projects funded under the previous initiative (BBI JU) may be taken into account.

As the IKAA is directly linked to the project portfolio of the CBE JU, IKAA planning will change as the number of projects changes after each CBE JU call.

In accordance with Article 11(2) of Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe, BIC members are required to provide updated information for IKAA reporting by 31 May each year.

The design and implementation of the planning and reporting system is being integrated into the corporate e-grants suite, which still needs further development. The CBE JU collected preliminary information for the 2023-2031 IKAA plan, as estimated by BIC members at the start of the first projects under Horizon Europe. According to these estimations, the estimated value of IKAA expected in relation to CBE JU grants signed so far is EUR 774.383.570,10 (cumulative for all years and categories). Despite being very promising, this level of IKAA cannot be taken as a reference, given that the largest part of the certification will happen after the projects' finalisation. See Annex 5.9 for more information.

Call	IKAA values in CBE JU grants – evolution (in EUR)	Amount of certified IKAA
2022	76.928.719	NA
2023	31.850.511	NA
TOTAL since 2022	108.759.230,08	NA

Table 52 IKAA values in CBE JU grants – evolution.

Overall industry contribution to the CBE JU initiative

The following table consolidates the actual contribution values for 2024. As previously noted, these values correspond to a small segment of the anticipated portfolio of projects, which only began to be implemented in the second half of 2023.

Consolidated contributions from CBE BIC members in 2024	
Nature	**Amount (in €)**
Financial contributions (FCs)	3 406 214
In-Kind to Operational Activities (IKOP) incurred, not yet certified	19 858 738

In-Kind to Additional Activities (IKAA) incurred, not yet certified	See comment above
TOTAL contributions reported	**23 264 952**

Table 53 Consolidated contributions from CBE BIC members in 2024.

2.4.2 Contributions under Horizon 2020

This section deals with the financial contributions to the BBI JU by members other than the Union or its constituent entities (hereafter referred to as BBI BIC members), in accordance with the requirements laid down in Council Regulation (EU) 560/2014 establishing the Bio-based Industries Joint Undertaking, which has since been replaced by the CBE JU.

According to the above-mentioned Council Regulation, by the end of the 2014-2024 JU mandate, BBI BIC members are required to make the following contributions:

- at least EUR 182.5 million as financial contributions to operational costs,
- in-kind contribution to operational costs to be made by implementing BBI JU projects (BBI IKOP),
- at least EUR 1.755 billion as in-kind contributions to additional activities (IKAA)[35],
- at least EUR 2.73 billion (including financial contributions to administrative costs).

Financial contribution to operational activities

In 2018, in compliance with Article 4(5) of Council Regulation (EU) 560/2014 establishing the Bio-based Industries Joint Undertaking, the European Commission reduced the EU contribution to operational commitments from EUR 975 million to EUR 835 million to compensate for a projected shortfall in contributions to operational costs by BBI BIC member of EUR 179 million. This ended the expectation that the BBI BIC member would fully achieve the target for financial contributions to operational costs.

At the end of 2018, the financial contribution paid by the BIC and/or its constituent entities as direct contributions to the BBI JU operational budget amounted to a total of EUR 3 250 000. This amount is not expected to change by 2024 and in its Annual Report for 2019, the European Court of Auditors (ECA) recommended that *"Where a JU founding regulation requests operational financial contributions from the JU's private members, it is very important that it also provides for an appropriate legal framework that ensures that the required financial contribution amount will be achieved by the end of the programme"*[36].

35 Additional activities are outside the BBI Joint Undertaking's work plan for contributing to the objectives of the BBI Initiative.

36 Annual report on the EU Joint Undertakings for the financial year 2019, page 33

In-kind contribution to operational costs (BBI IKOP)

In accordance with Article 12(3)(c) of Council Regulation (EU) 560/2014 establishing the Bio-based Industries Joint Undertaking, the BBI JU IKOP is the difference between the certified project costs and the accepted EU contribution for the relevant BBI JU BIC.

The above-mentioned Council regulation does not set a specific target for the BBI IKOP. Indicative targets were set in the annual work programmes of the BBI JU. The targets concerned were indicative because the BBI JU had launched calls for proposals that were fully open and none of the successful beneficiaries had an obligation to join the BIC consortium.

The BBI JU IKOP can be categorised at three different levels in terms of the status of the related project costs: (1) expected/committed in signed grant agreements; (2) estimated/reported by BIC members on an annual basis[37]; (3) certified, mostly at the end of projects.

1. Estimated IKOP in signed grant agreements

After the last BBI JU call in 2021, the consolidated value of IKOP committed in signed grant agreements was EUR 263.3 million, representing 32 % of the total EU contribution committed in grants (EUR 822.1 million).

The ratio of BBI JU IKOP committed by BIC members in proportion to the indicative targets set out in the AWPs decreased significantly over the years as the number of non-BIC members applying for grants at BBI JU calls increased. The budgetary cuts mentioned above and further reductions in operational commitment appropriations in the grant agreements had the effect of reducing the BBI JU IKOP to be leveraged by financial contributions that were ultimately not committed in indirect actions.

Calls	Committed values (EUR)			Ratios with committed EU contribution	
	Committed EU contribution	IKOP targets in AWPs	IKOP actually committed in grants	Target IKOP	Committed IKOP
2015	49 653 708	23 785 000	26 627 047	48 %	54 %
2016	178 849 526	105 000 000	56 503 116	59 %	32 %
2017	182 873 089	110 000 000	72 538 001	60 %	40 %
2018	85 161 992	40 000 000	38 526 397	47 %	45 %
2019	102 881 595	45 000 000	36 257 845	44 %	35 %
2020	118 186 833	60 000 000	17 472 382	51 %	15 %
2021	104 460 161	49 000 000	15 369 206	47 %	15 %
Totals	**822 066 903**	**432 785 000**	**263 293 995**	**53 %**	**32 %**

Table 54 IKOP expected/committed in signed grant agreements at the implementation of BBI JU calls.

[37] These estimations are used to calculate the IKOP accruals reported in the annual accounts of the JU (see Annex 5.10)

2. IKOP incurred by BIC members on an annual basis

In addition to the implementation, reporting and closing of BBI JU projects, including any potential amendments, actual IKOP realisation is estimated on an annual basis. Supporting information is gathered in accordance with the accounting methodologies established by the JU, and the accrued values are reported under liabilities in the JU's annual accounts.[38]. The reported values remain estimates as the JU reserves the right to make adjustments to both components of the IKOP calculation until the completion of final project reporting and audit certification.

At the end of 2024, the estimated IKOP incurred on BBI JU projects but not yet certified amounted to EUR 48.3 million.

Certified IKOP (mostly at the end of the projects)

The actual IKOP is calculated by the CBE JU mainly on the basis of Certificates of Financial Statements submitted by the BIC members at the end of BBI JU projects. Additional information may come from the ex-post controls carried out on financial statements by the European Commission[39]. IKOP contributions are calculated on a yearly basis and the cumulative values are reported in JU's annual accounts under its net assets.

At the end of 2024, the total balance of certified IKOP provided by BIC members amounted to EUR 92million.

	BBI IKOP consolidation	
BBI IKOP estimation	€263,293,994	**Implementation**
BBI IKOP already incurred but not certified	€48,355,247[40]	**18%**
BBI IKOP certified	€105,040,767	**40 %**
2024 result	**€153,396,014**	**58 %**

Table 55 Actual values of BBI IKOP and expected leverage. **Of this total, an estimated 13.2 € million has been certified but not yet validated by ED or transferred to the net asset of the provisional accounts*.

In-kind contributions to additional activities (IKAA)

The IKAA represents the in-kind contributions made by BBI BIC members in the implementation of additional activities outside the AWP established under the mandate of the BBI JU, which nevertheless contribute to the objectives of the BBI initiative. BBI BIC members are required to submit additional activities plans (AAP) to the Governing Board of the JU for approval on an annual basis.

The actual realisation of these contributions is certified by independent external auditors in compliance with Article 4(4) of Council Regulations (EU) 560/2014 establishing the Bio-based Industries Joint Undertaking. The chart below sets out an analysis of the change in the cumulative

[38] These estimations are used to calculate the IKOP accruals reported in the annual accounts of the JU, (see Annex 5.10)

[39] Detailed information on ex-post controls on operational expenditure are provided in section 4.1.1

[40] Of this total, an estimated 13.2 € million has been certified but not yet validated by ED or transferred to the net asset of the provisional accounts.

BBI IKAA values expected for the 2015-2024 period (for the achievement of the specific BBI IKAA target by 2024) and of the cumulative BBI IKAA values certified by the end of 2024.

Between 2019 and 2021, as reported in previous AARs, the IKAA planning and certification processes were both negatively impacted by the Covid-19 pandemic. Since 2022, BBI JU BIC members have been able to make additional IKAA contributions. As explained in the section below, this means that they are expected to meet the overall target for BIC members' contributions to the BBI initiative (EUR 2.73 billion).

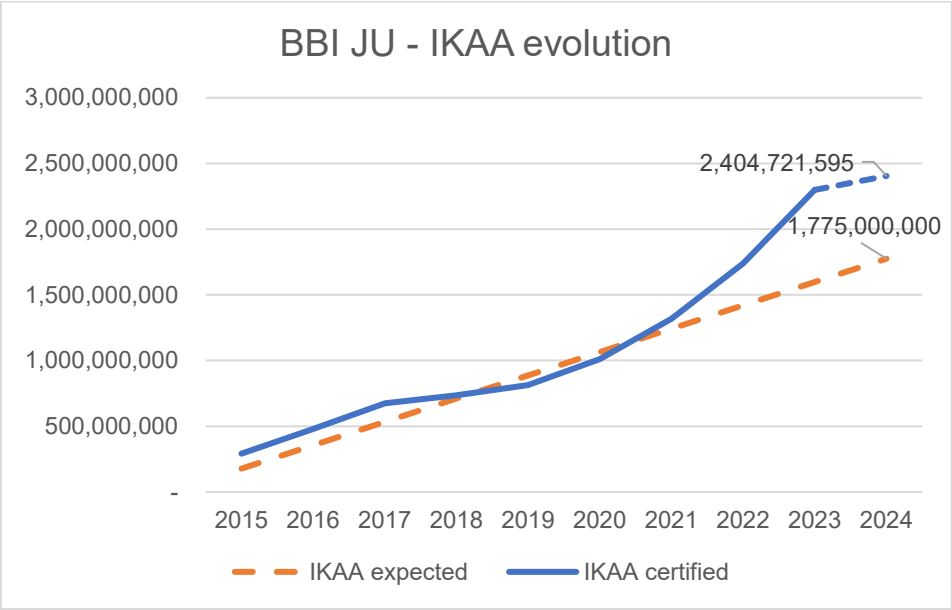


Figure 74 IKAA evolution in the period 2015-2024.

The total additional investment by the end of 2024, taking into account the amount planned for 2024, was EUR 2.4 billion. This already meets the initial IKAA target (EUR 1.7 billion) set for this specific contribution under Council Regulations (EU) 560/2014 establishing the Bio-based Industries Joint Undertaking and reaches 98.4 % of the final expected IKAA value by the end of the BBI initiative.

	BBI IKAA consolidation	
BBI IKAA expected	2,444,510,517 [41]	**Implementation**
BBI IKAA already incurred, not yet certified	106,000,000 [42]	**4.3 %**
BBI IKAA certified	2,298,721,595	**94,1%**
2024 result	**2,404,721,595**	**98,4%**

Table 56 Actual values of BBI IKAA.

Overall industry contribution to the BBI JU initiative

The value of financial contributions to operational costs achieved in 2018 will not change and this contribution to the overall target will be minimal and cumulated with financial contributions made to administrative costs of the BBI JU.

With regard to the total contributions of BBI BIC members at the end of 2023, the BBI IKOP target was set at the closure of the BBI JU calls, and it will contribute to achieving the overall legal target when all BBI JU projects are completed (10 % of which are still ongoing and the last is expected to be completed in 2027).

The specific legal target for BBI IKAA was achieved by 2023. As reported above, the IKAA will also play a pivotal role in reaching the EUR 2.73 billion overall target for BIC contributions to the BBI initiative.

EUR	IKOP	Financial (operational and administrative)	IKAA	Overall legal target
Actual targets	**263,293,995**	**22,741,201**	**2,444,510,517**	**2,730,000,000**
2024 results	169,438,544		2,404,721,595	2,596,901,340
Target ratio	64%	100 %	98,4%	95,1%

Table 57 Actual targets for the types of contributions to be provided by BIC members and 2024 results against the overall target.

Monitoring the leverage effect of the BBI JU initiative

The leverage effect aims to measure the ability of the BBI initiative to attract additional funding from beneficiaries, whether members of the JU or not, and to multiply Horizon 2020 budget resources, including through additional activities.

At the end of the last call for proposals of the BBI JU in 2021, the maximum estimated EU contribution in BBI JU grants until 2024 was EUR 822 066 903.

The leverage calculation takes into account not only the contributions of BBI BIC members, but also those of other beneficiaries of EU funding participating in BBI JU projects. The additional financing to be calculated for the leverage effect corresponds to the in-kind contribution provided by all participants in BBI JU projects (APIK – All Participants In-Kind contributions) and corresponds to the costs incurred by all participants in the implementation of indirect actions less the contribution of the BBI JU and any other Union contribution towards those costs. At the end of BBI JU's last call for proposals in 2021, the estimated APIK was EUR 487 928 957.

In order to measure the leverage effect, the European Commission proposed a calculation formula, which has been applied to all Joint Undertakings since the mid-term evaluation of all JUs operating under Horizon 2020. This formula excludes contributions to the administrative costs of the Joint Undertaking. Excluding contributions to the administrative costs of the BBI JU, the final target leverage effect is EUR 2.85. The formula was formally adopted by the BBI JU Governing Board in

2017[43]. It provides an indication of the total leverage effect of the initiative over a given period. The formula is as follows:

(Total) leverage = Operational leverage + additional leverage:

$$Operational\ leverage = \frac{\sum APIK^{44} + \sum FC^{45}}{\sum EU\ contribution^{46}}$$

$$Additional\ leverage = \frac{\sum IKAA^{47}}{\sum EU\ contribution}$$

As each element of this calculation has its own reporting and certification process with significant differences over time, the result will not reach the appropriate level of reliability until the end of the programme. Despite this consideration, the BBI JU Governing Board discussed and agreed to monitor the leverage effect on an annual basis once the different elements of the calculation reach a consistent level of reliability.

For the period until the end of 2024, the reported operational leverage is unchanged from the 2021 figure. The additional leverage is "expected" because the certification of the BBI IKAA Plan 2024 is still ongoing. The following table shows the cumulative value of contributions to the BBI initiative over the 2015-2024 period.

Year	Cumulative values of contributions to the BBI JU initiative (EUR)					Leverage evolution
	APIK	BIC financial contributions	IKAA certified	Total	EU funding	
2015	33,,107,,991	-	291,482,000	324,589,991	49,653,708	6,54
2016	121,090,840	750,000	478,859,001	600,699,841	228,503,234	2,63
2017	250,427,121	1,250,000	674,844,239	926,521,360	411,376,322	2,25
2018	308,723,689	3,250,000	734,763,805	1,046,737,494	496,538,314	2,11
2019	378,041,578	3,250,000	813,846,895	1,195,138,473	599,419,909	1,99
2020	424,791,217	3,250,000	1,010,760,042	1,438,801,259	717,606,742	2,00
2021	487,928,957	3,250,000	1,318,600,140	1,809,779,097	822,066,903	2,20

[43] BBI JU Governing Board meeting of 28 June 2017.

[44] All Participants In Kind contribution (APIK) is the difference between the total costs and the JU contribution of the grant agreements signed by the cut-off date of the data reported in the AAR.

[45] Total amount of financial ("cash") contributions by BIC, delivered at programme level, and/or by BIC constituent entities that are beneficiaries not receiving funding, delivered at project level and committed by the cut-off date of the data reported in the AAR.

[46] Total amount of EU funding committed in grant agreements signed by the cut-off date of the data reported in the AAR.

[47] Total amount of in-kind contribution to additional activities by BIC and/or its constituent entities implemented by the cut-off date of the data reported in the AAR and duly certified later.

2022	487,928,957	3,250,000	1,739,096,172	2,230,275,130	822,066,903	2,71
2023	487,928,957	3,250,000	2,292,521,595	2,783,700,553	822,066,903	3,39
2024	**487,928,957**	**3,250,000**	**2,404,721,595**	**2,895,900,553**	**822,066,903**	3,52

Table 58 Components of the leverage effect calculation over the first years of the initiative.

The value of the leverage effect of the BBI JU initiative at the end of 2024 is calculated as follows:

$$Operational\ leverage = (487\ 928\ 957 + 3\ 250\ 00048)\ /822\ 066\ 903 = 0.60$$

$$2\ 404\ 721\ 595\ /\ 822\ 066\ 903 = 2.92$$

$$(Total)\ \ expected\ leverage\ by\ end\ 2024 = \ 0.60 + 2.92 = 3.52$$

The expected leverage is therefore already above the 2024 target. The chart below shows the change in the leverage effect over the 2015-2024 period.

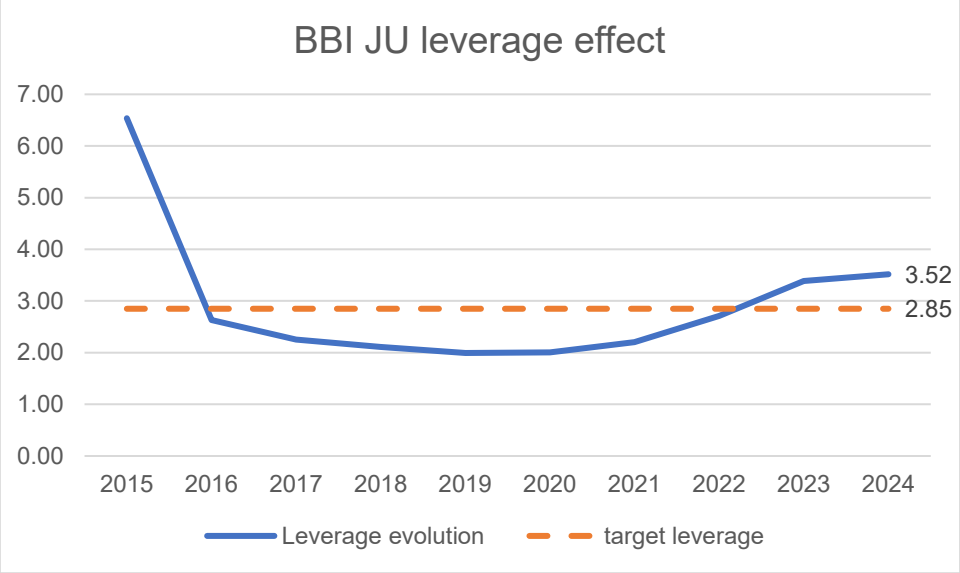


Figure 75 Evolution of the leverage effect 2015-2024.

[48] This amount includes the financial contribution from the member other than the Union and its constituent entities at programme and project level.

2.5 ADMINISTRATIVE PROCUREMENT AND CONTRACTS

The CBE JU has continued to use existing framework contracts with the European Commission as much as possible.

A new framework contract (FWC) was also signed to cover communications support for the duration of the JU.

The CBE JU also signed specific contracts under the framework contract managed jointly with the other JUs operating from the White Atrium, namely common IT services. In addition, the CBE JU made use of the Service Level Agreements (SLAs) in force with the European Commission until the end of 2024. Several other contracts were signed for less than EUR 15 000 each, while the following table shows the contracts signed in 2023 for individual amounts higher than EUR 15 000.

Contractor	Type of contract	Tender procedure	Subject of the contract	Signature date	Amount (in EUR)
Randstad	FWC HR/2024/OP/0095	Various specific contracts under a framework contract	Interim staff	various	302 359
ADRIA CONGREX SRL	CBE JU OP/2023/01-Lot 3	Various specific contracts under a framework contract	Events organisation	various	313 995
Phrenos	CBE JU OP/2023/01-Lot 3	Various specific contracts under a framework contract	Social media	various	29 462
Formato Verde	CBE JU OP/2023/01-Lot 1	Various specific contracts under a framework contract	Communication services: content writing, design and animations	various	41 747
NTT DATA Belgique Consortium	BUDG-2022-OP-0010 DIMOS VI CASCADE 4	Specific Contract under a framework contract	Development of a web tool to collect KPI data from project coordinator	21.11.2024	197 926
ORACLE	DI/07871	Specific Contract under a framework contract	SYSTAL	12.6.2024	17 545

Table 59 Specific contracts signed in 2024.

2.6 IT AND LOGISTICS

In 2024, CBE JU carried out the following actions in the field of IT:

- The AI@CBE pilot project was launched with the installation and configuration of the server that will host this dedicated in-house, low-cost, open-source and customised AI solution for text generation. The outcome will be a tool, accessible only on the internal network of the Joint Undertakings, that will help the communications team to create content to improve the presence of CBE JU's in social media, summarise project sheets and enhance the team's overall content production capabilities;

- On behalf of all the Joint Undertakings hosted in the White Atrium building, the CBE JU took the lead in the project to renew the IT equipment of the common meeting rooms in order to make them fully hybrid. After rejecting the services offered by the framework contract because of their impact on the budget of the JUs, the CBE JU chose the SCIC services of DIGIT. Following a site visit, the SCIC confirmed that the common meeting rooms in the White Atrium could be equipped in accordance with SCIC's standard price list applicable to all EUIBAs. The SCIC is expected to commence work in 2025, depending on whether the meeting rooms will undergo refurbishment.

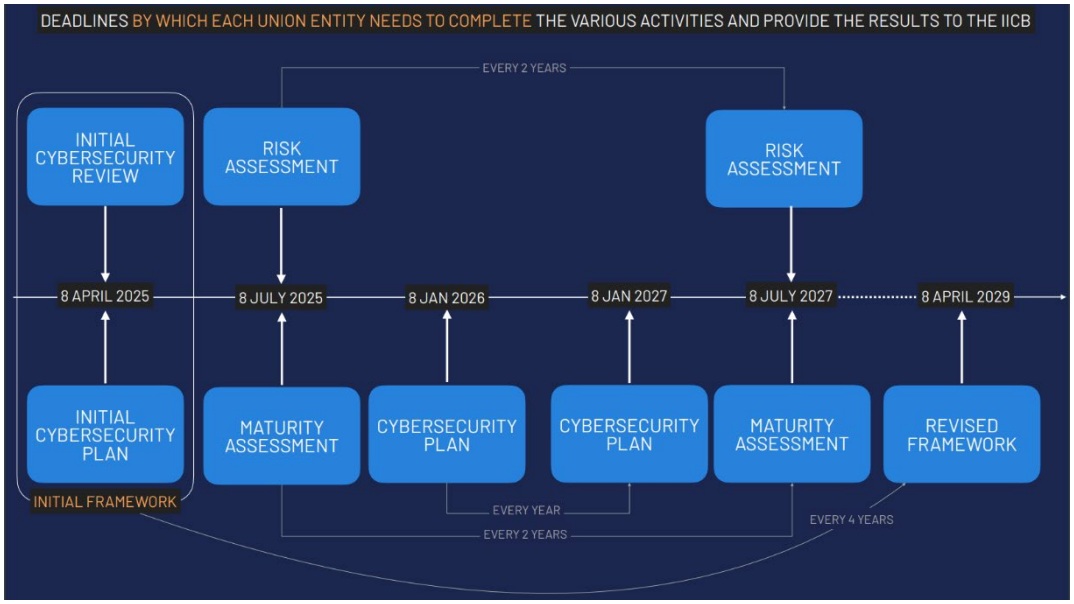
- The CBE JU participated in the Joint Awareness & Preparedness Cybersecurity Exercise (JASPER) organised by CERT-EU and ENISA. In the final report, which contains CERT-EU / ENISA observations, it is noted that *"CBE's responses to the injects were well planned and to the point. It was particularly interesting to see that a communication plan was present and was activated*". Possible improvements suggested in the final report include updating documentation on the procedures to be activated in the event of a cyberattack;

- A new development cycle for the web tool used by the Programme Unit to collect KPI data from project coordinators was launched at the end of the year. This will allow the functionalities of the tool to be extended with new features, that will improve the data visualisation activities of the Programme Unit;

- After the CBE JU completed the onboarding on the SECABC platform set up by DIGIT as a common repository for address books, in June 2024 the CBE JU staff was successfully onboarded on the new version of MyIntracomm based on SharePoint, available at https://eceuropaeu.sharepoint.com/;

- The full inventory of IT assets was successfully completed with the removal of obsolete and depreciated items, which was necessary to prepare the migration to the new financial system SUMMA that will replace ABAC in 2026;

- In the context of the IT back office agreement (BOA), the CBE JU was appointed as co-lead the JU, together with IHI as lead JU, to provide horizontal support to all JUs (limited in scope to the common infrastructure) in the process leading to compliance with the Cybersecurity Regulation (EU, Euratom) 2023/2841. The preparatory process started with the participation of the CBE JU in September 2024 to dedicated CERT-EU introductory sessions (during ICTAC 44 + online workshop). The CBE JU then launched the compliance process to meet the following deadlines set by the Interinstitutional Cybersecurity Board (IICB):



- In June, the annual IT security awareness phishing exercise was conducted with the support of CERT-EU and achieved an excellent success rate of 93.8 %. However, there is still room for improvement through additional phishing exercises and internal training (see overall results below, compared with anonymised results for other JUs):

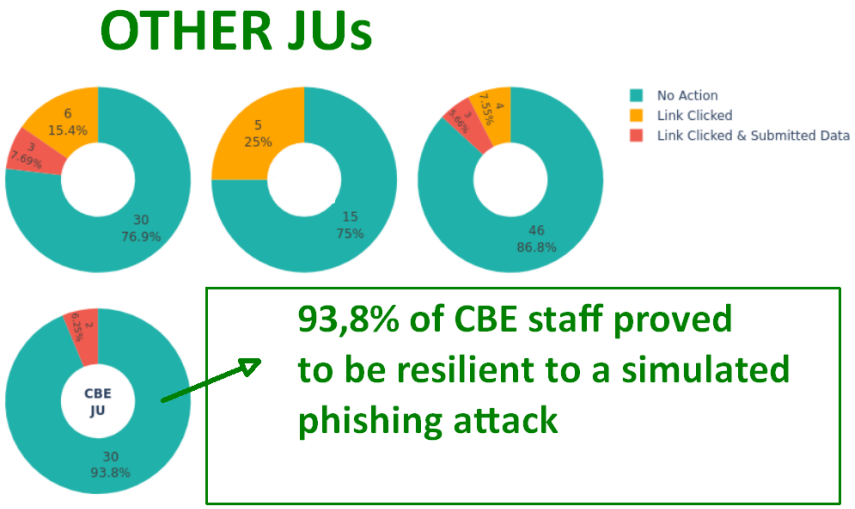


Figure 76 Results of the annual IT security awareness phishing exercise

2.7 HUMAN RESOURCES

2.7.1. HR management

Staff and recruitment

At the end of 2024, the JU Programme Office consisted of 29 statutory staff, which corresponds to a 100 % occupation rate.

The CBE JU welcomed five new colleagues this year for the following positions: the Head of Administration and Finance (temporary agent), two Project Officers (contract agent), one Financial Assistant (contract agent) and the Internal Control and Audit Officer (contract agent). These recruitments were mainly to replace staff members who left the JU during the year.

As in previous years, the CBE JU offered young graduates and those at the start of their careers the opportunity to undertake a six-month traineeship at its premises. The aim of this scheme is to provide trainees with a unique, first-hand experience of the workings of an EU body and a first insight into the objectives and activities of the CBE JU. Two trainees joined the Programme Unit (one for the spring session and one for the autumn session), with one trainee joining the Communication team during the spring session.

The call for expression of interest for the 2025 traineeships was successfully launched in Q4 2024 for a start in early 2025.

In order to reinforce the team during periods of peak workload, the CBE JU also made use of interim agents (3,5 FTE) through the framework contract with the European Commission to address specific needs of the JU Programme Office and cover the gap between departure of staff and their replacement.

The table and the chart below provide statistical data on staff, including the gender and geographical balance within the CBE JU as of 31 December 2024.

Gender balance/ Average age

	Average Age	Staff	%
Male	45.6	10	34.5%
Female	43.1	19	65.5%
Total	43.9	29	100.0%

Table 60 Average age of CBE JU staff.

This year, the CBE JU achieved a gender balance in management positions, with women holding 66 % of middle and senior management roles.

Geographical balance

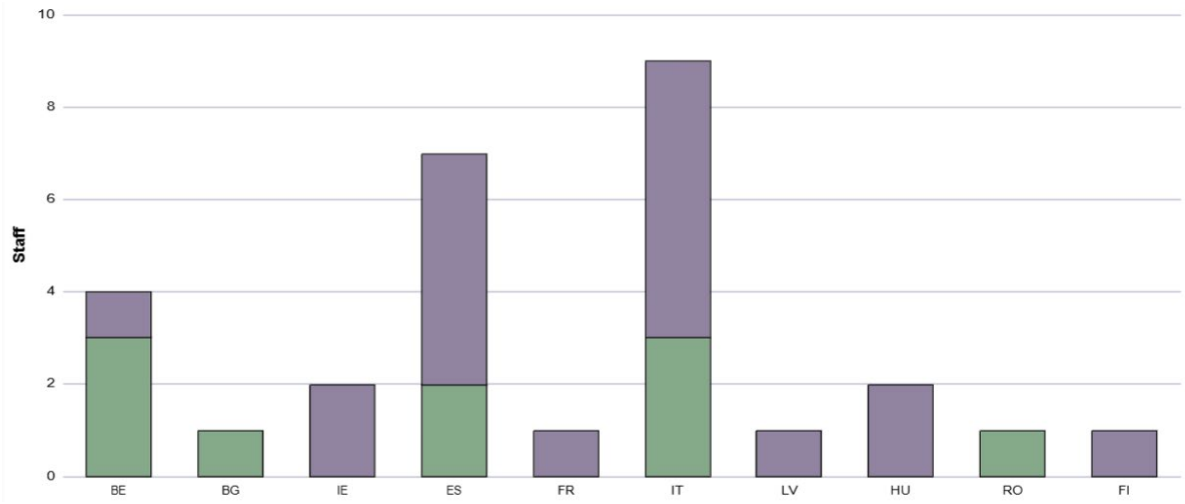


Figure 77 Geographic balance of CBE JU staff.

Legal framework

The HR Office continued to strengthen the legal framework of the CBE JU this year, focusing on the application of the European Commission's implementing rules to the CBE JU. The Joint Undertaking adopted deputising rules (to ensure service continuity) and a model decision on working time and hybrid work.

Specific Implementing Rules (SIRs) brought in in 2024	
Title of the SIR	**Reference and date of the GB's decision**
Request for the Commission agreement for derogation from implementing rules to the staff regulations	CBE-GB-03/24_a of 12.3.2024
Nomination of the reporting offices responsible for the annual appraisal of the Executive Director	CBE-GB-03/24_b of 14.6.2024
Adoption, by analogy, of the Commission Decision C(2024) 1038 amending Decision C(2011)1278 final on the GIPs for Articles 11 and 12 of Annex VIII SR on the transfer of pension rights	CBE-GB-04/24 of 18.6.2024

Table 61 Specific Implementing Rules (SIRs) brought in in 2024.

The CBE JU conducted its annual appraisal and reclassification exercises. It also held information sessions for staff on these issues.

Learning and career development

In 2024, the CBE JU updated its learning and development framework aligning it with the CBE JU's annual objectives, as part of its commitment to foster the continuous growth of its staff. This initiative underlines the importance the CBE JU places on ensuring that its employees develop appropriate skills to thrive in their roles and are fully equipped to take on new challenges.

As in previous years, the CBE JU made use of its Service Level Agreements with the European Commission, which provides access to a wide catalogue of learning courses and ad hoc learning opportunities.

In addition, a training on workplace ergonomics was organised as well as team-building and social events.

A staff survey was conducted at the end of 2024. It consisted of four different sections: *my organisation, my job, management and hybrid working*. The results of each section showed an overall high level of satisfaction as follows:

A vast majority of staff (92 %) enjoy working at the CBE JU and would recommend it as a place to work (88 %). 92 % of staff members have a clear understanding of what is expected from them (e.g. job description, yearly objectives), understand the values of the CBE JU (79 %) and are committed to the mission and objectives of the CBE JU (96 %). The adjectives most often used by employees to describe the CBE JU are *"professional", "commitment", "excellence", "team spirit", "care" and "friendly"*, words that are perfectly in line with the CBE JU's values.

Key highlighted areas were workload and specific points related to the internal organisation of services. These will be further examined and addressed through a dedicated action plan.

2.7.2. Efficiency gains and synergies

Article 13 of the Council Regulation establishing the JUs, identifies human resources support as one the areas for common back-office arrangements. The CBE JU, together with the IHI JU, has taken the lead in setting up the BOA HR.

The BOA HR implements actions in three main areas of HR support: recruitment, HR legal framework and HR digitalisation. Its objectives are to maximise synergies between JUs, harmonise procedures by valorising best practices, ensure coherent HR support services, achieve efficiencies and economies of scale, and increase the bargaining power of JUs operating under the SBA with contractors and service providers.

HR Back Office Arrangement and activities carried out in 2024

In 2024, under the HR BOA, the Joint Undertakings have continuously maximised their synergies and have implemented several actions in three main HR areas: selection and recruitment, HR legal framework and HR digitisation. In particular, through bi-monthly meetings, the JUs have continued to promote best practices, ensure consistency of HR support services and achieve efficiencies and economies of scale.

In line with the HR BOA Action Plan 2024, the JUs have:

- Implemented a common online assessment solution for remote proctoring services to support the delivery of written tests as part of selection procedures. To this end, an SLA between JUs was signed in September 2024 to proceed with the purchase of the above services;
- Launched a series of workshops to align and harmonise selection and recruitment procedures practices across the JUs;
- Strengthened their cooperation by:
    - Organising an away day for HR officers to share best practices and shape cooperation;
    - Sharing reserve lists to reduce time to recruitment;
    - Providing expertise and resources to enable staff to serve as panel members in multiple selection procedures at other JUs;

- Supporting new joint undertakings during their onboarding/start-up phase by providing guidance, advice and templates;
- Centralising the organisation of training courses of common interest for all JUs (e.g. ethics and integrity, anti-fraud, respect and dignity at the workplace for JU staff members, cybersecurity training courses for JU staff);
- Contributing to the development of a common JU HR legal framework by sharing decisions of the Executive Director and Governing Board on various HR regulatory issues;
- Launching, by the CBE JU as the lead, of the new call for confidential counsellors to strengthen the network with additional confidential counsellors.

The JUs have also participated as interinstitutional partners in meetings organised by the European Commission on the HR transformation programme, which aims to set up a new IT platform to replace SYSPER.

The JUs plan to further strengthen this collaboration in 2025.

Other BOAs

BOA Procurement

Through joint initiatives in the area of public procurement and contract management for items of common interest and use, the JUs complemented each other and worked in synergy towards an economically efficient use of the resources available to them and an enhancement of their negotiating power. The exchange of knowledge and best practices, as well as providing legal/procurement support according to expertise and practical experience in the field, lead to time and cost savings among the participating JUs. At the same time, an interchangeable system among the members of the BOA Procurement, which plays the role of contractual lead, has allowed an optimal use of resources.

The Joint Procurement Planning – Catalogue of Services, approved by the Steering Committee on 30 November 2023, was continuously implemented throughout 2024 for the benefit of the participating JUs that expressed an interest in a particular tender. In total, there were three new inter-JU framework contracts, and three new direct contracts where one JU procured services on the behalf of the others.

The BOA Procurement, which addresses the common administrative needs of the JUs, has proved successful. However, it represents a significant additional workload for the JUs acting as lead contracting authorities.

BOA Accounting

EU-Rail is the lead JU for this BOA and signed the SLA with the other JUs on 16 December 2022. Accounting services are provided by three Accounting Officers from the following JUs: CA JU, SESAR JU and EU-Rail JU.

The lead JU is responsible for organising, supervising and coordinating the accounting services for the other JUs. The accounting officers are responsible for the accounts they sign off, with the support and coordination of the lead JU.

In order to ensure the provision of these services, it has been agreed between the EC and the JUs to make use of the support of 3 additional Contractual Agents and an external accounting services

provider. The BOA for accounting services is fully operational and are delivering the intended services, including the preparation of the annual accounts for ten joint undertakings. As of January 2024, the BOA team consists of three accounting officers supported by three accounting assistants.

BOA ICT

The Clean Hydrogen JU and the IHI JU co-lead the BOA ICT, which continues the joint approach to ICT services before 2024, referred to as a 'pre-BOA' for ICT.

In 2024, following the practice of the previous years, the JUs held 4 ICT coordination meetings (called 'IT gov meetings') during which:

- The implementation of the common ICT Annual Work Plan and Budget for 2024 (AWP 2024) was monitored.

- The common ICT Annual Work Plan and Budget for 2025 (AWP 2025) was defined and adopted at the meeting, which took place in November 2024.

The actions set out in the AWP 2024 were implemented in accordance with the plan.

The AWP 2024 included the following seven actions and associated budgets:

- **Action 1** IT Back office arrangement (BOA) implementation

  The Service Level Agreement (SLA) for the BOA ICT was approved in November (see below).

- **Action 2** Common infrastructure migrations

  The migrations for the IaaS and the Testa secured connection were completed in March.

- **Action 3** Upgrade of AV equipment in common meeting rooms

  The MoU with OIB for audio-visual services was signed in September and the choice of design for the meeting rooms to equip was agreed in December.

- **Action 4** Cybersecurity – data protection – Infosec regulation

  The common BCP has been revised and approved.

- **Action 5** EULogin integration with M365

  This action was dropped due to lack of maturity/availability of the DIGIT solution.

- **Action 6** SaaS O365 assets

  The SLA was signed in December between the JUs to launch a request for services for a revised M365 DPIA. Project leadership in 2025 will be ensured by the DPO network supported by the ITOs.

- **Action 7** Reconversion of the White Atrium building

  A disposal exercise for IT equipment was organised in each JU with centralisation and common pick-up.

New equipment was installed on the 1st floor to equip the SNS JU and the Global Health EDCTP3 JU with optic fibre and wi-fi antennas.

UPS renewal project was launched in December with installation to take place in Q1 2025.

Some actions have a natural continuation or reinforced implementation in the next AWP.

The AWP2025 includes the following actions:

- **Action 1** BOA ICT implementation for governance and management of shared infrastructure (see below)
- **Action 2** Next FWC for ICT managed services
- **Action 3** Upgrade of common meeting rooms
- **Action 4** Internet provider
- **Action 5** Security regulation(s) related to Service #5 – Security and compliance management on CERT-EU Services, Infosec regulation, Business Continuity Plan and Disaster Recovery Plan, and Cybersecurity Regulation
- **Action 6** SaaS O365
- **Action 7** Windows 11 migration
- **Action 8** Reconversion of the White Atrium building

In parallel, the JUs drafted the Service Level Agreement and Description of Services, describing the services to be provided under the BOA ICT in accordance with the priorities set out in the BOA ICT concept note adopted by the Governing Boards in early 2024, namely:

- Service area #1 Inter-JU IT Governance;
- Service area #2 Management of shared ICT infrastructure and Service area #4 Workplace services provision;
- Service area #5 Security and compliance management.

By the end of 2024, the SLA and Description of Services were signed by the EDs of the ten joint undertakings, paving the way for BOA ICT implementation in accordance with Article 13 of the SBA and the continued implementation of the common practices of the last 14 years from 1 January 2025.

3 GOVERNANCE

3.3 MAJOR DEVELOPMENTS

There were no major developments in the governance of the CBE JU in 2024.

3.4 PHASING-OUT PLAN MONITORING

In accordance with Article 19(4)(v) of the Council regulation, the Acting Executive Director of the CBE JU submitted to the Governing Board for approval a plan setting out the main lines for the preparation, planning and implementation of the phasing-out of the JU. The preliminary phasing-out plan was adopted by the Governing Board on 14 December 2023 (Decision CBE-GB-11/23). It takes into account inherent risks and sets out recommendations and relevant mitigation measures.

In 2024, the CBE JU worked on a revised version of the plan including strategic reflections and scenario analysis for the continuation of its activities in the event of reduced – or absent – funding under the Horizon Europe programme. The updated phasing-out plan was adopted by May 2025[49]. However, it is a living document that will be further updated as the scenarios for the future of the Research Framework Programme are better defined.

3.5 GOVERNING BOARD

The Governing Board of the CBE JU held four ordinary meetings on 16 March, 18 June, 3 October and 12 December 2024.

The members of the Governing Board are:

EC	BIC CONSTITUTIVE ENTITIES
John Bell Director for Healthy Planet, DG RTD/B (vice-Chair)	Rob Beekers Strategic Marketing & Innovation, CARGILL BIO INDUSTRIAL (CBI) (Chair)
Astrid Ladefoged Head of Unit, DG RTD/B1	Giulia Gregori Manager Strategic Planning and Corporate Communication, NOVAMONT
Kristin Schreiber Director for Ecosystems I: Chemicals, Food, Retail, DG GROW/F	Alex Michine CEO of METGEN
Maria Cristina Russo Director for Prosperity, DG RTD/E	Christophe Luguel

[49] Decision of the Governing Board of 2 May 2025 adopting the updated phasing-out plan from Horizon Europe (CBE-GB-7/25)

	Head of Industrialisation & Financing at Bioeconomy for Change (B4C)
Diego Canga Fano Director for Quality Policy, Research & Innovation, Outreach, DG AGRI/F	

Table 62 CBE JU Governing Board members.

In 2024, the Governing Board of the CBE JU adopted the following decisions:

- CBE-GB-1/24: approving the 2024 call ranking list;
- CBE-GB-2/24: approving the first amendment of the AWP 2024;
- CBE-GB-3/24: approving the request for the Commission agreement on the derogation from Staff Implementing Rules;
- CBE-GB-3b/24: nomination of the reporting officers of the Executive Director appraisal;
- CBE-GB-4/24 second amendment Work Programme 2025;
- CBE-GB-5/24: approving the AAR 2023;
- CBE-GB-6/24: second amendment of the AWP 2024;
- CBE-GB-7/24: adopting AWP 2024.

3.6 EXECUTIVE DIRECTOR

Nicoló Giacomuzzi-Moore took up the position of Executive Director on 1 February 2024, having served as Acting Executive Director since 1 September 2023. He is the legal representative of the CBE JU and is responsible for the day-to-day management and its operations in accordance with Article 19 of Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe [50].

Appointed by the Governing Board, the Executive Director of the Joint Undertaking ensures the implementation of its work programme, manages its resources efficiently and represents it in its external relations. The Executive Director's role also includes overseeing administrative and financial matters, preparing annual activity reports, and ensuring compliance with EU regulations and policies.

[50] Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe and repealing Regulations (EC) No 219/2007, (EU) No 557/2014, (EU) No 558/2014, (EU) No 559/2014, (EU) No 560/2014, (EU) No 561/2014 and (EU) No 642/2014.

3.7 STATES' REPRESENTATIVES GROUP

SRG membership in 2024

Some countries changed their appointed representatives this year. At the end of 2024, the SRG consisted of 36 full members and 33 alternate members, of whom 58 % were women and 42 % were men. The group is chaired by Ms Sari Tasa, the Finnish representative. Mr Fabio Fava, the Italian representative, serves as Vice-chair of the group. The list of the SRG members, together with the rules of procedure and a description of their tasks, is published on the CBE JU website.

Main activities and achievements in 2024

The CBE JU Governing Board consulted the SRG and on the Multi-annual Programming Document (MAP) and the AWP 2025 at various stages and received valuable and strategic advice. The SRG was also consulted on the final draft of the 2023 AAR in June 2024.

SRG members played a pivotal role as CBE JU ambassadors in 2024 through their involvement in specific national or regional measures taken at national or regional level to dissemination events, deployment activities and mobilisation of key stakeholders. A list of events is set out in the annexes, including the national info days that SRG members, with the support of the CBE JU Programme Officers, organised to provide information on CBE JU's 2024 call for proposals.

SRG members report to the Governing Board on an annual basis on national and regional policies and initiatives, with the aim of highlighting policies and strategies that are in line with the CBE JU and identifying opportunities to collaborate with these initiatives in furtherance of CBE JU's own work. Information is exchanged through reports submitted by the SRG members at the end of each calendar year (in accordance with Article 20(10) of the Council regulation). In addition, each SRG meeting is an opportunity to exchange information on national and regional research and innovation programmes, communication and deployment work, in order to better coordinate these with CBE JU's own activities. A task force of SRG members (composed of BE, FI, ES, IE, IT and PT) oversees reporting obligations, makes recommendations and proposes improvements to reporting activities where necessary, taking into account lessons learned from previous exercises.

The SRG members submitted their reports in 2024, providing relevant information on the status of the circular bioeconomy at national and regional level. These reports included updates on activities, and examples of good practices contributing to the objectives of the CBE JU, such as other funding instruments, educational initiatives and activities undertaken at national level to promote the circular bio-based economy and the CBE JU. The reports were shared within the group and made available to the GB. Furthermore, in 2024 the CBE JU developed an internal dashboard for a more user-friendly visualisation of the information reported by SRG members. In addition, the CBE JU engaged in several interactions with the JRC to strengthen cooperation with the Bioeconomy Country Dashboard, which is part of the Knowledge Centre for Bioeconomy.

CBE JU SRG meetings in 2024

The Programme Office held two face-to-face SRG meetings on 7 June and the other 19 October. They were also attended by the Chair of the Governing Board, the Chair of the Scientific

Committee, the CBE JU Executive Director, the BIC Consortium, the EC and the CBE JU Programme Office staff. The main issues discussed at the two SRG meetings are reported below.

5th SRG meeting held on 13 June 2024

- The SRG confirmed the election of its Chairperson, Mrs. Sari Tasa (representative of Finland), for her first official term. It also confirmed the extension of the mandate of its Vice-chair, Mr. Fabio Fava (representative of Italy), for a second term.
- The SRG received feedback on the advice provided for the update of the MAP document.
- The SRG reviewed and provided input on the first draft of the 2025 Annual Work Programme, including a preliminary list of topics. Members expressed an overall positive view.
- Members shared updates on national/regional developments and activities related to the CBE.
- The SRG discussed the status of the annual reports submitted by members at the end of 2023, in accordance with Article 20(10) of the Council regulation. The CBE JU presented plans to develop a dashboard to facilitate a user-friendly visualisation of the reported information.
- The SRG received updates on the implementation of the CBE JU programme, including the main achievements presented in the draft Annual Activity Report 2023, the progress achieved in establishing deployment groups, the implementation of the CBE JU widening participation strategy and the action plan to it, the newly signed grant agreements under the 2023 call, and updates on communication activities and dissemination materials.
- The SRG also received updates from the European Commission on activities relevant to the CBE JU, including the Biotech and Biomanufacturing initiative, the plan to update the EU Bioeconomy Strategy and synergies with the annual work programme of Cluster 6.
- The BIC provided updates on activities relevant to the CBE JU, including the status of BIC membership, the publication of a report mapping Romania's bio-based potential and the forthcoming publication of a similar report for Hungary (November 2024). In addition, the BIC updated the SRG on the progress of two upcoming studies, one on the availability of virgin biomass and another on biowaste generation, the TechTour Circular event aimed at connecting investors and participation in the BISC-E 2024.

6th SRG meeting held on 10 October 2024

- The SRG discussed and provided advice on the pre-final draft of the 2025 Annual Work Programme (2nd consultation) and expressed an overall positive opinion.
- The SRG received updates and discussed the status of implementation of the CBE JU programme, including the priorities for 2025, statistics on 2024 call submissions, progress on deployment and working groups, ongoing efforts to develop a dashboard to visualise country statistics, and upcoming communication activities relevant to the SRG.
- SRG members shared updates on national/regional policies and initiatives related to CBE JU.
- The SRG received an update from the European Commission on activities relevant to CBE JU, including political guidelines of the second mandate of President von der Leyen's Commission, key messages from the mission letter of the future Commissioner for Research and Innovation, the status of the future Biotech Act, and the planned updates of the EU Bioeconomy Strategy.
- The SRG received updates from the BIC on activities relevant to the CBE JU, including the Open Innovation Competition Challenge, a webinar on artificial intelligence, the European

Bioeconomy in Figures study, the BIC/Renewable Carbon Initiative biomass study, the BIC-Zero Waste Europe report on biowaste, BIC's involvement in the Projects of Common European Interest, the Tech Tour 2024 event, and the BISC-E competition.

3.8 SCIENTIFIC COMMITTEE

SC membership

According to Articles 21 and 55 of the Council Regulation (EU) 2021/2085, the Scientific Committee (SC) is one of the advisory bodies of the CBE JU. The CBE JU SC is composed of 15 independent experts with a balanced representation of globally recognised experts from academia, industry, SMEs, non-governmental organisations and regulatory bodies. Collectively, the members of the Scientific Committee have the necessary scientific skills and technical expertise to provide science-based recommendations to the CBE JU[51].

The SC is chaired by Ms Helena Vieira, with Mr. Piergiuseppe Morone serving as Vice-chair. Of the SC members, seven are women (47 %) and eight are men (53 %). There were no changes in its composition in 2024.

Activities and achievements of the SC in 2024

The SC was consulted and provided valuable advice to the CBE JU Governing Board on the Multi-annual Programming (MAP) document and the AWP 2025 at different stages.

In order to promote interaction and facilitate the communication between the two advisory bodies, the Chair of the SC attended both meetings of the SRG and presented the main points of discussion and advice provided by SC members on the MAP document, the AWP 2025 and other strategic discussions.

As required by the Council regulation, an SC task force on sustainability was established to ensure that all aspects of sustainability and circularity are adequately addressed in the programme.

Throughout the year, SC members were kept updated on BIC and the EC activities relevant to the CBE JU, as well as on progress in implementing the CBE JU programme and the 2024 call, including the results of submissions and other relevant updates on CBE JU activities.

SC members are also active ambassadors of the CBE JU programme, disseminating relevant information about the CBE JU programme to the networks (academia, industry, research centres, international organisations and others) and promoting their activities.

CBE JU SC meetings in 2024

The CBE JU Programme Office held two SC meetings on 6 June and on 9 October 2024. The meetings took place in person in Brussels and chaired by SC Chair Helena Vieira. They were also attended by the Chair of the GB, the Chair of the SC, the Executive Director of the CBE JU, the BIC, the European Commission (EC) and staff of the CBE JU Programme Office.

The main issues discussed at the two SC meetings are reported below.

[51] The list of SC members, including their background and expertise, can be found on the CBE JU website here: Scientific Committee | Circular Bio-based Europe Joint Undertaking (CBE JU).

5th SC meeting held on 6 June 2024

- The SC received feedback on the advice provided for the update of the Multi-Annual Programming Document.
- The SC discussed and provided advice on the first draft of the 2025 AWP, including a preliminary list of topics.
- The SC received updates on the implementation of the CBE JU programme, including the main achievements presented in the draft AAR 2023, the progress made in establishing deployment and working groups, the implementation of the CBE JU widening participation strategy and the action plan to it, the newly signed grant agreements under the 2023 call, and updates on communication activities and dissemination materials.
- The SC also received updates from the European Commission on activities relevant to the CBE JU, including the Biotech and Biomanufacturing initiative, the plan to update the EU Bioeconomy Strategy, and synergies with the Annual Work Programme of Cluster 6.
- The BIC provided updates on activities relevant to the CBE JU, including the status of BIC membership, the progress of two upcoming studies, one on the availability of virgin biomass and the other on biowaste generation, as well as on other ongoing initiatives.

6th SC meeting held on 9 October 2024

- The SC discussed and provided advice on the pre-final draft of the 2025 AWP (2nd consultation) and expressed an overall positive opinion.
- The SC received updates and discussed the status of the implementation of the CBE JU programme, including the priorities for 2025, statistics on the 2024 call submissions, the progress achieved in setting up deployment and working groups, the ongoing efforts to develop a dashboard to visualise country statistics and upcoming communication activities.
- The SC received an update from the European Commission on activities relevant to the CBE JU, including political guidelines of the second mandate of President von der Leyen's Commission, key messages from the mission letter of the future Commissioner for Research and Innovation, the status of the future Biotech Act and the planned updates of the EU Bioeconomy Strategy. The SC received updates from the BIC on activities relevant to the CBE JU, including the Open Innovation Competition Challenge, a webinar on artificial intelligence, the European Bioeconomy in Figures study, the BIC/Renewable Carbon Initiative biomass study, the BIC-Zero Waste Europe report on biowaste, among other initiatives. More details on the specific points discussed in each SC meetings can be found in the report on the 5th SC meeting and the report on the 6th SC meeting.

3.9 DEPLOYMENT AND WORKING GROUPS

3.9.1. Deployment group on finance & investments

Progress was made towards establishing the Deployment group on finance and investments. The main activities of the working group composed of the EC, the BIC and the CBE JU Programme Office include the following:

- **A concept note:** Final endorsement by the Governing Board and publication on the website of the concept note, which includes the definition, scope and phases of the establishment of the deployment group.
- **The Bioeconomy 2.0 study:** The European Investment Bank (EIB) and the service provider received support with feedback, inputs and meeting organisation during the drafting of the Bioeconomy 2.0 study, which is the first step in the establishment of the deployment group. The study was launched on 8 April 2024, and the final draft of the report was presented to all stakeholders during a workshop on 12 September held at the CBE JU premises. The results of the study were presented to the Governing Board in March 2025.

3.9.2. Working group on primary producers

The main objectives of this working group are to address the challenges that primary producers face in adopting circular bio-based solutions and innovations while ensuring that they benefit from being part of new and innovative circular and bio-based value chains.

In 2024, significant progress was made towards establishment of the Working Group on primary producers. This achievement was the result of collaborative efforts between the EC, BIC and the CBE Programme Office through the creation of a dedicated task force. In addition, the following activities were carried out:

- Organisation of a consultative and participatory workshop with relevant stakeholders in February 2024. The aim of the workshop was to gather feedback on the proposed objectives, areas of intervention and profile of members of the future working group. The feedback gathered was used to draft a concept note. The States' representatives group provided advice on the identification of relevant stakeholders to participate in the workshop.
- Finalisation and endorsement of the concept note drafted by the working group by the Governing Board on 25 April 2024. The document outlines the scope, objectives, tasks and composition of the working group, including the rules of procedure and conditions for its functioning.
- Inclusion of the topic 'HORIZON-JU-CBE-2024-CSA-03' in the 2024AWP, with the aim of having a dedicated Coordination and Supporting Action to support the working group in successfully achieving its objectives.

  Drafting of the selection procedure, which was submitted to the Governing Board for approval in December 2024. The procedure outlined the eligibility criteria that organisations should meet in order to become members of the working group, as well as the conditions for an open call for expressions of interest to be launched in January 2025.

4 FINANCIAL MANAGEMENT AND INTERNAL CONTROL

This section sets out the results of controls and other relevant information that support the management's assurance regarding the achievement of the objectives of financial management and internal control. It includes the information necessary to confirm that the available evidence is complete, reliable and comprehensive. It reports on the performance of the internal control and management systems covering all activities, programmes and management modes relevant to the CBE JU. The section contains a description of the internal control and risk management systems in place, along with an assessment of their effectiveness: compliance, efficiency and effectiveness.

Assurance is provided following an assessment of the effectiveness of risk management, control and governance processes.

This review is carried out both by management, which continuously monitor the functioning of the internal control systems on a continuous basis, and by internal and external auditors. The results are documented in the annual assessment of the internal control framework and reported to the Executive Director of the CBE JU. The following reports are used in the assessment:

- The annual declaration of assurance reports provided by the Authorising Officer by Sub-Delegation (AOSD) to the delegating Authorising Officer;
- The reports on recorded exceptions, non-compliance events and internal control weaknesses;
- The opinion of the Internal Control and Audit Manager responsible for risk management and internal control;
- The outcome of activities of the ex-post audit function and fraud prevention measures;
- The results of annual risk assessments performed by the Internal Audit Service and the observations and recommendations reported during the year;
- The observations and recommendations of the European Court of Auditors;
- The observations and recommendations of the Accounting Officer in the context of the validation of the local accounting systems;
- The conclusions of the annual risk assessments;
- Security and data breach registers.

These reports ae the result of a systematic analysis of the available evidence. This approach provides sufficient guarantees as to the completeness and reliability of the reported information and results in a full coverage of the budget under the accountability of the Executive Director of the CBE JU. The budget of the CBE JU is composed of different categories of expenditure, namely staff and other administrative costs and grant management costs.

The grant management control environment in which the CBE JU operates is largely a corporate one. The results reported in the following sections are the outcome of controls designed mainly by the Common Implementation Centre (CIC), which is responsible for the control system of the R&I framework programmes. The CBE JU actively participates in the various governance structures put in place by the CIC and contributes to the development and improvement of the common legal framework, the business processes and IT tools. For staff expenses and other administrative costs,

the CBE JU uses exclusively the EC accounting system ABAC for financial operations and the eTendering and eProcurement solutions provided at corporate level for public procurement procedures.

The CBE JU has adopted and regularly updates a financial procedures manual, which describes the financial circuits involved in the implementation of the budget. The financial circuits cover all financial operations, taking into account the lean structure of the CBE JU and the risks associated with the management environment and the nature of the financial operations. They have been established in order to standardise the mandatory steps in the processing of financial transactions, to clarify the different actors, their main responsibilities and the controls they have to carry out.

Certain control activities carried out in the CBE JU cannot be fully captured by quantitative indicators, although they contribute significantly to the overall benefits of programme implementation or the centralised support delivered to the Commission services. These activities include feedback for joint policy making, process improvement, information and communication, dissemination and exploitation of the project results, etc.

4.1 CONTROL RESULTS

This section reports on and assesses the elements identified by management to provide assurance on the achievement of the following internal control objectives: (1) effectiveness, efficiency and economy of operations; (2) reliability of reporting; (3) safeguarding of assets and information; (4) prevention, detection, correction and follow-up of fraud and irregularities; and (5) adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual nature of programmes and the nature of the payments concerned.

4.1.1. Effectiveness of controls

The results of the controls on the legality and regularity of transactions, the prevention of fraud and the safeguarding of assets are presented below.

Legality and regularity of financial transactions

The CBE JU applies internal control procedures to ensure the adequate management of the risks relating to the legality and regularity of the underlying transactions it for which is responsible, taking into account the multiannual nature of programmes and the nature of the payments concerned.

The results of the controls carried out are measured by means of ex-post audits of transactions from the operational budget of the CBE JU.

Ex-post controls on operational expenditure are carried out in accordance with the Horizon 2020 audit strategy, which is risk-based and builds on the lessons learned from Horizon 2020. The CIC has developed these audit strategies in cooperation with all its clients – the European Commission services, the executive agencies and the joint undertakings.

The main objective of the audit strategies is to provide the individual authorising officers with the necessary elements of assurance in a timely manner to enable them to report on the budget

expenditure for which they are responsible. Ex-post controls on operational expenditure contribute in particular to:

- assessing the legality and regularity of expenditure on a multi-annual basis;
- providing an indication of the effectiveness of the related ex-ante controls;
- providing the basis for corrective and recovery mechanisms, where appropriate.

The Common Audit Service (CAS) is a CIC service serving all Horizon 2020 and Horizon Europe stakeholders in the implementation of the audit strategy. Its mission is to deliver a corporate approach throughout the audit cycle: audit selection, planning, application of rules, relations with beneficiaries and management information on the audit process.

The CBE JU is effectively integrated into this control chain. It participates in the audit process definition and in the monitoring of its implementation in continuous collaboration with the CAS and its clients. The main objectives of this cooperation are to align operations and exploit synergies in the joint audit effort. The efficiency gains should reduce the audit costs and the administrative burden on auditees, in line with the specific objectives for ex-post controls set out above.

The main results in 2024 were:

- The representative detected error rate for the CBE JU provided by CAS was 1.61 % (2.57 % for the whole Horizon 2020 programme) and recalculated by CBE JU was 1.76%;
- The cumulative residual error rate for the CBE JU provided by CAS was 1.25 % (1.55 % for the whole Horizon 2020 programme) and recalculated by CBE JU was 1.28%.

No error rates are available for Horizon Europe for 2024 as the ex-post audit campaign for this framework programme was planned for the beginning of 2024 for transactions within the scope of such campaigns from 2025 onwards.

The methodology used to calculate the error rates for the CBE JU is described in Annex 5.11 ‘Materiality criteria’. The calculations of the overall error rates for Horizon 2020 are detailed in the European Commission’s Annual Activity Report.

The results of these controls are intended to contribute to the achievement of the multi-annual targets for detected errors in expenditure incurred under the Horizon 2020 programme. The expectations set out of the Horizon 2020 framework programme are the same as those set out in the legislative proposal for the BBI JU. According to these expectations, the error rate should be between 2 % and 5 % on an annual basis, with the ultimate aim of achieving a residual error level as close as possible to 2 % at the closure of the multi-annual programme[52].

[52] Legislative Financial Statement as part of the 2011 Commission proposal for the Regulation on Horizon 2020 (COM/2011/809) of 30 November 2011, pages 98-102, as recalled in the Commission proposal for the Regulation on the Bio-based Industries Joint Undertaking (COM/2013/496) of 10 July 2014, pages 34-36.

In conclusion, as in previous years, the CBE JU believes that the expenditure incurred under the Horizon 2020 programme in 2024 does not warrant a reservation.

Fraud prevention, detection and correction

A common anti-fraud strategy has been put in place in the Research and Innovation Family (RAFS), covering the prevention and detection of potential fraud and the conditions for its investigation. This strategy is proportionate to the level of risk and to the nature and magnitude of the fraud identified. The strategy has been developed and implemented in cooperation with the Fraud and Irregularities in Research Committee (FAIR), which brings together the services of the European Commission, Executive Agencies and Joint Undertakings implementing the Horizon 2020 and Horizon Europe framework programmes.

CBE JU staff are continuously updated on how to identify fraud risks and have been equipped with the tools necessary to prevent, detect and report suspicious cases. The Learning and Development Framework requires mandatory training on fraud awareness, prevention and detection to be included in the training maps for all staff involved in financial transactions.

The JU Programme Office has designated a liaison officer responsible for managing all activities relating to fraud reporting to the European Anti-Fraud Office (OLAF), providing support in OLAF's investigations, following up on its recommendations and cooperating on fraud prevention.

In December 2021, the FAIR agreed on a set of mandatory common indicators to measure and monitor the overall performance of the RAFS:

Indicator	2024 result
Number of new cases sent to OLAF and opened in the year, and cases handled by OLAF relevant to the granting authority in a given year	0
Number of OLAF financial recommendations received in a given year	0
Internal awareness-raising actions (e.g. trainings)	1
Cooperation with stakeholders, such as participation in the FAIR Committee, etc.	2

Table 63 Overall performance of the RAFS.

In 2024, no new OLAF investigations were notified to the CBE JU and no new recommendations were received. Internal awareness training was provided to staff and the CBE JU participated in two FAIR meetings and in the adoption of the 2024 update of the RAFS.

In conclusion, no matters have arisen that could impact the Authorising Officer's assurance as outlined in section 4.5.2 below

Assets and information, reliability of reporting

In 2024, the Accounting Officer carried out their annual evaluation of the local financial systems of the CBE JU. The evaluation methodology was adapted in 2023 to take into account the results of previous years' evaluations. The evaluation reviewed the available information on the follow-up conducted further to the 2023 evaluation, analysed a sample of the operations authorised during the financial year 2024 and examined key performance indicators. Based on the available evidence and the scope of the work performed, the evaluation did not identify any internal control weaknesses that would have a material impact on the accuracy, completeness and timeliness of the information required to draft the annual accounts and produce reliable reports.

Lastly, the Management Representation Letter issued by the CBE JU's Authorising Officer and Accounting Officer on the 2024 Provisional Accounts did not contain any reservations in respect of the opinion that they present fairly, in all material respects, the financial position of the CBE JU, the results of its operations, its cash flows, and the changes in its net assets as at 31 December 2024.

In conclusion, no matters have arisen that could impact the Authorising Officer's assurance given in section 4.5.2 below.

4.1.2. Efficiency of controls ('Time to')

The efficiency indicators provided for in the Financial regulation are Time to Pay (TTP), Time to Inform (TTI) and Time to Grant (TTG).

- The TTG for the 2024 call was achieved at 100 %.
- For operational expenditure, all interim and final cost claims validated in 2024 (35) were paid on time with an average TTP of 58 days for interim payments and 62 days for final payments.
- The TTP for administrative payments showed that a delay occurred in 64 (10.14 %) out of a total of 631 payments. The average TTP was 18 days, including late payments. A weekly monitoring system was set up in the last quarter of 2024 to ensure that administrative payments are made on time.

4.1.3. Economy of controls

For a programme-implementing organisation such as the CBE JU, the assessment of the cost-effectiveness and efficiency of controls focuses on yearly activities related to the management of the annual budget, including both operational and financial facets of operations.

The cost-effectiveness of controls compares the benefits of controls with their costs. The quantification of the benefits of controls reflects the cumulative value of corrections applied to cost claims reviewed and processed by the organisation during the year. However, there are other benefits of controls that do not appear in the calculation, such as ex-ante monitoring and communication activities that result in fewer corrections being made, and the deterrent effect of controls on fraud or conflict of interest risks.

The cost-efficiency of controls compares the cost of controls with the resulting operational performance of the organisation. Recognising that reducing controls may lower their costs and speed up processes but may also increase the risk of error (and vice versa), the most relevant KPIs of the control results mentioned above are Time to Pay of underlying cost claims and the residual error rate detected by ex-post controls on operational expenditure.

4.1.4. Conclusion on the cost-effectiveness of controls

Overall, the CBE JU's controls have resulted in an effective achievement of its objectives, safeguarding the JU's assets and ensuring the accuracy and reliability of data, as well as the legality and regularity of the financial transactions.

The 2024 results of the CBE JU, presented in the table below, warrant the conclusion that the controls performed on financial transactions:

- were cost-effective, as the benefits of the controls were greater than their costs;
- were cost-efficient, as the organisation achieved a high operational performance in the execution of payments with a relatively low cost of controls (0.46 % of the yearly expenditure) and kept the residual error rates on operational expenditure below 2 %.

2024 payments (in EUR)	158 180 884
Estimated costs of controls (in EUR)	**723,388**
As a % of yearly expenditure	*0.46%*
Benefits of controls (in EUR)	**2,905,550**
As a % of yearly expenditure	*1.84 %*
% Administrative payments on time	*90 %*
% Operational payments on time	*100 %*
% Residual error rate on operational expenditure	*1.25[53] %* *1.28[54]%*

Table 64 Results of the 2024 assessment of cost-effectiveness and cost-efficiency of controls.

[53] Figures provided by the CAS.

[54] Figures recalculated by CBE JU.

4.2 AUDIT OBSERVATIONS AND RECOMMENDATIONS

This section sets out the activities, observations, opinions and conclusions reported by the Internal Auditor and by the European Court of Auditors. Summaries of the management measures taken in response to the audit recommendations are also included, together with an assessment of the likely material impact of the findings on the achievement of internal control objectives and therefore on management's assurance.

4.2.1. Internal audits

The Internal Audit Service (IAS) of the European Commission carries out the internal audit function for the CBE JU.

In 2024, the IAS followed up on the implementation of outstanding recommendations from previous audits and declared all of them closed. The IAS also completed the update of the risk assessment of CBE JU's operations for its 2024 audit plan. The IAS audit of the CBE JU is guided by the Strategic Internal Audit Plan, which stems from the in-depth risk assessment conducted in 2023. The plan encompasses the 2024–2026 period and is subject to annual updates.

4.2.2. Audit by the European Court of Auditors

The ECA did not report any findings on the first part of its audit of the 2024 annual accounts of the CBE JU. The audit work on the 2024 annual accounts of the CBE JU was still ongoing at the beginning of 2025.

In 2024, the Baker Tilly EU external audit team was engaged for two years (2024 and 2025) to conduct audits of the financial years, with the objective of obtaining reasonable assurance and forming an opinion on the reliability of the provisional and final annual accounts. In early December, the Baker Tilly EU external audit team arranged a kick-off meeting with the CBE JU to discuss the planning of the audit of the CBE JU 2024 Annual Accounts and in January 2025 launched the audit of the CBE JU 2024 Annual Accounts.

4.2.3. Audit by the Internal Audit Service (IAS)

In October 2024, the Internal Audit Service announced the following audit engagements starting in January 2025:

- Audit of the establishment of back office arrangements (this is relevant to the CBE JU as it leads the BOA HR);
- Audit of the management of in-kind contributions (design under Horizon Europe) in the Directorate-General for Research and Innovation (DG RTD), CBE JU, CA JU, and SESAR 3 JU).

4.2.4. Overall conclusions

All conclusions of the Internal Audit Service provided assurance to the Executive Director and the Governing Board on the compliance, effectiveness and efficiency of the internal control framework implemented by the CBE JU. In particular, the IAS made several recommendations to add value to CBE JU's operations, but none of them were critical. They were all addressed and implemented in a timely manner according to an action plan agreed upon with the IAS.

The work of the auditors and the follow-up actions taken by the Programme Office form part of the evidence base used to assess the effectiveness of the JU's internal control systems as reported in section 4.3 and the management's conclusions on assurance set out in the section 4.4.

4.3 ASSESSMENT OF THE EFFECTIVENESS OF INTERNAL CONTROL (IC) SYSTEMS

The internal control framework of the CBE JU is based on 17 control principles. It is aligned with the EC's control framework and has been in force since 1 January 2020. All the principles of the new control model are embedded throughout the organisational structure of the CBE JU and are based on a combination of ex-ante and ex-post controls, segregation of duties, documented processes and procedures, control of deviations, and promotion of ethical behaviour.

In this context, the Executive Director steers and oversees the management of risk and internal control management, supported by the Internal Control and Audit Manager and the members of the management team, which reviews the robustness of reporting on operational performance. The CBE JU staff at all levels ensure the proper implementation of the internal control framework through clearly defined roles, accountability, objectives and performance evaluation mechanisms.

The results of the 2024 Internal Control Framework assessment confirm that the CBE JU's control systems are in place and functioning effectively. At the level of principles, the self-assessment of the combined impact of the detected strengths and weaknesses provided reasonable assurance as to the presence and effective functioning of all 17 principles. Only a few minor cases were identified, which did not affect the effectiveness of the integrated internal control systems. Rather, they provided an opportunity to plan work for 2024, aiming to enhance their effectiveness and strengthen the cross-reliance of the relevant systems.

As a result, all five components of internal control are considered to be in place and operating reasonably well in an integrated manner.

1. The control environment component, which provides the basis for the implementation of internal controls throughout the organisation, has not been found to have any significant weaknesses and all underlying principles are found to be fully in place and effective.

2. The risk assessment component is a dynamic and iterative process for identifying and assessing risks that could prevent the achievement of objectives and determining how such risks should be managed. No weaknesses were identified in this component and all underlying principles were found to be in place and effective.

3. For the control activities component, which ensures the mitigation of risks related to the achievement of objectives, no critical weaknesses were identified, and all underlying principles were found to be fully in place and effective. A moderate case concerning testing of business continuity arrangements for the JUs based in the same building will be addressed in 2025.

4. The information and communication component ensures that the information necessary for internal control and evidence of the achievement of objectives is available. Delays in the timely deployment of the corporate IT tools for CBE JU IKAA planning and reporting have had a moderate impact, which the CBE JU is addressing in cooperation with the EC services and a report on the issue is set out in section 2.4 and Annex 5.9 to this report. No

other weaknesses have been identified for this component and all underlying principles were found to be fully in place and effective.

5. The monitoring activities component is in place and functioning well: continuous and specific assessments are used to ascertain whether each of the five components of internal control is in place and functioning. Continuous assessments, built into business processes at different levels of the organisation, provide timely information on deficiencies. Findings are evaluated and deficiencies are flagged up and corrected in a timely manner, with serious matters reported as appropriate.

4.3.1. Continuous monitoring

Management structures are comprehensive. The design and implementation of management and control structures cover all programmes and activities. Specifically on spending programmes, they cover all expenditure types, delivery mechanisms and budget management and support the CBE JU in achieving its policy, operational and control objectives.

The CBE JU continuously monitors the performance of the internal control system through a number of indicators. For operational expenditure, this monitoring is built into the e-grants suite of IT tools and reports can be generated at any time with real-time information on operational performance. The information systems (SyGMa) and workflows (COMPASS) ensure that transaction processes are recorded in the IT accounting system (ABAC) with a high degree of automation, that controls are embedded in each workflow, that assessments, deviations and formal notifications are registered, and that documents are kept on file (ARES).

Staff performing assessments in regular workflows or in specific assessments have good knowledge of control requirements and objectives. Operational and financial staff have received specific corporate training (preparing and signing grant agreements, reporting and payments, project monitoring, amendments, fraud prevention in the research family, and other relevant topics) and the CBE JU organises internal workshops on financial or operational matters as required.

The CBE JU regularly convenes governance bodies, management and staff meetings with agendas that include reports on the implementation of previously agreed action plans and discussions of emerging business.

Where there are indications that a specific risk is emerging in a process, or the results of ongoing controls results show a sudden drop in performance in a particular area, managers may take direct action (specific assessments) to identify the root causes of the risk/underperformance/inefficiency and plan corrective action.

There is a procedure for reporting and assessing exceptions, non-compliance and internal control weaknesses and it is implemented when relevant. The resulting assessments and remedial action plans are submitted to the Authorising Officer for approval and entered in a register.

The Head of the Internal Control and Audit monitors and reports on the timely implementation of action plans, either documented or resulting from audit recommendations.

4.3.2. Risk assessment and management

Risk management adds value to the organisation by supporting it efficiently and effectively in achieving its objectives. Its effectiveness is regularly assessed as an integral component of the internal control system of the organisation (see section 4.3 above). The level of resources devoted to it and the amount of documentation produced are adequate and proportionate to the criticality of the activities concerned. Management across the JU Programme Office is promptly alerted to emerging risks. In addition, the Governing Board is notified of risks in a timely manner, enabling it to discuss and agree appropriate responses.

The effective management of risks throughout 2024 is detailed in section 1.1.3.

At the end of 2024, the CBE JU conducted a risk assessment exercise on the achievement of the objectives described in this work programme for 2025. The assessment evaluated the root causes of each identified risk and its potential consequences, taking into account the controls in place and the convergences and interdependencies between risks. This process is documented in the internal risk register, which includes a description of the response plans, specifying the party responsible for each action and the individual deadlines. Relevant information is disclosed in the CBE JU Annual Work Programme 2024, section 2.2.1.

4.3.3. Prevention of conflicts of interest

The JU Programme Office has developed a comprehensive set of rules and procedures that are effectively implemented across its entire governance structure as follows:

- Upon joining the team of the JU Programme Office, each staff member agrees to the application of the Staff Regulations and signs a declaration of honour on the management of conflicts of interest.
- All staff members receive a copy of the Code of Good Administrative Behaviour. There is also mandatory training on managing conflicts of interest and whistleblowing as part of the Learning and Development Framework of the CBE JU.
- Conflict of interest procedures are in place for the members of both the Governing Board and the Advisory Board of the CBEJU. In addition to the general rules on conflict of interest set out in the rules of procedure of each Joint Undertaking, Decision 13/17 of the Governing Board of 13 December 2017 contains specific rules on the prevention and management of conflicts of interest applicable to the bodies of the Bio-based Industries Joint Undertaking. Specific measures have been put in place to prevent and manage conflicts of interest of experts in charge of reviewing projects and tenders.

In 2024, these control systems operated effectively and there are no matters to report that can affect the reasonable assurance to be provided by the Authorising Officer in section 4.5.2 below.

4.4 CONCLUSION ON THE ASSURANCE

In conclusion, based on the elements reported above, the management of the CBE JU has reasonable assurance that, overall, suitable controls are in place and working as intended; risks are being appropriately monitored and mitigated; and necessary improvements and enhancements are being implemented.

The Authorising Officers by Delegation have signed their declarations that cover robustness in reporting on operational performance. The Head of Risk Management and Internal Control has signed the yearly declaration on the state of internal control in the Programme Office and takes responsibility for the completeness and reliability of the related management reporting. No issues have been reported that may influence the reasonable assurance to be provided by the Authorising Officer in section 4.5.2.

4.5 STATEMENT OF ASSURANCE

4.5.1. Declaration of assurance

I, the undersigned, Nicoló Giacomuzzi-Moore, Executive Director of the Circular Bio-based Europe Joint Undertaking (CBE JU), in my capacity as Authorising Officer:

- Declare that the information contained in this report gives a true and fair view.
- State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

  This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the work of the internal audit capability, the observations of the Internal Audit Service and the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration.
- Confirm that I am not aware of anything not reported here which could harm the interests of the Joint Undertaking.

Place: Brussels

Nicoló GIACOMUZZI-MOORE

Executive Director

4.5.2. Assessment of the Annual Activity Report by the Governing Board

Assessment of the Annual Activity Report by the Governing Board

On 18 March 2025, the Governing Board of the Circular Bio-based Europe Joint Undertaking (CBE JU) appointed a working group to carry out all the preparatory work necessary for assessing the Annual Activity Report for 2024 (AAR2024). On 1 April 2025, the CBE Programme Office submitted the draft AAR2024 to the Governing Board. During the Governing Board meeting on 26 June 2025, the working group presented its analysis of the AAR in accordance with Article 16 of the Board's rules of procedure.

Analysis by the Working Group

The AAR2024 provides a complete and accurate report of the progress made in 2024 towards the objectives set in the 2024 Annual Work Plan (2024 AWP), adopted by the Governing Board on 14 December 2023. The following points can be highlighted:

The project portfolio continues to develop towards the strategic objectives of the partnership.

- It comprises a wide array of projects that span several thematic areas, highlighting efforts to replace fossil-based products with sustainable, bio-based alternatives across different sectors.
- Diversification of feedstocks and inclusion of circular economy principles continues to be observed, contributing to a more sustainable, resilient and innovative bioeconomy in Europe.
- Projects continue to cover a wide range of TRLs, from lab research to near-commercial deployment, bringing products and technologies closer to market while feeding a pipeline of future innovation in the bio-based industries.
- Projects are implemented across various EU member states, supporting regional development and inclusivity. Further, many projects contribute to capacity building and knowledge transfer.

Participation to CBE JU continues to be attractive and open and is further supported by the Widening Participation Strategy.

- The implementation of the Widening Participation Strategy (adopted in 2023) and action plan is showing good results with a substantial increase of participants from widening countries to the info day and in proposal consortia. In terms of participation in funded projects, there are positive signs from Estonia, Greece, Latvia and Portugal that are already well represented. However, the participation of other widening countries' is still lagging, and further efforts are needed.
- A continued increase of the number of applicants and participants to the info day and the number of newcomers to the CBE JU's activities is observed.

Good progress towards the establishment of the Working Group on Primary producers was observed.

- This includes adopting the note containing the concept for this group, which is based on recommendations from a participatory workshop with relevant stakeholders and submitting a proposal to the governing board for selecting members of the working group.
- The approval under Call 2024 of a CSA to support the Working Group is expected to ensure a smooth operation.

The operationalisation of a Deployment Group on Finance and Investments remains a challenge that the CBE JU is working to address.

- The upcoming EIB report *The Bioeconomy 2.0 study* will provide recommendations that can support the reflection on the scope of the group and a strategy for involving the appropriate stakeholders.

Monitoring, via HE key impact pathways (KIPs) and Common JU and CBE specific key performance indicators (KPIs), shows progress and performance.

- On BBI JU legacy, the partnership specific targets were mainly achieved and, in most cases, surpassed. To increase the communication potential of the success of the partnership, and as the BBI funded projects are completed, it could be interesting to develop, in future reports, a compelling narrative to explain the achievement of H2020 KPIs against the targets. CBE JU specific KPIs are progressing at the expected level, given that projects were only started from 2022. The same can be observed for HE Common JU KPIs and the HE KIPs, for which data is in some cases still not available for the same reason

Since the beginning of the partnership, the Union's and BIC's contribution to the CBE JU are in line with the commitments set out in the Council Regulation.

- The overall contribution of the partners to the administrative costs was EUR 11,252,275 (EUR 5,626,138 each).
- The Union's contribution towards operational costs was EUR 551,971,035, including a contribution to promote research and innovation in biotech and biomanufacturing, following the EC communication Building the future with nature: boosting biotechnology and biomanufacturing in the EU (COM 2024/137).
- BIC and its constituent entities have reported a consolidated IKOP and IKAA estimation of 165,240,002 EUR. It is important to note that this amount does not reflect yet the IKOP and IKAA from grants originating in the Call of 2024 that will be taken into account for future reporting. Furthermore, these amounts are expected to increase in the upcoming years, as more innovation actions, including flagships, are planned to be funded.
- The leverage effect of 3.5 for the entire BBI/CBE programme is above the target, and a leverage effect of 5 for innovation actions & flagships shows clearly that the objective of supporting scale-up and stimulating private investments could be realised.

The implementation aspects of the programme continue to be appropriately managed.

- A high standard of operational performance was maintained, measured by the implementation of Call 2024, grant signature and payments, and staff satisfaction.
- The communication activities, supported by the CBE JU Communication Strategy, showcase the partnership and funded projects. Among others, the yearly successful organisation of the info day contributes to increase participation to the open call including newcomers.
- The report identifies the risks associated with the CBE JU's operations, duly reports on how the resources were used, and indicates the efficiency and effectiveness of the CBE JU's internal control system.
- The report reflects management processes and functions meeting the four objectives of the programme office control framework.

- The administrative expenditures used 85% of the Commitment Appropriations. This is an improvement from the year 2023 and the Joint Undertaking will continue to work to reinforce the administrative budget process as recommended by the Council and the Court of Auditors.

Governing Board Conclusion and Recommendations

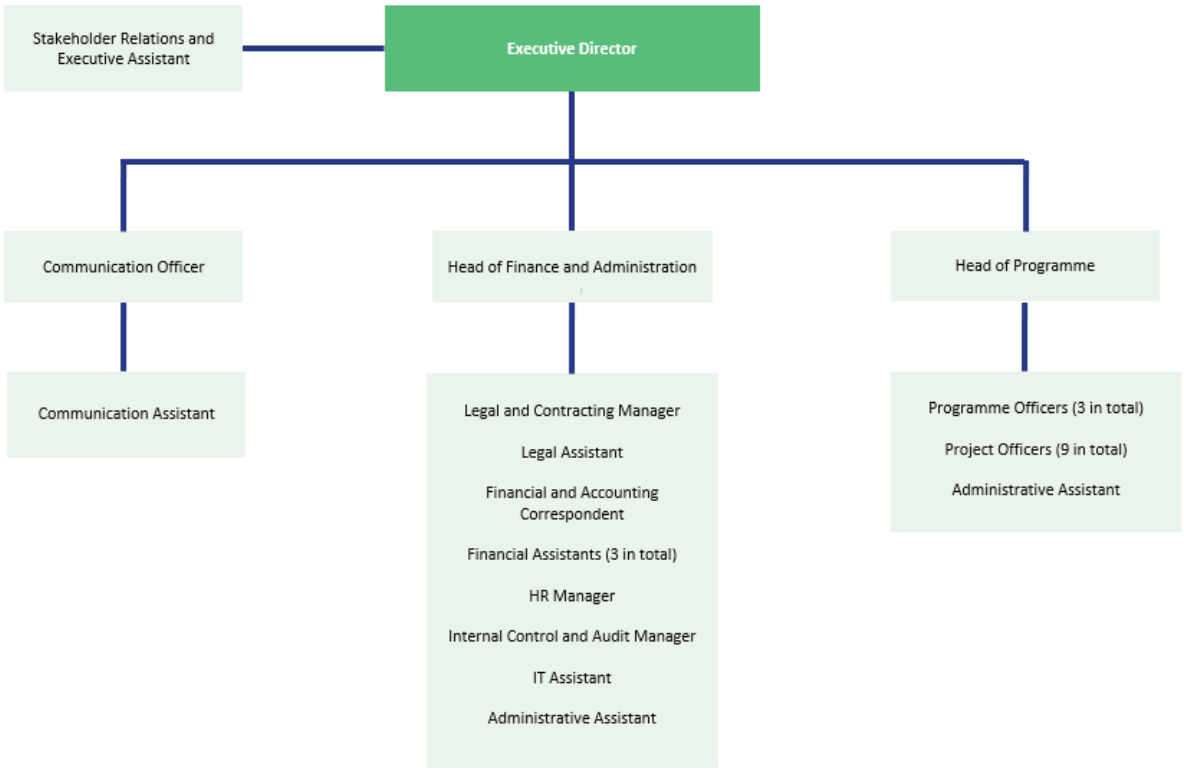
Based on the working group's report, the declaration of assurance from the Executive Director of the CBE JU, and the other information provided in this report, the Governing Board concludes that the 2024 key objectives have been met. These achievements align with the principles of legality and sound financial management.

The Governing Board commends the CBE JU for its good work in 2024 and encourages it to maintain its high standard of excellence. However, the Board notes several areas needing increased attention and requests the CBE JU to:

- Develop and make public and easily accessible tools for disseminating the progress on the CBE JU's specific KPIs.
- Liaise with relevant EC services, on the reporting on Common JU KPIs and HE KIPs, especially on the medium-long term. Start a reflection on how to communicate in a meaningful way the good progress of the partnership.
- Create a strategic approach to leverage synergies with relevant EU, national, and regional initiatives that support innovation in the circular bio-based economy.
- Continue to implement actions to further enhance the participation of entities from Widening Countries in CBE JU activities.
- Finalize the establishment of the Deployment Group on Finances and Investment.
- Continually monitor policy developments at the EU level.
- Maintain an up-to-date phase-out plan for the partnership as mentioned in the SBA.

5. ANNEXES

5.1. ORGANISATIONAL CHART



5.2. ESTABLISHMENT PLAN AND ADDITIONAL INFORMATION ON HR MANAGEMENT

Function group and grade	2023				2024			
	Authorised		Actually filled as of 31/12/2023		Authorised		Actually filled as of 31/12/2024	
	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.
AD 16								
AD 15								
AD 14	1					1		1
AD 13						1		
AD 12	2		1			1		
AD 11			1					2
AD 10						2		2
AD 9	5		3			3		3
AD 8	2		3			2		1
AD 7			1					1
AD 6								
AD 5								
TOTAL AD	10		9		10		10	
AST 11								
AST10								
AST 9								
AST 8								
AST 7								
AST 6								
AST 5	1		1			1		1
AST 4	1		1			1		1
AST 3						1		1
AST 2	1		1					
AST 1								
TOTAL AST	3		3		3		3	
AST/SC 6								
AST/SC 5								
AST/SC 4								
AST/SC 3								
AST/SC 2								
AST/SC 1								
TOTAL AST/SC								
TOTAL AD+AST								
AST/SC								
GRAND TOTAL	13		12		13		13	

Contract Agents	Authorised	Actually filled as of 31/12/2024
Function Group IV	10	10
Function Group III	6	6
Function Group II		
Function Group I		
TOTAL	16	16

Seconded National Experts	Authorised	Actually filled as of 31/12/2024
	0	0

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5.4. PATENTS FROM PROJECTS

Project acronym	Number of IPRs	Type of IPR
AgriChemWhey	2	Patent
BIOMOTIVE	5	Patent
BIOVEXO	3	2 patents + 1 trademark
DEEP PURPLE	2	Patent
EMBRACED	6	Patent
EnzOx2	2	Patent
EUCALIVA	1	Registered design
FARMYNG	4	Patent
HYPERBIOCOAT	1	Patent
InDIRECT	3	Patent
OLEAF4VALUE	1	Patent
PEFerence	8	Patent
PHERA	4	Patent
PULP2VALUE	2	Patent

5.5. SCOREBOARD OF HORIZON 2020 LEGACY KEY PERFORMANCE INDICATORS

		KPI	Definition	Target at the end of H2020	Results in 2024
Industrial leadership	12	SME - Share of participating SMEs Introducing innovations new to the company or the market (covering the period of the project plus three years)	Number and % of Participating SMEs that have introduced innovations to the company or to the market	50 %	Cumulative figures[55] 199 SMEs introduced innovations in the company 240 SMEs introduced innovations in the market
	13	SME – Growth and job creation in participating SMEs	Turnover of company, number of employees	To be developed based on FP7 ex-post evaluation and /or first Horizon 2020 project results	Cumulative figures for projects finalised by 31 December 2024[56] Turnover: EUR 2,319,213,386 Employees: 14,006
Societal challenges	14	Publications in peer-reviewed high impact journals	The percentage of papers published in the top 10 % impact ranked journals by subject category Publications from relevant funded projects (DOI: Digital Object Identifiers); Journal impact benchmark (ranking) data to be collected by commercially available bibliometric databases	On average, 20 publications per EUR 10 million funding	2024: 45 publications Total (2015–2024): 859 publications[57]
	15	Patent applications and patents awarded in the area of the JTI	Number of patent applications by theme; Number of awarded patents by theme	On average, 2 per EUR 10 million funding (2014-2020)	149 patent applications/26 patents awarded[58]
	16	Number of prototypes and testing activities	Number of prototypes and testing (feasibility/demo) activities	To be developed on the basis of first Horizon 2020 results	1,409[59]

[55] Based on input from 142 projects from calls in 2014-2020, and as per information available on CORDA (24/02/2025). Data is reported per project with no indication of SME share.

[56] Based on input from 122 out of 124 projects completed by 31 December 2024. Number of SMEs (distinct beneficiaries) providing data: 374 out of 381.

[57] These figures include all peer-reviewed publications as the bio-based sector is multi-disciplinary meaning we cannot determine the top 10 % impact-ranked journals.

[58] Cumulative figure (2015-2024).

[59] Sum of all prototypes and testing activities reported up until end 2024.

Evaluation	17	Number of joint public-private publications in projects	Number and share of joint public-private publications out of all relevant publications		To be developed on the basis of first Horizon 2020 results	310 (240 peer-reviewed)
	18	New products, processes, and methods launched into the market	Number of projects with new innovative products, processes, and methods. Project count and drop-down list allowing to choose the type processes, products, methods		To be developed on the basis of first Horizon 2020 results	Number of projects with new innovative: Products: 106 Processes: 92 Methods: 56
	NA	Time to inform (TTI) all applicants of the outcome of the evaluation of their application from the final date for submission of completed proposals	To provide applicants with high-quality and timely evaluation results and feedback after each evaluation step by implementing and monitoring a high scientific level peer reviewed process	Number and % of information letters sent to applicants within target, Average TTI (calendar days), Maximum TTI (calendar days)	153 calendar days	n/a in 2024
	NA	Redress after evaluations		Number of redresses requested	n/a	n/a in 2024
Grants	NA	Time to grant (TTG) measured (average) from Call deadline to signature of grants	To minimise the duration of the granting process aiming at ensuring a prompt implementation of the Grant Agreements through a simple and transparent grant preparation process	Number and % of grants signed within target, Average TTG in calendar days, Maximum TTG in calendar days	TTG ≤ 245 days (as % of GAs signed)	n/a in 2024
	NA	Time to sign (TTS) grant agreements from the date of informing successful applicants (information letters)		Number and % of grants signed within target, Average TTS in calendar days, Maximum TTS in calendar days	TTS ≥ 92 calendar days	n/a in 2024
Payments	NA	Time to pay (TTP) (% made on time) -pre-financing - interim payment -final payment	To optimise the payments circuits, both operational and administrative, including payments to experts (Average number of days for Grants pre-financing, interim payments and final payments; Number of experts appointed Average number of days for administrative payments)		-pre-financing (30 days) - interim payment (90 days) -final payment (90 days)	Operational: -pre-financing (n/a in 2024) - interim payments 100% on time. Average TTP 64 days -final payments 100% on time. Average TTP 60 days
HR	NA	Vacancy rate (%)	% of posts filled in, composition of the JU staff		n/a	n/a in 2024
JU efficiency	NA	Budget implementation/ execution: 1. % CA to total budget 2. % PA to total budget	Realistic yearly budget proposal, possibility to monitor and report on its execution, both in commitment (CA) and payments (PA), in line with sound financial management principle % of CA and PA		100% in CA and PA	CA execution (n/a in 2024) PA execution 72% (kEUR 19 479 out of total kEUR 26 988 (prior year unused reactivations)

	N A	Administrative Budget: Number and % of total of late payments	Realistic yearly budget proposal, possibility to monitor and report on its execution in line with sound financial management principle (Number of delayed payments % of delayed payments (of the total))	n/a	63 (10%) of a total 654 payments were late (BBI + CBE combined)

5.6. SCOREBOARD OF HORIZON EUROPE COMMON KEY IMPACT PATHWAYS INDICATORS (KIPS)[60]

The data in the table below corresponds to the 21 Call 2022 projects (starting in Q2-Q3 2023) and the 30 Call 2023 project (starting Q2-Q3 2024), which are still at the early stages and therefore their contributions are still limited.
Only short-term indicators are currently available. Medium- and long-term indicators will be ready at a later stage in the programme.
The data for these indicators is centrally collected to the European Commission's Horizon Europe dashboard.

Key Impact Pathway[61]	Short-term	Medium-term	Longer-term	Detail per action or globally for 2024
Towards scientific impact				
1-Creating high-quality new knowledge	Publications -Number of peer-reviewed scientific publications resulting from the Programme	Citations -Field-Weighted Citation Index of peer-reviewed Publications resulting from the Programme	World-class science -Number and share of peer-reviewed publications resulting from the projects funded by the Programme that are core contribution to scientific fields	0
2-Strengthening human capital in R&I	Skills -Number of researchers involved in upskilling (training, mentoring/coaching, mobility and access to R&I infrastructures) activities in projects funded by the Programme	Careers -Number and share of upskilled researchers involved in the Programme with increased individual impact in their R&I field	Working conditions -Number and share of upskilled researchers involved in the Programme with improved working conditions, including researchers' salaries	893
3-Fostering diffusion of knowledge and open science	Shared knowledge -Share of research outputs (open data/publication/software etc.) resulting from the Programme shared through open knowledge infrastructures	Knowledge diffusion -Share of open access research outputs resulting from the Programme actively used/cited	New collaborations -Share of Programme beneficiaries which have developed new transdisciplinary/trans-sectoral collaborations with users of their open access research outputs resulting from the Programme	0
Towards societal impact				
4-Addressing Union policy priorities and	Results -Number and share of results aimed at addressing identified Union policy priorities and global	Solutions -Number and share of innovations and research outcomes addressing identified	Benefits -Aggregated estimated effects from use/exploitation of results funded by the Programme on tackling identified	0

[60] Based on Annex V to Regulation 2021/695/EU

global challenges through R&I	challenges (including SDGs) (multidimensional: for each identified priority) Including: Number and share of climate-relevant results aimed at delivering on the Union's commitment under the Paris Agreement	Union policy priorities and global challenges (including SDGs) (multidimensional: for each identified priority) Including: Number and share of climate-relevant innovations and research outcomes delivering on Union's commitment under the Paris Agreement	Union policy priorities and global challenges (including SDGs), including contribution to the policy and law-making cycle (such as norms and standards) (multidimensional: for each identified priority) Including: Aggregated estimated effects from use/exploitation of climate-relevant results funded by the Programme on delivering on the Union's commitment under the Paris Agreement including contribution to the policy and law-making cycle (such as norms and standards)	
5-Delivering benefits and impact through R&I missions	R&I mission results -Results in specific R&I missions (multidimensional: for each identified mission)	R&I mission outcomes - Outcomes in specific R&I missions (multidimensional: for each identified mission)	R&I mission targets met -Targets achieved in specific R&I missions (multidimensional: for each identified mission)	Not available
6-Strengthening the uptake of R&I in society	Co-creation -Number and share of projects funded by the Programme where Union citizens and end-users contribute to the co-creation of R&I content:	Engagement -Number and share of participating legal entities which have citizen and end-user engagement mechanisms in place after the end of projects funded by the Programme	Societal R&I uptake -Uptake and outreach of co-created scientific results and innovative solutions generated under the Programme	Not available
Towards technological / economic impact				
7-Generating innovation-based growth	Innovative results -Number of innovative products, processes or methods resulting from the Programme (by type of innovation) & Intellectual Property Rights (IPR) applications	Innovations -Number of innovations resulting from the projects funded by the Programme (by type of innovation) including from awarded IPRs	Economic growth -Creation, growth & market shares of companies having developed innovations in the Programme	0
8-Creating more and better jobs	Supported employment -Number of full time equivalent (FTE) jobs created, and jobs maintained in participating legal entities for the project funded by the Programme (by type of job)	Sustained employment -Increase of FTE jobs in participating legal entities following the project funded by the Programme (by type of job)	Total employment -Number of direct & indirect jobs created or maintained due to diffusion of results from the Programme (by type of job)	0
9- Leveraging investments in R&I	Co-investment (= Total Cost(After the reduced funding methodology applied) – EU Contribution) -Amount of public & private investment mobilised with the initial investment from the Programme	Scaling-up -Amount of public & private investment mobilised to exploit or scale-up results from the Programme (including foreign direct investments)	Contribution to '3 % target' - Union progress towards 3 % GDP target due to the Programme	99,719,958.67 EUR

5.7. HORIZON EUROPE PARTNERSHIP KEY PERFORMANCE INDICATORS[62]

N°	Criterion addressed	Proposed common indicators	Baseline[63]	Results for 2024	Target [64]
1	**Additionality**	Progress towards (financial and in-kind) contributions from partners other than the Union – i.e. committed vs. actual	n/a: planning of contributions still ongoing until 2024. Interim results BBI overall target: EUR 2.73 billion. 2023 result: EUR 2.53 billion (9385%)	Total contributions reported, incurred, not yet certified: EUR 126.265.4 million out of EUR 438 million committed (29%) Planning of contributions still ongoing until 2028.	1000 million €
2	**Additionality/ Synergies**	Additional investments[65] triggered by the EU contribution, including qualitative impacts related to additional activities	n/a	Not available yet	n/a
3	**Directionality**	Overall (public and private, in-kind and cash) investments mobilised towards EU priorities	Green Deal: 100% of investments Resilience: 100% of investments	Green Deal: 100% Resilience: 100%	n/a
4	**International visibility and positioning**	International actors[66] involved	43 (not unique) beneficiaries from 6 countries (Australia, Bangladesh, Hong Kong, South Africa, Switzerland and United States)	17 (not unique) beneficiaries from 4 countries (China, Japan, South Korea and Switzerland)	n/a

[62] Based on an interim report published on 21 June 2021 (Commission Experts' report, Section 5 and Appendix 1).

[63] The baseline refers to the cumulative results for BBI JU programme, CBE JU predecessor partnership under H2020.

[64] In the Council Regulation, targets have been only set for the financial and in-kind contributions of both partners, EU and BIC. For the other indicators, there are no targets set for 2027.

[65] According to the guidance, these are additional activities or investments triggered by the partnership (not as part of the partnership but in addition to it). Partnership acts as a kind of a trigger (e.g., because of a partnership, MS decides to launch a national programme). These can include e.g. private investments in training or activities required for putting on the market the product/service which results from the European Partnership; or public investments mobilised from other EU/ national / regional programmes (e.g. ERDF, CEF)

[66] Number of beneficiaries and associated partners from third countries (non-EU, non-associated countries). The baseline refers to the BBI JU programme and the 2024 results of the 2022 and 2023 call projects, which were signed in 2023 and 2024, respectively.

N°	Criterion addressed	Proposed common indicators	Baseline[63]	Results for 2024	Target [64]
5	**Transparency and openness**	Share & type of stakeholders and countries invited/engaged[67]	4307 unique eligible applicants from 75 different countries (33% SME[68], 71% private for profit companies, 22% Higher Education Establishments and Research Centers)	3292 unique eligible applicants from 62 different countries (38% SME*, 62% Private for Profit Companies, 28% Higher Education Establishments and Research Centers)	n/a
	6		No and types of newcomer members[69] in partnerships and their countries of origin (geographical coverage)	n/a	93 unique eligible newcomer BIC member applicants from 28 different countries (35% SME*, 81% Private for Profit Companies, 9% Higher Education Establishments and Research Centers
	7		No and types of newcomer beneficiaries[70] in funded projects (in terms of types and countries of origin)	1200 unique beneficiaries	366 unique newcomer beneficiaries from 44 different countries (28% RIA, 65% IA and 7% CSA)
	8		Number and type of coordinated and joint activities with other European Partnerships[71]	n/a	**4 activities with 3 Partnerships**: • Safe and Sustainable Food Systems – 1 portfolio synergy • Sustainable Blue Economy – 1 outreach & dissemination • Textiles of the Future – 2 coordinated programming
	9		Number and type of coordinated and joint activities with other R&I Initiatives at EU /national/ regional/sectorial level[72]	n/a	**16 activities with 7 Initiatives:** • AlgaeInitiative : 1 outreach & dissemination • COST: 4 outreach & dissemination • JRC Knowledge Center for Bioeconomy: 1 portfolio synergy

[67] Number of unique applicants. The baseline refers to the BBI JU programme, 2024 results refer to applicants of the 2022, 2023 and 2024 calls.

[68] SMEs include both private and non-profit SME.

[69] In legal terms, the only member of the CBE JU partnership other than the EU is the Bio-based industries consortium (BIC). In this indicator, the number of newcomer applicants that are BIC members is reported, 2023 results refer to applicants of the 2023 call.

[70] The baseline refers to unique beneficiaries under the BBI JU programme, and 2023 results refer to unique beneficiaries in CBE JU 2022 call projects.

[71] Please see a more detailed description of these activities in section 1.7.2 Progress against HE Common JUs KPIs.

[72] Please see a more detailed description of these activities in section 1.7.2 Progress against HE Common JUs KPIs.

N°	Criterion addressed	Proposed common indicators	Baseline[63]	Results for 2024	Target [64]
					• HE MSCA-SE: 1 coordinated programming, 4 outreach & dissemination, 1 portfolio synergy • HE cluster 6: 1 portfolio synergy • HE Mission Oceans: 1 coordinated programming, 1 outreach & dissemination • HE EIC: 1 coordinated programming
	10		Complementary and cumulative funding from other Union funds (HE, National funding, ERDF, RRF, Other cohesion policy funds, CEF, DEP, LIFE, other)[73]	n/a	**SRG15 countries:** 3 – unaware funding synergies, 6 – ERDF, 4 – ESF+, 4 – CF, 11 – EAFRD, 6 – EMFAF, 3 – RRF, 3 – JTF, 2 – IF
	11		Visibility of the partnership in national, European, international policy/industry cycles	n/a	**Total number of events: 54** Participation of CBE JU at international events at global, European and national level [74]: **- 4 Global events:** EU-US workshops on Bioeconomy; 2nd World Biopolymers and Bioplastics Innovation; World Bio Markets; Global Bioeconomy Summit **- 22 EU events:** IFIB; BIOKET; IBISBA mini-summit; Synergies between EU Missions and European Partnerships; ECOSYSTEX Insights; BIOEAST Bioeconomy Conference; Bioeconomy Changemakers festival; Science Business round table; European Partnership Stakeholder Forum; CBE JU Info Day; COST connect: bio-based resources, materials and solutions; Exploring the Role and Potentialities of Living Labs in European Partnerships; EUBCE; IPIFF; European Biotech Week; ECOSYSTEX Conference; European farmers and agri-cooperatives Congress; European Process Industry Conference - A.SPIRE; ECOMONDO; EBU Anniversary; European

[73] Currently there is no complementary funding from other Union funds. However, complementary/cumulative funding is being monitored through: i) the States' representatives group's national reporting, where countries indicate on other EU funding instruments to support activities relevant for the circular/bio-based sector and ii) via the CBE JU specific KPI *10.3 Number of projects with synergies with other funding programmes at EU, national or regional level.* See section 1.7.3 Progress towards JU-specific KPIs for more information.

[74] Please see Annex 5.12 for a full list of events with CBE JU participation

N°	Criterion addressed	Proposed common indicators	Baseline[63]	Results for 2024	Target [64]
					Business Summit; Bioeconomy Regions Summit; Hungarian Presidency bioeconomy event **- 25 CBE JU national info days:** AT, HR, CZ, DK, EE, FR, DE, EL, HU, IE, IL, IT, LV, LT, NL, PL, PT, RO, SK, SI, ES, SE, CH, TR, UK **- 3 National events:** Talent 4BBI Winter School (IE), Bioeconomia Circolare per la Transizione Ecologica (IT), CBE Openings for Danish companies (DK)

5.8. SCOREBOARD OF KEY PERFORMANCE INDICATORS SPECIFIC TO THE CBE JU

The KPIs reported in this table are the one set for the CBE JU partnership in its Strategic Research and Innovation Agenda (SRIA).

KPI	Unit of measurement	Estimated target 2025[a]	Estimated target 2027[a]	Ambition >2027	Results for 2024
Resources (input), processes and activities					
1. Strategic participation and integration of feedstock producers and suppliers towards large-scale valorisation of sustainable biomass	1.1. No of primary producers, involved as project beneficiaries and/or engaged in value chains at project level	52	79	100	18
	1.2. N oof (bio)waste management actors, involved as project beneficiaries and/or engaged in value chains at project level	10	16	20	14
3. Ensure environmental sustainability of feedstock	3.1. No of projects using feedstock generated with practices that contribute to enhance biodiversity	16	24	30	9*
	3.2. No of projects using feedstock generated with practices aiming at zero-pollution (soil, water, air) and/or at reducing water consumption	19	28	40	9*
	3.3. No of projects using feedstock generated with practices contributing to climate change mitigation and/or adaptation	32	47	60	12*
7. Improve the market uptake of biobased products	7. No of brand owners involved as project partners	24	38	50	41

	and/or engaged with other mechanisms				
Outcomes					
2. Unlock sustainable and circular biobased feedstock for the industry	2. No of innovative bio-based value chains created or enabled based on sustainably sourced biomass	60	95	120	42*
4. Improve environmental sustainability of bio-based production processes and value chains	4.1. No of projects with innovative & sustainable processes that contribute to GHG emissions reduction	32	47	60	24*
	4.2. No of projects developing innovative & sustainable processes that improve on resource efficiency and zero waste	32	47	60	26*
	4.3. No of projects developing innovative & sustainable processes enabling to address zero pollution	32	47	60	23*
	4.4. No of projects with innovative & sustainable processes with improved energy efficiency	32	47	60	22*
	4.5. No of products with improved life cycle environmental performance	25	40	50	26*
5. Expand circularity in bio-based value chains	5.1. No of innovative products that are biodegradable, compostable, recyclable, reused or upcycled (circular by design)	51	76	100	45*
6. Increase innovative bio-based outputs and products	5.2. No projects developing circular production practices (incl. industrial & industrial-urban symbiosis)	20	32	40	25*
	6.1. No of innovative bio-based dedicated outputs, with novel or significantly	47	71	100	71*

	improved properties vs relevant alternatives 6.2. No of innovative bio-based drop-in outputs meeting applications requirements	16	24	30	26*
8. Attract investment on the bio-based sector	8. No of actions implemented at project level to attract investment and/or to create awareness in the investment/funding community	15	23	30	16*
9. Increase resilience and capacity in the bio-based sector	9. No of projects contributing to develop the skills and capacity needed by the EU bio-based sector	26	40	50	44*
10. Improve participation of regions and countries with high unexploited potential and strategic interest to develop it	10.1. No of participants from the underrepresented EU countries and region	50	100	150	59
	10.2. No of regional hubs established and operated to process bio-based feedstocks and other cooperation aspects	8	13	15	16*
	10.3. No of projects with synergies with other funding programmes at EU, national or regional level	30	47	60	21*

(*) Projected contributions reported by CBE JU projects to be validated via expert review of the project reporting.

5.9. IKAA REPORT

The IT tool for IKAA planning and reporting being unavailable until Q3 2024, the IKAA values estimated for the period 2024-2031 were filled in manually by the beneficiaries. Data is reported at scope of activities level because this is the level of granularity that could be achieved for this exercise.

In 2025, the CBE JU will continue to collaborate with the beneficiaries to ensure consistent reporting via the corporate IKAA IT tool.

IKAA REPORT FOR YEAR 2024 (Call 2023)													
DESCRIPTION							Annual reporting				Cumulative reporting*		
Title	Description	Category	Scope/Type	AA linked to project	Project acronym	AA linked to programme	Estimated value for the year	Incurred value for the year	Certified value for the year	Estimated AA total value	Cumulative AA value incurred	Cumulative AA value certified	Cumulative AA value not yet certified
NA	NA	NA	(a) investments in new facilities demonstrating a new value chain, including investments in durable equipment, tools and accompanying infrastructure, in particular related to regional deployment and its sustainability verification;	YES	NA	NO	€ 8.775.386,00	€ 8.775.386,00	NA	€ 8.775.386,00	€ 32.473.088,08	NA	€ 32.473.088,08
NA	NA	NA	(b) Investments in a new innovative and sustainable production plant or Flagship	YES	NA	NO	€ 200.000,00	€ 200.000,00	NA	€ 200.000,00	€ 26.555.955,00	NA	€ 26.555.955,00
NA	NA	NA	(c) investments in new research and innovation and justified infrastructure, including facilities, tools, durable equipment or pilot plants (research centres);	YES	NA	NO	€ 21.653.460,00	€ 21.653.460,00	NA	€ 21.653.460,00	€ 45.795.522,00	NA	€ 45.795.522,00
NA	NA	NA	(d) Standardization activities (outside previous scope of investments)	YES	NA	NO	€ 4.200,00	€ 4.200,00	NA	€ 4.200,00	€ 4.200,00	NA	€ 4.200,00
NA	NA	NA	(e) communication, dissemination and awareness-raising activities (not falling in previous scope of investments)	YES	NA	NO	€ 1.010.325,00	€ 1.010.325,00	NA	€ 1.010.325,00	€ 1.125.325,00	NA	€ 1.125.325,00
NA	NA	NA	f) Other scope not indicated	YES	NA	NO	€ 187.140,00	€ 187.140,00	NA	€ 187.140,00	€ 2.805.140,00	NA	€ 2.805.140,00
						Totals	**€ 31.830.511,00**	**€ 31.830.511,00**	**€ -**	**€ 31.830.511,00**	**€ 108.759.230,08**	**€ -**	**€ 108.759.230,08**

*Cumulative AA value = Call 2022 AA Total Value (as reported in 2023) + Call 2023 AA Total Value (as reported in 2024).

In addition to the data provided in the table, an amount of €122,616,000 without yearly breakdown has been reported in 2024 by the beneficiaries of call 2023. This data is not reflected in the table because the latter reports per year.

Cumulative amount of IKAA planned by beneficiaries without yearly breakdown for call 2022 (as provided in 2023) and call 2023 (as provided in 2024) is €122,727,100 (per scope of activities). The cumulative amount of IKAA reported as estimated for the whole projects cycle for calls 2022 and call 2023 is € 774.383.570,10.

5.10. FINAL ANNUAL ACCOUNTS

This annex starts on the next page.

Circular Bio-based Europe Joint Undertaking

Annual accounts of the Circular Bio-based Europe Joint Undertaking

Financial year 2024

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CERTIFICATION OF THE ACCOUNTS

I acknowledge my responsibility for the preparation and presentation of the annual accounts of the Circular Bio-based Europe Joint Undertaking, in accordance with Article 52 of the Model Financial Regulation ('MFR') [1] and I hereby certify that the annual accounts of the Circular Bio-based Europe JU for the year 2024 have been prepared in accordance with Chapter 8 and the accounting rules adopted by the Commission's Accounting Officer, as are to be applied by all the institutions and Union bodies.

I have obtained from the Authorising Officer, who certified its reliability, all the information necessary for the production of the accounts that show the Circular Bio-based Europe Joint Undertaking's assets and liabilities and the budgetary implementation.

Based on this information, and on such checks as I deemed necessary to sign off the accounts, I have a reasonable assurance that the accounts present fairly, in all material aspects, the financial position, the results of the operations and the cash-flow of the Circular Bio-based Europe JU.

My assurance statement related to the Final Accounts 2024 will be transmitted to the Accounting Officer of the Commission. The Management Representation Letter, signed by the Authorising Officer and myself, will be sent to the European Court of Auditors for the audit of the Final Accounts.

Andrea Tóth

Accounting Officer of the Circular Bio-based Europe Joint Undertaking

[1]Commission Delegated Regulation (EU) 2019/887 of 13 March 2019 on the model financial regulation for public-private partnership bodies referred to in Article 71 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council

BACKGROUND INFORMATION NOTE

1. General background on the entity

Establishment

Horizon Europe – the EU Framework Programme for Research and Innovation (2021-2027) – aims to increase the EU's research and innovation impact by combining European partnership co-investment with additional private and public sector funds in areas where the scope and scale of the research and innovation resources can help achieve the EU's Horizon Europe priorities, notably, its Pillar II – Global challenges and European industrial competitiveness.

The setting up of the joint undertakings under Horizon Europe was regulated through Council Regulation (EU) 2021/2085 of 19 November 2021 (also known as the Single Basic Act) and published in the Official Journal on 30 November 2021.

Under the Single Basic Act (Article 174.3), the Circular Bio-based Europe Joint Undertaking (CBE JU) shall be the legal and universal successor, in respect of all contracts, including employment contracts and grant agreements, liabilities and acquired property, of the Bio-based Industries Joint Undertaking established by Council Regulation (EU) 2014/560 of 6 May 2014, which it shall replace and succeed. The Joint Undertaking is based in Brussels. The Bio-based Industries Joint Undertaking, known also as BBI JU, was a public-private partnership between the European Union (EU) and the Bio-based Industries Consortium (BIC). It aimed to bring together all relevant stakeholders and contributes to establishing Europe as a key player in the research, demonstration and deployment of advanced bio-based products and biofuels.

Mission

CBE JU's mission is to implement, under Horizon Europe rules, the Strategic Research and Innovation Agenda (SRIA) developed jointly by the industry and by the European Commission and adopted by the CBE JU Governing Board, by organising calls for proposals to support research, demonstration and deployment activities enabling the collaboration between stakeholders along the entire value chains, covering primary production of biomass, processing industry and final use.

Main operational activities

CBE JU contributes to a more resource-efficient and sustainable low-carbon economy, and to increasing economic growth and employment, in particular in rural areas, by developing sustainable and competitive bio-based industries in Europe. This is based on advanced biorefineries that source their biomass sustainably and in particular aims to:

- Accelerate the innovation process and development of the bio-based innovative solutions;
- Accelerate the market deployment of the existing mature innovative bio-based systems; and
- Ensure high level of environmental performance of bio-based industrial systems.

Governance

CBE JU is headed by an Executive Director, who is accountable to a Governing Board – the main decision-making body of the CBE JU. The Governing Board has overall responsibility for the strategic orientation and the operations of the CBE JU and supervises the implementation of its activities.

It brings together the two groups of the JU's Members:

- The EU, represented by the European Commission (the Commission);

- The Bio-based Industries Consortium Aisbl (the 'BIC'), a non-profit organisation established under Belgium law, with its permanent office in Brussels, Belgium.

The Governing Board is made up of five representatives from the Commission and five representatives of the Members other than the Union, at least one of which should represent SMEs.

Other bodies of CBE JU are:

- The Scientific Committee, which is composed of a balanced representation of worldwide recognised experts from academia, industry, SMEs, non-governmental organisations and regulatory bodies;
- The States' Representatives Group, which is composed of one representative of each Member State and of each country associated to Horizon Europe;
- The Stakeholders' or Deployment Groups.

Sources of financing

CBE JU is jointly funded by the EU and the "Members other than the Union" (BIC) through financial contributions paid in instalments and in-kind contributions consisting of the costs incurred by them in implementing indirect actions that are not reimbursed by the CBE JU. The resources of the CBE JU entered to its budget are composed of:

- Members' financial contributions to the administrative costs;
- Members' financial contributions to the operational costs;
- Any revenue generated by the JU;
- Any other financial contributions, resources and revenues.

2. Annual accounts

Basis for preparation

The legal framework and the deadlines for the preparation of the annual accounts are set by the Model Financial Regulation (MFR)[1]. As per this regulation, the annual accounts are prepared in accordance with the rules adopted by the Accounting Officer of the Commission (EU Accounting Rules, EAR), which are based on internationally accepted accounting standards for the public sector (IPSAS).

Accounting Officer

In accordance with the MFR, the Governing Board of the entity appoints the Accounting Officer who is, amongst other tasks, responsible for preparation of the annual accounts.

The Single Basic Act[2] establishing the new generations of JUs, required, within one year following the date of entry into force of the Regulation, the establishment of back-office arrangements, to provide horizontal support functions to the joint undertakings, by concluding service level agreements. The Accounting Back Office (Acco BOA) was established and took over the accounting services from the Accounting Officer of the European Commission from 1 December 2022.

Following the decision of the **Circular Bio-based Europe** Joint Undertaking Governing Board of 29 November 2022 (CBE-GB-15/22), on behalf of the Back Office Arrangement Accounting (BOA), Ms. Katty Hancq, as of 1 December 2022, acts as the Accounting Officer and Ms. Andrea Tóth and Mr. Andrei Hretu were nominated as Deputy Accounting Officers of **Circular Bio-based Europe** Joint Undertaking. Following the enactment of the contingency back-up plan for long term leaves, the deputisation of Ms. Andrea Tóth was activated from the date of 15 November 2024, in accordance with the GB decision CBE-GB-15/22. The deputy Accounting Officer was appointed with the same responsibility and the same conditions as the Accounting Officer. The deputisation remains active until revoked.

Composition of the annual accounts

The annual accounts cover the period from 1 January to 31 December and comprise the financial statements and the reports on the implementation of the budget. While the financial statements and the complementary notes are prepared on an accrual accounting basis, the budget implementation reports are primarily based on movements of cash.

Process from provisional accounts to discharge

The provisional annual accounts prepared by the Accounting Officer are transmitted, by 1 March of the following year, to the European Court of Auditors (ECA) and to the audit company contracted by the JU. Following the audit, the Accounting Officer prepares the final annual accounts and submits them to the Governing Board for opinion.

The final annual accounts, together with the opinion of the Governing Board, are sent to the Accounting Officer of the Commission, the European Court of Auditors, the European Parliament and the Council, by 1 July of the following financial year. The ECA scrutinises the final annual accounts and includes any findings in the annual report for the European Parliament and the Council.

It falls to the Council to recommend, and then to the European Parliament to decide, whether to grant discharge to the Executive Director in respect of the implementation of the budget for a given financial year. Amongst other elements this decision is also based on a review of the accounts and the annual report of the ECA.

[1] Commission Delegated Regulation (EU) 2019/887 of 13 March 2019 on the model financial regulation for public-private partnership bodies referred to in Article 71 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council (OJ L 14 2, 29.5.2019, p. 16)

[2] Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe and repealing Regulations (EC) No 219/2007, (EU) No 557/2014, (EU) No 558/2014, (EU) No 559/2014, (EU) No 560/2014, (EU) No 561/2014 and (EU) No 642/2014

3. Operational highlights

Achievements of the year

The CBE JU accomplished its major annual objectives, by signing the second batch of grant agreements under the Horizon Europe mandate, successfully completing evaluations of the third call for proposals, recruiting new staff, managing the running projects and promoting their achievements.

The most important achievements of 2024 were as follows.

The third CBE JU call under Horizon Europe was published in April and the evaluations were successfully carried out in late autumn, setting the basis for the signature of the grant agreements in 2025.

Over the same period, the JU's founding partners prepared the ambitious Annual Work Plan 2025, also with a large call of over EUR 163 million. The definition of the call topics for 2025 was a result of the joint effort in defining and respecting a very tight planning and in involving to a maximum extent the Scientific Committee and the States' Representatives Group in the process.

On the project management side, the GAP of the 2023 call was successfully completed within the deadlines, and the pre-financing payments all made. For ongoing BBI JU-funded projects 36 interim and final payments were processed on time, covering over EUR 96 million of requested EU contribution. The total amount of net payments for 2024 was over EUR 19 million, reaching a 72% execution of the voted budget.

While the budget implementation was good overall, it was impacted by requests for the extension of two large flagship projects as well as some changes to the duration of certain projects' reporting periods, which combined resulted in an under-consumption of the budget. On the administrative side the BBI JU legacy budget was executed in priority (as it should have been fully executed by end 2024), so the CBE JU administrative budget remained with a surplus, which will be reactivated in the budgets of 2025 and 2026.

The CBE JU 2024 communications highlights include a successful Info Day for potential applicants with about 500 attending in person and over 1.500 remote participants. In addition, 1.300 networking meetings were held on the day, presenting the CBE JU's achievements in high-level stakeholder events, such as World Bio Markets, EUBCE, the Global Bioeconomy Summit, Ecomondo and the Sustainable Industry Week, and promoting the successes of CBE JU-funded projects, in particular the completion of several flagship biorefineries, which attracted high media interest.

On the IT side, CBE JU set up a new web-based IT tool in 2024, to gather information from projects on their achievements, including the KPIs and impacts of the Joint Undertaking. The first project was concluded in the summer with the full submission of data from the new CBE JU funded projects. This first module was focused on helping to organise the feedback from projects about their achievements, to support a structured elaboration of data and to facilitate the communication and reporting about the CBE JU specific objectives. A second contract was launched at the end of 2024 to develop the internal interface and to improve the validation and data extraction for reporting. This contract is expected to be finished by mid-2025.

On the recruitment side, the new Executive Director took up his functions in early 2024. Several other recruitments took place in 2024 (Head of Administration and Finance Unit, Financial Officer, Internal Control Coordinator, Project Officers) reaching the full CBE JU staff establishment plan.

CBE JU took the lead in the setting up of the Back Office Arrangement for HR jointly with IHI JU. The SLA including all JUs was signed in early 2024 as well as the multi-annual work plan. In this period the JUs continued working on joint actions, under the coordination of CBE JU, improving the coherence of the HR IT landscape and legal framework, sharing reserve lists and implementing joint selection procedures where possible. A new call for expression of interest to become a confidential counsellor was launched to reinforce the joint network of confidential counsellors.

Budget and budget implementation

The voted budget and amendments

2024 was the third year for which there was a combined budget for both CBE JU (Horizon Europe) as well as the BBI JU (Horizon 2020) legacy. On the administrative side 2024 was the last year for the execution of the BBI remaining budget whereas final payment(s) for the last BBI JU ongoing projects are expected to be made up to

(at least) the end of 2027. The Governing Board adopted the 2024 budget on 14 December 2023, for the global amount of EUR 221.898 thousand in commitment appropriations (CA) and EUR 190.228 thousand in payment appropriations (PA), including prior year unused reactivated (C2) appropriations). The budget was amended twice in 2024:

1. In mid-February 2024, to i) reactivate the remaining BBI JU administrative appropriations from 2023 (around EUR 640 thousand in CA and EUR 1.047 thousand in PA), with a view to executing a maximum before 2024 year end, and ii) to transfer around EUR 400 thousand in (BBI JU) PA from Title 1 to Title 2 (also to optimise the execution.
2. In October 2024, to transfer EUR 650 thousand in CA from both the CBE and BBI administrative budget Title 2 to Title 1 to ensure the salary-related payments of the last quarter, following unforeseen variations in the forecast pattern of execution.

The total amended budget (including prior year reactivations) was then CA EUR 222.538 thousand and PA EUR 191.275 thousand. The total amended C1 (fresh budget), without prior year reactivations, was EUR 151.800 thousand in CA and EUR 160.910 thousand in PA. There were large amounts of prior year reactivated appropriations as follows:

- Administrative
  - ✓ BBI JU: CA EUR 1.448 thousand, PA EUR 2.465 thousand
  - ✓ CBE JU: CA EUR 1.379 thousand, PA EUR 782 thousand
- Operational
  - ✓ BBI JU: CA EUR 23.147 thousand, PA EUR 26.590 thousand
  - ✓ CBE JU: PA EUR 45.536 thousand, PA EUR 529 thousand

The BBI JU operational CA were reactivated from Horizon 2020 (H 2020) to Horizon Europe (H Europe) in line with the provisions of the Single Basic Act establishing the Joint Undertakings under H Europe. They are deemed part of the global envelope and not in addition to it.

The reactivated appropriations were consumed wherever possible in priority in line with CBE's Financial Rules art. 6(5), and reached 95% consumption on the admin CA side, 91% on the admin PA side, 99% on the operational CA side and 72% on the operational PA side by year end.

At the end of 2024, there was a total remaining surplus of BBI JU unused appropriations of:

- EUR 311 thousand in administrative CA (including C8 decommitted RAL) and EUR 275 thousand in administrative PA.
- EUR 399 thousand in operational CA and EUR 7.509 thousand in operational PA.

A decision will be taken in early 2025 as to how best to deal with the remaining BBI JU administrative appropriations.

CBE JU showed a much stronger execution for the first time (particularly on the administrative side, where the BBI JU legacy budget was running down). The total C1 administrative budget for CBE JU was EUR 3.502 thousand in CA and PA. Of this amount, EUR 2.704 thousand – 77% -was executed in CA and EUR 2.847 thousand – 81% -in PA. On the operational side, for CBE JU, the operational commitment appropriations available for the CBE 2024 call, including EUR 68.683 thousand from prior year reactivations, totalled EUR 214.680 thousand (this excludes EUR 1.000 thousand in the operational budget for expert-evaluators of the call). The call was launched for EUR 213 million and, following the call evaluations, the amount committed for the call was EUR 206.680 thousand, as EUR 7 million was decommitted for reactivation in the 2025 call in line with the CBE JU Financial Rules. However, another EUR 7,5 million will also be decommitted in 2025 (for reactivation in the call 2026). This means that the total operational CA execution was 93%.

A Governing Board decision was taken at the end of 2024 to reactivate in the 2025 budget of CBE JU:

- Administrative:
  - ✓ CA: EUR 2.071 thousand from 2023 and 2024
  - ✓ PA: EUR 2.371 thousand from 2022 and 2023
- Operational:
  - ✓ CA: EUR 23.638 thousand in CA from 2022 and 2023 (of which EUR 5 thousand from BBI JU)

- ✓ PA: EUR 21.495 thousand from 2022, 2023 and 2024 (of which EUR 13.948 thousand from BBI JU and EUR 7.547 thousand from CBE JU).

Administrative expenditure

The total consumption of the administrative budget was 85% in CA and 86% in PA – a substantial improvement compared to 2023. For BBI JU, in its final year of budget execution, the rates were 99% in CA and 89% in PA.

- **Title 1**:
  - Overall CA implementation of staff-related costs was 95% (for BBI JU the total T1 execution was 100%). For CBE, 93% of its salaries-only budget of EUR 2.037 thousand was executed. On the BBI JU side, salary costs (total budget EUR 1.005 thousand) showed a strong execution at 100%. All Title 1 chapters achieved an execution of over 90% with the exception of teambuilding expenses (EUR 11 thousand, 71%) and CBE sundry recruitment (EUR 13 thousand, 31%)
  - The overall PA execution in Title 1 is 94% of which 96% for BBI JU and CBE JU 93%.

- **Title 2:**
  - The 2024 infrastructure budget achieved an overall CA implementation of 72% in 2024. For BBI JU (budget EUR 1.440 thousand) the total was 99%. All Title 2 chapters showed an execution of > 80% with the exception of:
    - ✓ CBE rentals (EUR 778 thousand, 21%). This account was actually used to consolidate extra appropriations in the re-balancing exercise performed in Q4 2024 (including a budgetary amendment) to ease the execution of a very tight budget, and not all of the transferred credits were eventually needed.
    - ✓ CBE IT equipment purchases (EUR 551 thousand, 75%)
    - ✓ CBE formal meetings (EUR 49 thousand, 69%)
    - ✓ CBE studies and consultancy (EUR 51 thousand, 75%)

  - The overall PA consumption in Title 2 is 78%. For BBI JU this is 89%. For BBI, execution of all chapters was 100% except for rental costs (total EUR 397 thousand – 43% execution). On the CBE JU side all T2 chapters showed an execution of <->80% with the exception of (taking the more material amounts):
    - ✓ IT equipment purchases (EUR 557 thousand, 76%)
    - ✓ Communication materials (EUR 110 thousand, 27%)
    - ✓ Audit costs (EUR 51 thousand, 3%)
    - ✓ External staff (EUR 283 thousand, 79%)
    - ✓ Expert reviewers (EUR 150 thousand, 53%)

For all of these chapters, invoices are expected to be received in early 2025.

Operational expenditure

- **CA**. CBE JU call 2024 was launched in April 2024 for a total of EUR 213 million, of which accepted proposals totalled EUR 197.509 thousand. The GAP has been launched and is expected to be finalised by end May 2025.
  In May 2024 the GAP of the two CBE JU 2023 calls, totalling EUR 216,5 million, was finalised and between March and November the 30 pre-financing payments relating to these calls were made.

- **PA.**
  - **BBI JU:** For the ongoing BBI projects, the Programme Office achieved an overall 72% implementation, with payments of 36 interim and final periodic reports for grants from the previous BBI JU calls (total EUR 19.479 thousand out of total Title 3 BBI JU projects' budget of EUR 26.988 thousand). This lower than anticipated execution was the result of a small number of payments anticipated towards year end being delayed until 2025, as well as the announced termination of one of the older flagship projects, for which a large payment was forecast in 2024 and there will instead be a recovery in 2025. The BBI JU remaining project payments are expected to continue until at least 2027.

- **CBE JU:** The pre-financing payments for CBE call 2023 (totalling EUR 132.149 thousand) reached 84%. No interim payments are due for the first CBE JU calls until 2025.

BOA implementation update

The Single Basic Act of the Joint Undertakings (SBA) indicated that the JUs should achieve synergies via the establishment of back-office arrangements operating in some identified areas. The following four areas have been identified as a priority by the JUs:

- Accounting
- Legal (administrative procurements)
- Information and Communication Technologies (ICT)
- Human Resources (HR)

The Accounting Back office is operational since December 2022, where the Accounting Officer of Clean Aviation JU (CAJU) acts as one of the service providers. The BOA procurement covers mainly the administrative type of joint procurements addressing needs of the JUs. CAJU has a leading role to coordinate the BOA procurement and to establish a common procurement planning for the JUs.

Impact of the activities in the financial statements

In the financial statements, the impact of the above-mentioned activities resulted in:

- **Pre-financing:** In 2023 the second two calls for proposals under the Horizon Europe Programme were launched and the pre-financing occurred in 2024 for a total EUR 132.149 thousand. Nevertheless, for ongoing BBI JU projects and the finalisation of several projects the clearing of the pre-financing with incurred expenses, impacted the increase of pre-financing from EUR 140.368 thousand in 2023 to EUR 224.471 thousand in 2024 (see note **2.3**).
- **Increase of payables:** The payables increased by EUR 15.816 thousand (2023: EUR 78.642 thousand from 2024: EUR 94.459 thousand) mainly because the in-kind contributions to be validated for the provisional accounts as well as the contributions in cash to be validated increased significantly. (see note **2.7**).
- **Operational costs:** The decrease in the operational costs (2023: EUR 120.180 thousand; 2024: EUR 88.642 thousand) is mainly due to a reduction in the estimated in-kind contributions and the validated costs claims for operational project costs (see note **3.4**).

CIRCULAR BIO-BASED EUROPE JOINT UNDERTAKING

FINANCIAL YEAR 2024

FINANCIAL STATEMENTS AND EXPLANATORY NOTES

BALANCE SHEET

	Note	31.12.2024	31.12.2023
NON-CURRENT ASSETS			
Intangible asset under construction	2.1	*280.018,75*	*112.436,10*
Property, plant and equipment	2.2	*78.376,00*	*67.588,26*
Long term pre-financing	2.3	*149.143.106,98*	*75.056.897,80*
		149.501.501,73	***75.236.922,16***
CURRENT ASSETS			
Short term Pre-financing	2.3	*75.327.635,62*	*65.310.787,10*
Exchange receivables and non-exchange recoverable	2.4	*61.495.212,82*	*58.448.096,64*
		136.822.848,44	***123.758.883,74***
TOTAL ASSETS		***286.324.350,17***	**198.995.805,90**
CURRENT LIABILITIES			
Short term provisions	2.6	-	-
Payables and other liabilities	2.7	*94.458.589,64*	*78.642.417,55*
Accrued charges and deferred income	2.8	*44.969.226,00*	*29.433.882,75*
		139.427.815,64	***108.076.300,30***
TOTAL LIABILITIES		***139.427.815,64***	**108.076.300,30**
NET ASSETS			
Contribution from Members	2.9	*1.127.945.150,86*	*979.226.825,78*
Accumulated deficit		*(888.307.320,18)*	*(760.505.237,48)*
Economic result of the year		*(92.741.296,15)*	*(127.802.082,70)*
NET ASSETS		***146.896.534,53***	**90.919.505,60**
LIABILITIES AND NET ASSETS		***286.324.350,17***	**198.995.805,90**

STATEMENT OF FINANCIAL PERFORMANCE

	Note	2024	2023
REVENUE			
Revenue from non-exchange transactions			
Recovery of operating expenses	3.1	*880.283,22*	*116.279,90*
		880.283,22	**116.279,90**
Revenue from exchange transactions	3.3		
Other exchange revenue		*71.464,60*	*18.188,69*
		71.464,60	***18.188,69***
Total revenue		**951.747,82**	**134.468,59**
EXPENSES			
Operational costs	3.4	*(88.642.113,32)*	*(120.180.335,69)*
Staff costs	3.5	*(3.105.891,08)*	*(2.757.139,48)*
Financial expenses	3.6	*(126.413,53)*	*(2.842.169,01)*
Other expenses	3.7	*(1.818.626,04)*	*(2.156.907,11)*
Total expenses		***(93.693.043,97)***	***(127.936.551,29)***
ECONOMIC RESULT OF THE YEAR		**(92.741.296,15)**	**(127.802.082,70)**

CASHFLOW STATEMENT[1]

	2024	2023
Economic result of the year	*(92.741.296,15)*	*(127.802.082,70)*
Operating activities		
Depreciation and amortisation	*25.690,86*	*27.534,25*
(Increase)/Decrease in pre-financing	*(84.103.057,70)*	*(12.488.783,41)*
(Increase)/Decrease in exchange receivables and non-exchange	*(3.047.116,18)*	*23.010.126,87*
(Increase)/Decrease in payables	*15.816.172,09*	*958.974,89*
(Increase)/Decrease in accrued charges & deferred income	*15.535.343,25*	*(5.557.206,06)*
(Increase)/Decrease in cash contributions	*136.408.434,86*	*96.024.106,58*
(Increase)/Decrease in in-kind contributions	*12.309.890,22*	*25.959.237,28*
(Increase)/Decrease in short term provision		*-*
Other non-cash movements	*0,06*	*-*
Investing activities		
(Increase)/Decrease in intangible assets and property, plant, equipment	*(204.061,31)*	*(131.857,70)*
NET CASHFLOW	**-**	**-**
Net Increase/(decrease) in cash and cash equivalents	*-*	*-*
Cash and cash equivalents at the beginning of the year	*-*	*-*
Cash and cash equivalents at year-end	*-*	*-*

[1] The treasury of Circular Bio-based Europe JU is integrated into the Commission's treasury system. Because of this Circular Bio-based Europe JU does not have any bank accounts of its own. All payments and receipts are processed via the Commission's treasury system and registered on intercompany accounts, which are presented under the heading non-exchange recoverables.

STATEMENT OF CHANGES IN NET ASSETS

	Contribution from Members	Accumulated Surplus/(Deficit)	Economic result of the year	Net Assets
BALANCE AS AT 31.12.2022	**857.243.481,92**	**(656.755.282,24)**	**(103.749.955,24)**	**96.738.244,44**
Allocation 2022 economic result	*-*	*(103.749.955,24)*	*103.749.955,24*	*-*
Cash contribution	*96.024.106,58*	*-*	*-*	*96.024.106,58*
Contribution in-kind	*25.959.237,28*	*-*	*-*	*25.959.237,28*
Economic result of the year	*-*	*-*	*(127.802.082,70)*	*(127.802.082,70)*
BALANCE AS AT 31.12.2023	**979.226.825,78**	**(760.505.237,48)**	**(127.802.082,70)**	**90.919.505,60**
Allocation 2023 economic result	*-*	*(127.802.082,70)*	*127.802.082,70*	*-*
Cash contribution	*136.408.434,86*	*-*	*-*	*136.408.434,86*
Contribution in-kind	*12.309.890,22*	*-*	*-*	*12.309.890,22*
Economic result of the year	*-*	*-*	*(92.741.296,15)*	*(92.741.296,15)*
BALANCE AS AT 31.12.2024	**1.127.945.150,86**	**(888.307.320,18)**	**(92.741.296,15)**	**146.896.534,53**

NOTES TO THE FINANCIAL STATEMENTS

1. SIGNIFICANT ACCOUNTING POLICIES

1.1. ACCOUNTING PRINCIPLES

The objective of financial statements is to provide information about the financial position, performance and cash flows of an entity that is useful to a wide range of stakeholders.

The overall considerations (or accounting principles) to be followed when preparing the financial statements are laid down in EU Accounting Rule 1 'Financial Statements' and are the same as those described in IPSAS 1: fair presentation, accrual basis, going concern, consistency of presentation, materiality, aggregation, offsetting and comparative information. The qualitative characteristics of financial reporting are relevance, faithful representation (reliability), understandability, timeliness, comparability and verifiability.

1.2. BASIS OF PREPARATION

1.2.1. Reporting period

Financial statements are presented annually. The accounting year begins on 1 January and ends on 31 December.

1.2.2. Currency and basis for conversion

The annual accounts are presented in euros, the budget implementation tables are presented in thousands of euros, the euro being the EU's functional currency. Foreign currency transactions are translated into euros using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the re-translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of financial performance. Different conversion methods apply to property, plant and equipment and intangible assets, which retain their value in euros at the date when they were purchased.

Year-end balances of monetary assets and liabilities denominated in foreign currencies are translated into euros on the basis of the European Central Bank (ECB) exchange rates applying on 31 December.

Euro exchange rates

Currency	31.12.2024	31.12.2023	Currency	31.12.2024	31.12.2023
BGN	**1,9558**	1,956	**PLN**	**4,275**	4,34
CZK	**25,185**	24,724	**RON**	**4,9743**	4,976
DKK	**7,4578**	7,453	**SEK**	**11,459**	11,096
GBP	**0,8218**	0,887	**CHF**	**0,9412**	0,926
NOK	**11,795**	11,241	**JPY**	**163,06**	156,33
HUF	**411,35**	382,80	**USD**	**1,0389**	1,105

1.2.3. Use of estimates

In accordance with IPSAS and generally accepted accounting principles, the financial statements necessarily include amounts based on estimates and assumptions by management based on the most reliable information available. Significant estimates include, but are not limited to: amounts for employee benefit liabilities, financial risk of accounts receivable and the amounts disclosed in the notes concerning financial instruments, impairment allowance for financial assets at amortised cost and for financial guarantee contract liabilities, accrued revenue and charges, provisions, degree of impairment of intangible assets and property, plant and equipment, net realisable value of inventories, contingent assets and liabilities. Actual results could differ from those estimates. Reasonable estimates are an essential part of the preparation of financial statements and do not undermine their reliability. An estimate may need revision if changes occur in the circumstances on which the estimate was based or as a result of new information or more experience. By its nature, the revision of an estimate does not relate to prior periods and is not the correction of an error. The effect of a change in accounting estimate shall be recognised in the surplus or deficit in the periods in which it becomes known.

1.2.4. Application of new and revised European Union Accounting Rules (EAR)

Revised IPSAS standards which have been issued, and are effective for annual periods beginning on or after 1 January 2025

The following new IPSAS standards and amendments are effective as of January 1, 2025:

- **IPSAS 46 Measurement:** IPSAS 46 brings measurement guidance together in a single standard and introduces a public sector specific current value measurement basis for assets held for their operational capacity and provides additional generic guidance on fair value. IPSAS 46 will be effective for periods beginning on or after January 1, 2025.

- **IPSAS 45 Property, Plant, Equipment:** IPSAS 45 introduces the current operational value as a measurement basis in the updated current value model for assets and also identifies the characteristics of heritage and infrastructure assets and provides new guidance on how these types of assets should be recognized and measured. IPSAS 45 will be effective for periods beginning on or after January 1, 2025.

- **IPSAS 43 Leases**: IPSAS 43 introduces new or amended requirements with respect to lease accounting. It introduces significant changes to lessee accounting by removing the distinction between operating and finance lease and requiring the recognition of a right -of-use asset and a lease liability at commencement for all leases, except for short-term leases and leases of low value assets. IPSAS 43 will be effective for periods beginning on or after January 1, 2025.

- **IPSAS 44 Non-current Assets Held for Sale and Discontinued Operations:** IPSAS 44 specifies the accounting for assets held for sale and the presentation and disclosure of discontinued operations. IPSAS 44 includes additional public sector requirements, in particular, the disclosure of the fair value of assets held for sale that are measured at their carrying amounts, when the carrying amount is materially lower than their fair value. IPSAS 44 will be effective for periods beginning on or after January 1, 2025.

- **Amendment to IPSAS 43 Leases:** This amendment offers a practical expedient to account for lease modifications in IPSAS 43, Leases. This amendment will be effective for periods beginning on or after January 1, 2025.

The following new IPSAS standards and amendments are effective as of January 1, 2026:

- **IPSAS 49 Retirement Benefits:** IPSAS 49 prescribes the accounting and reporting requirements for public sector retirement benefit plans, which provide retirement benefits to public sector employees and other eligible participants. IPSAS 49 will be effective for periods beginning on or after January 1, 2026.

- **IPSAS 47 Revenue:** IPSAS 47 is a single standard to account for revenue transactions in the public sector. IPSAS 47 replaces the existing three revenue standards and presents accounting models which will improve financial reporting and support effective public sector financial management. IPSAS 47 will be effective for periods beginning on or after January 1, 2026.

- **IPSAS 48 Transfer Expenses:** IPSAS 48 provides guidance on a major area of expenditure for governments and other public sector entities. IPSAS 48 fills a gap which had previously led to ambiguity and inconsistency of accounting policies in the public sector. IPSAS 48 will be effective for periods beginning on or after January 1, 2026.

- **Amendment to IPSAS 1, Presentation of Financial Statements:** The amendments clarify the principles related to the right to defer settlement for at least twelve months (with or without covenants); and the meaning of 'settlement' when a liability is rolled over under and existing loan facility. These amendments will be effective for periods beginning on or after January 1, 2026.

- **Amendment to IPSAS 43 Leases:** Amendments require a seller-lessee to subsequently measure lease liabilities arising from a leaseback in a way that it does not recognise any gain or loss that relates to the right-of-use it retains. This amendment will be effective for periods beginning on or after January 1, 2026.

The following new IPSAS standards and amendments are effective as of January 1, 2027:

- **Concessionary Leases and Other Arrangements Conveying Rights over Assets (Amendments to IPSAS 43, IPSAS 47, and IPSAS 48):** The new guidance enhances IPSAS 43, IPSAS 47, and IPSAS 48 by addressing the accounting for arrangements that are prevalent in the public sector consistent with the principles in those Standards. These amendments will be effective for periods beginning on or after January 1, 2027.

- **IPSAS 50, Exploration for and Evaluation of Mineral Resources:** IPSAS 50 provides guidance related to the costs incurred for exploration for, and evaluation of, mineral resources (for example, minerals, oil, natural gas and similar non-regenerative resources), as well as the costs of determining the technical feasibility and commercial viability of extracting the mineral resources. IPSAS 50 will be effective for periods beginning on or after January 1, 2027.

- **Stripping Costs in the Production Phase of a Mine (Amendments to IPSAS 12):** Appendix A in IPSAS 12, Inventories, provides interpretive guidance on accounting for waste removal costs that are incurred in surface mining activities during the production phase of the mine. These amendments will be effective for periods beginning on or after January 1, 2027.

The Accounting Officer of the European Commission (following consultation with the accounting officers of other EU bodies) is assessing the impact of the above standards on the Annual Accounts and considering a possible revision of relevant EAR accordingly. For the new standards and amendments where early application has been permitted, no early application has been adopted.

The new IPSAS 43 standard will have a limited impact on the Joint Undertaking. The corresponding EAR 8 (Leases) was issued in 2025, the entities shall apply the revised EAR for annual financial statements covering periods beginning on or after 1 January 2027. The scope of lease contracts falling under IPSAS 43 will be limited to the rental commitment of the office building of the Joint Undertaking. The total commitment under note **3.7** can give an indication of the impact of the new standard on the financial statements.

1.3. BALANCE SHEET

1.3.1. Intangible assets

An intangible asset is an identifiable non-monetary asset without physical substance. An asset is identifiable if it is either separable or arises from binding arrangements. Acquired intangible assets are stated at historical cost less accumulated amortisation and impairment losses. Internally developed intangible assets are capitalised when the relevant criteria of the EU accounting rules are met, and the expenses relate solely to the development phase of the asset. Intangible assets are amortised on a straight-line basis over their estimated useful lives (3 to 11 years).

1.3.2. Property, plant and equipment

All property, plant and equipment are stated at historical cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition, construction or transfer of the asset. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits or service potential associated with the item will flow to the entity and its cost can be measured reliably. Repairs and maintenance costs are charged to the statement of financial performance during the financial period in which they are incurred. Land is not depreciated, as it is deemed to have an indefinite useful life. Assets under construction are not depreciated as these assets are not yet available for use. Depreciation is calculated using the straight-line method to allocate their cost less their residual values over their estimated useful lives, as follows:

Type of asset	Straight line depreciation rate
Buildings	*4 % to 10 %*
Plant and equipment	*10 % to 25 %*
Furniture and vehicles	*10 % to 25 %*
Computer hardware	*25 % to 33 %*
Other	*10 % to 33 %*

Gains or losses on disposals are determined by comparing proceeds less selling expenses with the carrying amount of the disposed asset and are included in the statement of financial performance.

Leases

A lease is an agreement whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time. Leases are classified as either finance leases or operating leases.

Finance leases are leases where substantially all the risks and rewards incidental to ownership are transferred to the lessee.

An operating lease is a lease other than a finance lease, i.e., a lease where the lessor retains substantially all the risks and rewards incidental to ownership of an asset. When entering an operating lease as a lessee, the operating lease payments are recognised as an expense in the statement of financial performance on a straight-line basis over the lease term with neither an asset nor a liability recognised in the balance sheet.

1.3.3. Impairment of non-financial assets

Assets that have an indefinite useful life are not subject to amortisation/depreciation and are tested annually for impairment. Assets that are subject to amortisation/depreciation are tested for impairment whenever there is an indication at the reporting date that an asset may be impaired. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable (service) amount. The recoverable (service) amount is the higher of an asset's fair value less costs to sell and its value in use.

Intangible assets and property, plant and equipment residual values and useful lives are reviewed, and adjusted if appropriate, at least once per year. If the reasons for impairments recognised in previous years no longer apply, the impairment losses are reversed accordingly.

1.3.4. Financial assets

The classification of the financial instruments is determined at initial recognition. Based on the management model and the asset contractual cash-flow characteristics the financial assets can be classified in three categories: Financial assets at amortised cost ('AC'), financial assets at fair value through net assets/equity ('FVNA') or financial assets at fair value through surplus or deficit ('FVSD'). Based on this classification, the entity has only 'financial assets at amortised cost', which are exchange receivables.

Financial assets at amortised cost are non-derivative financial assets that meet two conditions: 1) The entity holds them in order to collect the contractual cash flows. 2) On specified days, there are contractual cash flows that are solely payments of the principal and interest on the outstanding principal.

Financial assets at amortised cost are included in current assets, except for those with maturity of more than 12 months from the balance sheet reporting date.

Initial recognition and measurement

Financial assets at amortised cost are initially recognised at their fair value plus the transaction costs.

Subsequent measurement

Financial assets at amortised cost are carried at amortised cost, which is the amount initially recognised minus the principal repayments, plus or minus the cumulative amortisation of the interests using the effective interest method. In addition, the entity recognises a loss allowance for expected credit losses over the lifetime of the financial assets. At each reporting date, the annual movement in the loss allowance adjusts the carrying amount of the financial asset. In the statement of financial performance, the entity recognises an impairment gain or loss for the adjustment of the loss allowance.

Derecognition

Financial assets at amortised cost are derecognised either when the rights to receive cash flows from the investments have expired or are waived, or and when the entity has transferred substantially all risks and rewards of ownership to another party.

1.3.5. Pre-financing amounts

Pre-financing is a payment intended to provide the beneficiary with a cash advance, i.e., a float. It may be split into a number of payments over a period defined in the particular contract, decision, agreement or basic legal act. The float or advance is either used for the purpose for which it was provided during the period defined in the agreement or it is repaid. If the beneficiary does not incur eligible expenditure, he has the obligation to return the pre-financing advance to the entity. Thus, as the entity retains control over the pre-financing and is entitled to a refund for the ineligible part, the amount is recognised as an asset.

Pre-financing is initially recognised on the balance sheet when cash is transferred to the recipient. It is measured at the amount of the consideration given. In subsequent periods pre-financing is measured at the amount initially recognised on the balance sheet less eligible expenses (including estimated amounts where necessary) incurred during the period.

1.3.6. Receivables and recoverables

The EU accounting rules require separate presentation of exchange and non-exchange transactions. To distinguish between the two categories, the term 'receivable' is reserved for exchange transactions, whereas for non-exchange transactions, i.e., when the EU receives value from another entity without directly giving approximately equal value in exchange, the term 'recoverables' is used (e.g., recoverables from Member States related to own resources).

Receivables from exchange transactions meet the definition of financial instruments. The entity classified them as financial assets at amortised cost and measured them accordingly.

Recoverables from non-exchange transactions are carried at fair value as at the date of acquisition less write-down for impairment. A write-down for impairment is established when there is objective evidence that the entity will not be able to collect all amounts due according to the original terms of the recoverables. The amount of the write-down is the difference between the asset's carrying amount and the recoverable amount. The amount of the write-down is recognised in the statement of financial performance.

1.3.7. Cash and cash equivalents

Cash and cash equivalents are financial assets at amortised cost and include cash at hand, deposits held at call or at short notice with banks, and other short-term highly liquid investments with original maturities of three months or less.

1.3.8. Payables

Included under accounts payable are both amounts related to exchange transactions such as the purchase of goods and services, and to non-exchange transactions e.g., to cost claims from beneficiaries, grants or other EU funding, or pre-financing received (see note **1.3.5**), or non-validated in-kind contributions to operational activities (see note **1.6.2**).

Where grants or other funding are provided to the beneficiaries, the cost claims are recorded as payables for the requested amount, at the moment when the cost claim is received. Upon verification and acceptance of the eligible costs, the payables are valued at the accepted and eligible amount.

Payables arising from the purchase of goods and services are recognised at invoice reception for the original amount. The corresponding expenses are entered in the accounts when the supplies or services are delivered and accepted by the entity.

1.3.9. Accrued and deferred revenue and charges

Transactions and events are recognised in the financial statements in the period to which they relate. At year end, if an invoice is not yet issued but the service has been rendered, or the supplies have been delivered by the entity or a contractual agreement exists (e.g., by reference to a contract), an accrued revenue will be recognised in the financial statements. In addition, at year end, if an invoice is issued but the services have not yet been rendered or the goods supplied have not yet been delivered, the revenue will be deferred and recognised in the subsequent accounting period.

Expenses are also accounted for in the period to which they relate. At the end of the accounting period, accrued expenses are recognised based on an estimated amount of the transfer obligation of the period. The calculation of accrued expenses is done in accordance with detailed operational and practical guidelines issued by the Accounting Officer. These aim at ensuring that the financial statements provide a faithful representation of the economic and other phenomena they purport to represent. By analogy, if a payment has been made in advance for services or goods that have not yet been received, the expense will be deferred and recognised in the subsequent accounting period.

1.3.10. Provisions

Provisions are recognised when the entity has a present legal or constructive obligation towards third parties as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Provisions are not recognised for future operating losses. The amount of the provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date. Where the provision involves a large number of items, the obligation is estimated by weighting all possible outcomes by their associated probabilities ('expected value' method).

When an obligation arises by uncertain future events that are not wholly within the control of the entity, a contingent liability is disclosed (refer to note **1.5.2**).

1.3.11. Net assets

Net assets are the residual of assets and liabilities and comprise accumulated contributions received from the Members of the JU (EU and industry) less the accumulated contributions used. The contributions include financial contributions received by the JU and contributions provided by the Members to the funded projects in-kind. The net assets also contain reserves, if applicable. Refer to note **1.6** for details.

1.4. STATEMENT OF FINANCIAL PERFORMANCE

1.4.1. Revenue

Revenue comprises gross inflows of economic benefits or service potential received and receivable by the entity, which represents an increase in net assets, other than increases relating to contributions from owners.

Depending on the nature of the underlying transactions in the statement of financial performance, revenue is distinguished between:

(i) Revenue from non-exchange transactions

Revenue from non-exchange transactions are taxes and transfers because the transferor provides resources to the recipient entity, without the recipient entity providing approximately equal value directly in exchange. Transfers are inflows of future economic benefits or service potential from non-exchange transactions, other than taxes. For the EU entities, transfers mostly comprise funds received from the Commission (e.g., balancing subsidy to the traditional agencies, operating subsidy for the delegation agreements).

The entity shall recognise an asset in respect of transfers when the entity controls the resources as a result of a past event (the transfer) and expects to receive future economic benefits or service potential from those resources, and when the fair value can be reliably measured. An inflow of resources from a non-exchange transaction recognised as an asset (i.e., cash) is also recognised as revenue, except to the extent that the entity has a present obligation in respect of that transfer (condition), which needs to be satisfied before the revenue can be recognised. Until the condition is met the revenue is deferred and recognised as a liability.

(ii) Revenue from exchange transactions

Revenue from the sale of goods and services is recognised when the significant risk and rewards of ownership of the goods are transferred to the purchaser. Revenue associated with a transaction involving the provision of services is recognised by reference to the stage of completion of the transaction at the reporting date.

1.4.2. Expenses

Expenses are decreases in economic benefits or service potential during the reporting period in the form of outflows or consumption of assets or the incurring of liabilities that result in decreases in net assets. They include both the expenses from exchange transactions and expenses from non-exchange transactions.

Expenses from exchange transactions arising from the purchase of goods and services are recognised when the supplies are delivered and accepted by the entity. They are valued at the original invoice amount. Furthermore, at the balance sheet date expenses related to the service delivered during the period for which an invoice has not yet been received or accepted are recognised in the statement of financial performance.

Expenses from non-exchange transactions relate to transfers to beneficiaries and can be of three types: entitlements, transfers under agreement and discretionary grants, contributions and donations. Transfers are recognised as expenses in the period during which the events giving rise to the transfer occurred, as long as: the nature of the transfer is allowed by regulation, or an agreement has been signed authorising the transfer; any eligibility criteria have been met by the beneficiary; and a reasonable estimate of the amount can be made.

When a request for payment or cost claim is received and meets the recognition criteria, it is recognised as an expense for the eligible amount. At year end, incurred eligible expenses due to the beneficiaries but not yet reported are estimated and recorded as accrued expense.

1.5. CONTINGENT ASSETS AND LIABILITIES

1.5.1. Contingent assets

A contingent asset is a possible asset that arises from past events and of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity. A contingent asset is disclosed when an inflow of economic benefits or service potential is probable.

1.5.2. Contingent liabilities

A contingent liability is either a possible obligation of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or a present obligation where it is not probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation.

A contingent liability also arises in the rare circumstances where a present obligation exists but cannot be measured with sufficient reliability.

Contingent liabilities are not recognised in the accounts. They are disclosed unless the possibility of an outflow of resources embodying economic benefits or service potential is remote.

1.6. CONTRIBUTIONS FROM MEMBERS

The contributions from the Members of the Joint Undertaking (JU) form the funding of the JU and are treated as contributions from owners. An owner in this context does not mean an owner in the sense of owning shares of the JU (no shares are issued) but rather in the sense of political interest and governance of the JU by exercising the voting rights linked to these contributions.

1.6.1. Financial contributions

Financial contributions are contributions of Members made in cash in order to provide funding of the operational or administrative needs of the JU.

Horizon 2020 Programme:

Financial contributions are contributions of Members made in cash in order to provide funding of the operational or administrative needs of the JU. These financial contributions are recognised in net assets in the period in which the enforceable right to receive the payment was established.

Horizon Europe Programme:

- EU Contributions: In accordance with Article 19 of the Financial Framework Partnership Agreement (FFPA) 2020-2027, the JU received from the European Union a pre-financing payment for the implementation of the Horizon Europe Framework Programme.

- According to the Specific Guidance for the accounting of the EU cash contributions received by the Joint Undertakings under FFPA related to MFF 2021-2027, the contributions payments made by the EU for the Horizon Europe Programme are accounted for as 'Contributions in cash to be validated'. During the provisional accounting closure, the JU should, on the basis of the payment's implementation report, determine the amounts of operating and administrative expenditure that have been covered from the EU financial contributions to the Horizon Europe Programme. In the accounting of the JU the underlying amount should be, for the purpose of the preparation of the provisional financial statements, transferred from the provisional payments to the net assets of the JU (cut-off procedure). It will be qualified as final payments and formally transferred to the net assets once the Commission has accepted the Consolidated Annual Activity Report – AAR (Art. 19.2 FFPA)

- Private (Bio-based Industries Consortium) contributions: financial contributions are contributions made in cash in order to provide funding of the administrative needs of the JU. These financial contributions are recognised in net assets in the period in which the enforceable right to receive the payment was established.

1.6.2. In-kind contributions

Members other than the EU (i.e., 'Private Members') can also contribute resources other than cash, e.g., laboratory equipment, specialised staff, etc. These in-kind contributions consist of the costs incurred by Private Members in implementing indirect actions.

The Regulation distinguishes between two types of in-kind contributions: (1) in-kind contributions to operational activities (IKOP) and (2) in-kind contributions to additional activities (IKAA).

The IKOP represents in-kind contributions made to the JU linked to its work plan and co-financed by the EU.
The IKOP is recognised in the net assets of the JU in the period in which the conditions for Members' contributions stipulated by the Regulation are met.

As IKOP calculated from periodic cost claims of projects is not automatically recorded in the statement of financial performance, at year end, this incurred IKOP as well as IKOP not yet reported (via received costs claims) is estimated and recorded as payables and other liabilities ('Contributions of Members to be validated').

The EU makes available cash contributions to the CBE projects in advance of the project start date (until the total of this pre-financing payment and other periodic cost reimbursements reach 90% of the agreed maximum grant amount for the project), providing the beneficiaries with a sufficient "frontloading" of funds to implement the programme activities. On the other hand, the in-kind contributions provided by the private Members can be verified and recognised only after the activities are concluded, reported and certified.

The EU cash contributions are validated and recognised in the accounts of the JU when paid to the JU (or based on the payments processed by the JU, in the case of HE, see point **2.9**) at the beginning of the project implementation, while Members' in-kind contributions are only recognised after validation of the costs incurred and declared. Consequently, due to this time gap, during the programme implementation the amounts of contributions recognised per member category (EU and Private Members) differ significantly from each other. This gap between the recognised amount of EU cash contributions on the one hand and in-kind contributions on the other will be closed as the programme approaches the finalisation stage.

Due to major simplifications introduced in the H2020 Programme (which continue to be applied also for Horizon Europe), the certification of IKOP is based on the CFS[2] certificate for the total eligible project costs. The certificates for IKOP are only due to be submitted to the JU after the end of the last project reporting period. This time frame causes a major delay between the date when the IKOP balances are committed (upon signature of the grant) and the moment they are finally validated and recognised in the net assets of the JU.

The IKAA (under Horizon 2020 Programme) are contributions linked to implementing additional activities, included in the annual additional activities plan annexed to the main part of the work programme, that do not receive financial support from the Joint Undertaking but contribute to its objectives.

These additional activities (under the Horizon Europe Programme) are directly linked to the projects and activities of the Circular Bio-based Europe Joint Undertaking, including in particular:

a) investments in new facilities demonstrating a new value chain, including investments in durable equipment, tools and accompanying infrastructure, in particular related to regional deployment and its sustainability verification;

b) investments in a new innovative and sustainable production plant or flagship;

c) investments in new research and innovation and justified infrastructure, including facilities, tools, durable equipment or pilot plants (research centres);

d) standardisation activities.

[2] CFS: Certificate on Financial Statements

Because the outflow of resources related to those activities is outside of the JU's control, these contributions are not recognised in its financial statements. However, to provide a complete picture of the operational activities related to the JU they are still disclosed as additional information in the notes.

2. NOTES TO THE BALANCE SHEET

ASSETS

2.1. INTANGIBLE ASSETS

Intangible assets under construction	TOTAL
Gross carrying amount at 31.12.2023	*112.436,10*
Additions	*167.582,65*
Gross carrying amount at 31.12.2024	**280.018,75**
Accumulated depreciation at 31.12.2023	-
Depreciation charge for the year	-
Accumulated depreciation at 31.12.2024	**-**
NET CARRYING AMOUNT AT 31.12.2024	**280.018,75**
NET CARRYING AMOUNT AT 31.12.2023	*112.436,10*

All intangible assets held by CBE are under construction. In 2023, IT development costs were booked under "intangible assets under construction". This related to the development of a KPI tool for project reporting, with a total end value of EUR 280 thousand. The second phase of the development, for EUR 167 thousand, was contracted in 2024, but deliverables are only expected in 2025. The tool was still considered under development at the end of 2024. Once operational it will be transferred to the intangible assets account and depreciated over the useful life of 5 years.

2.2. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are tangible assets that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and are expected to be used during more than one reporting period.

	Plant and equipment	Furniture and vehicles	Computer hardware	Other	TOTAL
Gross carrying amount at 31.12.2023	-	*40.623,37*	*109.205,06*	*70.557,54*	*220.385,97*
Additions	-	*8.274,18*	*28.204,48*	-	*36.478,66*
Transfers to other categories	-	*27.107,02*	-	*(27.107,02)*	-
Gross carrying amount at 31.12.2024	-	**76.004,57**	**137.409,54**	**43.450,52**	**256.864,63**
Accumulated depreciation at 31.12.2023	-	*(27.216,37)*	*(83.750,06)*	*(41.831,28)*	*(152.797,71)*
Depreciation charge for the year	-	*(6.866,44)*	*(13.040,48)*	*(5.784,00)*	*(25.690,92)*
Transfers to other categories	-	*(6.776,76)*	-	*6.776,76*	-
Accumulated depreciation at 31.12.2024	-	**(40.859,57)**	**(96.790,54)**	**(40.838,52)**	**(178.488,63)**
NET CARRYING AMOUNT AT 31.12.2024	-	**35.145,00**	**40.619,00**	**2.612,00**	**78.376,00**
NET CARRYING AMOUNT AT 31.12.2023	-	*13.407,00*	*25.455,00*	*28.726,26*	*67.588,26*

The transfer of EUR 27 thousand relates to a large number of standing desks, which were presented under "Other" in previous years and have now been more accurately reflected under "Furniture and Vehicles". The additions are related to additional desks and new laptops.

2.3. PRE-FINANCING

Pre-financing is a payment intended to provide the beneficiary with a cash advance, i.e. a float. It may be split into a number of payments over a period defined in the particular underlying contract, decision, agreement or basic legal act.

	31.12.2024	31.12.2023
Long term pre-financing	*149.143.106,98*	*75.056.897,80*
Short term pre-financing	*75.327.635,62*	*65.310.787,10*
Total	**224.470.742,60**	**140.367.684,90**

For all pre-financing amounts open at 31 December 2024 a case-by-case assessment was performed and all pre-financing that was considered unlikely to be cleared in the course of 2025 was classified as non-current pre-financing. The outstanding pre-financing presented under this heading is net of estimated (cut-off) expenses for ongoing projects without validated cost claims as at 31 December 2024.

The clearing of pre-financing against year-end (cut-off) adjustments amounted to EUR 79.354 thousand (2023: EUR 96.185 thousand) for ongoing projects without validated cost claims as at 31 December 2024. The remaining portion of the cut-off expenses is recorded in accrued charges (see note **2.8**).

In 2024 the 4th call for proposals under the Horizon Europe Programme was launched (there was one in 2022 and two in 2023) and the pre-financing will only be paid in 2025. For ongoing CBE JU and BBI JU projects - with the finalisation of several projects and the clearing of the pre-financing against incurred expenses, there was an overall increase of pre-financing from EUR 140.368 thousand in 2023 to EUR 224.471 thousand in 2024 (of which EUR 194.685 thousand for H Europe and EUR 29.786 thousand for H 2020).

2.4. EXCHANGE RECEIVABLES & NON-EXCHANGE RECOVERABLES

Exchange transactions are transactions in which the entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of goods, services or use of assets) to the other party in exchange. Non-exchange transactions are transactions in which an entity either receives value from another entity without directly giving approximately equal value in exchange or gives value to another entity without directly receiving approximately equal value in exchange. The amounts included under this heading are fully composed of current receivables from exchange transactions.

	31.12.2024	31.12.2023
Recoverables from non-exchange transactions		
Accrued Income Non exchange	*-*	*293.597,50*
Central treasury liaison accounts	*61.101.406,46*	*58.147.155,63*
	61.101.406,46	**58.440.753,13**
Receivables from exchange transactions		
Customers	*3.265.589,47*	*2.846.539,36*
Amounts written down (-)	*(2.968.577,34)*	*(2.842.169,01)*
Accrued income and deferred charges	*108.502,61*	*-*
Other	*(11.708,38)*	*2.973,16*
	393.806,36	**7.343,51**
Total	**61.495.212,82**	**58.448.096,64**

The largest amount under this heading relates to the central treasury liaison (intercompany) accounts with the European Commission that represent a virtual bank account of CBE JU. The treasury of CBE JU has been integrated into the European Commission's treasury system. The payments and receipts are processed via the European Commission's treasury system and registered on these intercompany accounts. The ending balance of this heading is thus the result of the incoming and outgoing payments and represents the funds available for the Joint Undertaking.

The amount written down for 2023 loss relates to a provision against a doubtful debt which arose in 2022 following the early termination of a large Flagship project, BIOSKOH. In addition, in 2024 the write-down includes a recoverable from two project beneficiaries, one of which has declared bankruptcy, while the other entity is disputing the recoverable amount, rendering the recovery uncertain.

A write-down down for doubtful debts was also raised for beneficiary Upfront Chromatography in project Prominent, because the beneficiary contested the recoverable amount, following implementation of an ex-post audit result, and this is being resolved in 2025.

2.5. CASH AND CASH EQUIVALENTS

The payments and receipts are processed via the Commission's treasury system and registered on liaison accounts, which are presented under heading 'receivables from non-exchange transactions' (see **2.4**).

LIABILITIES

2.6. PROVISIONS

Provisions are recognised when the entity has a present legal or constructive obligation towards third parties as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Provisions are not recognised for future operating losses. The amount of the provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date. Where the provision involves a large number of items, the obligation is estimated by weighting all possible outcomes by their associated probabilities ('expected value' method).

As of 31 December 2024, the Joint Undertaking did not have any provisions (2023: none).

2.7. PAYABLES AND OTHER LIABILITIES

Payables are liabilities to pay for goods or services that have been received or supplied and - unlike accrued charges - have already been invoiced or formally agreed with the supplier. Payables can relate to both exchange transactions (such as the purchase of goods and services) and non-exchange transactions (e.g., cost claims from beneficiaries of grants, pre-financing or other EU funding)

	31.12.2024	31.12.2023
Contributions to be validated		
Contributions in kind from Members to be validated	*56.042.125,68*	*62.343.926,59*
Cash contribution from EC to be validated	*31.919.907,56*	*7.418.646,92*
	87.962.033,24	**69.762.573,51**
Payables to entities		
Suppliers	*3.883.145,10*	*7.819.172,35*
Others	*2.613.411,30*	*1.060.671,69*
Members States	-	-
Consolidated entities	-	-
	6.496.556,40	**8.879.844,04**
Total	**94.458.589,64**	**78.642.417,55**

Included under the heading 'Contributions in-kind from Members to be validated' are the in-kind contributions from Members related to on-going projects without a validated certification (in the form of a recognised audit certificate of total declared costs) at 31 December. The amount for 2024 is recognised based on a calculation of IKOP in reporting period costs claims, complemented with a pro rata calculation for periods not covered by cost claims and based on total IKOP allocated to Member beneficiaries in the project grant agreements. The total estimate split per programme BBI EUR 44.170 thousand, CBE EUR 11.872 thousand.

In 2025 EUR 12.310 thousand BBI programme related IKOP was certified. This amount has been validated by the Authorising Officer (Executive Director), booked to net assets and is presented as "Contributions received from Members" (note **2.9**).

The increase of the cash to be validated is related to unexecuted pre-financing payments for the prior year call. The remaining funds will be used in 2025.

The 'contributions in cash to be validated' are the received but unspent EC financial contributions to the Horizon Europe Programme (note **1.6.1**). The amount of vendor payables relates to invoices and cost claims received but not yet validated and paid at the year end.

2.8. ACCRUED CHARGES

Accruals are liabilities to pay for goods or services that have been received or supplied but - unlike payables - have not yet been invoiced or formally agreed with the supplier. They include amounts due to employees (e.g. accruals for untaken holidays). The calculation of accruals is based on the open amount of budgetary commitments at year-end. The portion of the estimated accrued charges relating to pre -financing paid has been recorded as a reduction of the pre-financing amounts.

	31.12.2024	31.12.2023
Accrued charges	*44.962.744,90*	*29.429.669,61*
Other passive accruals and deferrals	*6.481,10*	*4.213,14*
Total	**44.969.226,00**	**29.433.882,75**

The heading comprises estimated operational costs of EUR 44.603 thousand, accrued administrative expenses of EUR 305 thousand and accrued staff expense for untaken leave of EUR 54 thousand. Accrued operating charges relate to on-going projects without a validated cost statement where the 2024 expense was estimated on a case-by-case basis using the best available information about the projects at 31 December 2024.

The portion of the estimated accrued charges which relates to pre-financing paid has been recorded as a reduction of the pre-financing amounts in line with the H2020 and HE rules (see note **2.3**). Following the validation of a large number of final and interim cost claims, the estimated expenses were replaced by actual costs hence the increase in the accrued charges. Of the total operational accrual of EUR 44.604 thousand, EUR 42.401 thousand relates to H Europe projects and EUR 2.203 thousand relates to H2020 projects.

NET ASSETS

2.9. CONTRIBUTIONS FROM MEMBERS

The JU is funded by contributions from its Members. Given their funding nature these contributions, which comprise both cash contributions and contributions in kind, are recognised in the JU's net assets as 'Contributions from owners' once validated. The term 'owner' does not imply ownership of any shares of the JU (in fact no shares are issued) but reflects the specific governance of the JU where voting rights are allocated in accordance with the contributions made.

In accordance with Article 19 of the Financial Framework Partnership Agreement (FFPA) 2020-2027, the CBE JU received from the European Union a pre-financing payment of EUR 159.159 thousand for the implementation of the Horizon Europe Framework Programme (see note **1.6.1**). According to the Specific Guidance for the accounting of the EU cash contributions received by the joint undertakings under FFPA related to MFF 2021-2027, the contributions payments made by the EU for the Horizon Europe Programme are accounted for as 'Contributions in cash to be validated'. They will be qualified as final payments and formally transferred to the net assets once the Commission has accepted the Consolidated Annual Activity Report – AAR (Art. 19.2 FFPA).

Programming period	2024			2023		
	Cash	in-Kind	Total	Cash	in-Kind	Total
Horizon 2020	*805.525.227,74*	*104.167.472,18*	909.692.699,92	*805.525.277,74*	*91.857.581,96*	*897.382.809,70*
Horizon Europe	*218.252.450,94*	-	*218.252.450,94*	*81.844.016,08*	-	*81.844.016,08*
Total	**1.023.777.678,68**	**104.167.472,18**	**1.127.945.150,86**	**887.369.243,82**	**91.857.581,96**	**979.226.825,78**

2.9.1. 2014-2020 (Horizon 2020) MFF: Total Members' Contributions

With regard to the Horizon 2020 Programme, Council Regulation (EC) No 2014/560 (its current legal mandate stems from the amending Regulation (EU) 2018/121 of 23 January 2018) distinguishes between Members (European Commission, Industry Grouping) and non-Members of the JU. In addition, only the in-kind contributions from the Members that are both certified by external auditors and validated by the Executive Director of CBE JU are accounted for in the JU's net assets. Estimated in-kind contributions, i.e. contributions for which no certifications have been received and/or this certification has not been validated by the Executive Director, are reported under 'other liabilities' (see note **2.7**).

Member	Commission	Industry Grouping			Total	
	Cash	Cash	In kind	Total	Cash	In kind
Running costs contributions at 31.12.2023	*18.673.090,28*	*18.731.401,00*	*-*	*18.731.401,00*	*37.404.491,28*	*-*
Current year contributions	*-*	*-*	*-*	*-*	*-*	*-*
Running costs contributions at 31.12.2024	**18.673.090,28**	**18.731.401,00**	**-**	**18.731.401,00**	**37.404.491,28**	**-**
Operating costs contributions at 31.12.2023	*764.870.736,46*	*3.250.000,00*	*91.857.581,96*	*95.107.581,96*	*768.120.736,46*	*91.857.581,96*
Current year contributions	*-*	*-*	*12.309.890,22*	*12.309.890,22*	*-*	*12.309.890,22*
Operating costs contributions at 31.12.2024	***764.870.736,46***	**3.250.000,00**	***104.167.472,18***	***107.417.472,18***	***768.120.736,46***	***104.167.472,18***
TOTAL contributions at 31.12.2023	*783.543.826,74*	*21.981.401,00*	*91.857.581,96*	*113.838.982,96*	*805.525.227,74*	*91.857.581,96*
TOTAL contributions at 31.12.2024	**783.543.826,74**	**21.981.401,00**	**104.167.472,18**	**126.148.873,18**	**805.525.227,74**	***104.167.472,18***

The rules relating to distribution of voting rights are defined in Article 54 of Council Regulation (EU) 2021/2085 of 19 November 2021. Based on this article, the number of votes of the Members other than the Union shall collectively hold 50% of the voting rights For what concerns the total level of the contribution by BIC Members at the end of 2024, the IKOP target was set at the closure of the BBI JU calls, and it will contribute to achieving the overall legal target alongside the finalisation of BBI JU projects (18% of which are still ongoing).

2.9.2. Research and Innovation Funding Programme for 2021-2027 (Horizon Europe)

In accordance with Article 19 of the Financial Framework Partnership Agreement (FFPA) 2020-2027, in 2024 the CBE JU received from the European Union a pre-financing payment for the amount of EUR 159.159 thousand for the implementation of the Horizon Europe Framework Programme (see note **1.6.1**). According to the Specific Guidance for the accounting of the EU cash contributions received by the Joint Undertakings under FFPA related to MFF 2021- 2027, the contributions payments made by the EU for the Horizon Europe Programme are accounted for as 'Contributions in cash to be validated'. They will be qualified as final payments and formally transferred to the net assets once the Commission has accepted the Consolidated Annual Activity Report – AAR (Art. 19.2 FFPA). Under the new SBA (Horizon Europe Programme) the in-kind contributions to operational activities should be accounted for solely on the basis of eligible costs and should be reported and audited in accordance with the mechanism applicable to the specific grant agreement. These legal requirements do not change the substance of the operation. Also, under Horizon Europe, only contributions validated and accepted by the Executive Director can be recognised under net assets. Therefore, the same accounting treatment as used under the previous regulations should be applied to IKOP under Horizon Europe.

Member	Commission	Industry Grouping			Total
	Cash	Cash	In kind	Total	Cash
Running costs contributions at 31.12.2023	*72.616,08*	*1.655.223,00*	*-*	*1.655.223,00*	*1.727.839,08*
Current year contributions	*1.789.683,48*	*1.750.991,50*	*-*	*-*	*3.540.674,98*
Running costs contributions at 31.12.2024	**1.862.299,56**	**3.406.214,50**	**-**	**1.655.223,00**	**5.268.514,06**
Operating costs contributions at 31.12.2023	*80.116.177,00*	*-*	*-*	*-*	*80.116.177,00*
Current year contributions	*132.867.759,88*	*-*	*-*	*-*	*132.867.759,88*
Operating costs contributions at 31.12.2024	**212.983.936,88**	**-**	**-**	**-**	**212.983.936,88**
TOTAL contributions at 31.12.2023	*80.188.793,08*	*1.655.223,00*	*-*	*1.655.223,00*	*81.844.016,08*
TOTAL contributions at 31.12.2024	**214.846.236,44**	**3.406.214,50**	**-**	**1.655.223,00**	**218.252.450,94**

The rules relating to distribution of voting rights are defined in Article 54 of Council Regulation (EU) 2021/2085 of 19 November 2021. Based on this article, the number of votes of the Members other than the Union shall collectively hold 50% of the voting rights.

3. NOTES TO THE STATEMENT OF FINANCIAL PERFORMANCE

REVENUE

NON-EXCHANGE REVENUE

Revenue from non-exchange transactions relates to transactions where the transferor provides resources to the recipient entity without the recipient entity providing approximately equal value directly in exchange. The heading mainly includes amounts received from the Commission during the year and recoveries of operational expenses.

3.1. RECOVERY OF EXPENSES

The revenue resulting from recovery of expenses refers to operational expenses recovered from beneficiaries during the year and adjustments coming from audits that will be collected in the following year.

	2024	2023
Recovery of expenses	*880.283,22*	*116.279,90*

The revenue resulting from recovery of expenses refers to operational expenses recovered from beneficiaries during the year and adjustments coming from audits that will be collected in the following year. In 2024 the JU made substantial efforts to finalise the outstanding audit implementation files.

3.2. OTHER NON-EXCHANGE REVENUE

The Joint Undertaking did not have any other non-exchange revenue in 2024 or in 2023.

EXCHANGE REVENUE

3.1. REVENUE FROM EXCHANGE TRANSACTIONS

The revenue from exchange transactions and events relates to the following types of transactions: rendering of services; sales of goods; and the use by others of entity assets yielding interest, royalties and dividends.

	2024	2023
Recovery of administrative expenses	*71.455,70*	*17.679,00*
Miscellaneous income exchange	*-*	*509,69*
Financial revenue	*8,90*	*-*
Total	**71.464,60**	**18.188,69**

In 2024 there was a large increase in recharges to other JUs for common JU administrative costs (such as the Systal HR tool implementation), for which CBE was the lead contracting JU during the year.

EXPENSES

3.3. OPERATIONAL COSTS

Included under this heading are operational expenses related to projects that were carried out in the current year. The part of the operational costs related to ongoing projects without any validated cost claims (or equivalent) available on 31 December was estimated using the best information available at the time of preparation of the annual accounts. The estimation is based on the case-by-case assessment of completion which ensures that only costs that reflect the services or work performed by 31 December are included in the operational costs of the year. Depending on the availability of information at the time of preparation of the annual accounts, the estimates are based on costs incurred to date as a proportion of the estimated total costs of the projects ("pro-rata temporis"). The break-down of the operational costs between operational costs incurred on the basis of validated cost claims (or equivalent) and estimated operational costs is given in the table below:

	2024	2023
Operational costs: validated in-kind contributions	*12.309.890,22*	*25.959.237,38*
Operational costs: estimated in-kind contributions	*(6.301.800,91)*	*(5.300.430,56)*
Total operational costs from in-kind contributions	**6.008.089,31**	**20.658.806,72**
Operational costs: validated EU contributions	*87.548.016,43*	*117.460.850,03*
Operational costs: estimated EU contributions	*(4.914.706,96)*	*(17.939.321,56)*
Total operational costs from EU contributions	**82.634.024,01**	**99.521.528,97**
Total	**88.642.113,32**	**120.180.335,69**

Depending on the availability of information at the time of the preparation of the annual accounts, the estimates are based on cost claims received or by pro rata temporis estimates based on total project grant amounts (remaining balance).

The operational costs from estimated in-kind contributions were estimated in cases where no project cost claims covering the whole year were validated at the year end. Instead of basing the estimates on annual declarations of IKOP from the private Members, the real amount of IKOP from the project cost claims validated relating to the reporting year is calculated in combination with a pro rata estimate of remaining costs based on total IKOP allocated to the project, calculated for the remaining period after the cost claim end date.

The operational cost from EU contributions shows an overall decrease, mainly due to the reduction in validated in-kind contributions The overall decrease in validated operational costs is in line with the phasing out of the H 2020 projects and the gradual start-up of projects for the first calls of H Europe (for which very few cost claims have been received as at end 2024).

3.4. STAFF COSTS

This heading includes the expenses for salaries, allowances and other employment-related benefits. Based on the service level agreement between the JU and the Commission, the calculation of staff-related costs is carried out by the Commission's Office for Administration and Payment of Individual Entitlements (also known as the Paymaster's Office - PMO). The pensions of the JU staff members are covered by the Pension Scheme of European Officials. This pension scheme is a defined benefit plan, i.e. the amount of benefit an employee will receive on retirement depends on several factors, the most important of which is years of service. Both the JU staff, the JU and the EU budget contribute to the pension scheme, with the contribution percentage being revised annually in line with the changes in the Staff Regulation governing the scheme. The cost to the EU Budget is not reflected in the JU accounts. Similarly, no provision related to the future pension payments is recognised in the annual accounts of the JU, as the obligation falls to the Commission. As per Article 83a (2) of the Staff Regulations, the part paid by the JU shall correspond to the percentage share between a) the JU's revenues without the subsidy from the general budget, and b) its total revenues. To avoid disruptive variations over time, the JU's employer's pension contribution is calculated with a single percentage share for the whole duration of the JU. This single percentage was established on the basis of the EU and non-EU Members' respective contributions, as foreseen in the JU's legal basis, with a correction and regularisation to be foreseen in the last year of existence of the JU. The contribution of the Circular Bio-based Europe Joint Undertaking was set as 2,3% of the total pension scheme contributions. This contribution is accounted for within staff costs.

In view of implementation problems and the principle of good administration, it was agreed between the Commission and the JUs that the provisions of Article 83a (2) are applied only to the JUs set up by the SBA and the Euro HPC JU, and not to those established under the previous Regulations. Given the late entry into force of the SBA at the end of November 2021, it became applicable as from 2022.

	2024	2023
Staff costs	*3.105.891,08*	*2.757.139,48*

The increase in 2024 is related to the indexation of salaries and the reclassification exercise, as well as recruitments during the year such as the new Head of Administration and Finance.

3.5. FINANCE EXPENSES

	2024	2023
Interest expense on late payment of charges	*5,20*	-
Other financial expenses	-	-
Amounts written down Recoverables	*126.408,33*	*2.842.169,01*
Total	**126.413,53**	**2.842.169,01**

The net impairment loss for 2023 was related to a provision against a doubtful debt which arose in 2022 following the early termination of a large Flagship project, BIOSKOH. In 2024, the write-down is related to a recoverable from a project beneficiary, which has declared bankruptcy, rendering the recovery uncertain.

A write-down was raised for beneficiary Upfront Chromatography in project Prominent, because the beneficiary contested the recoverable amount, following implementation of an ex-post audit result, and this is being resolved in 2025

3.6. OTHER EXPENSES

Included under this heading are expenses of administrative nature such as external non-IT services, operating leasing expenses, communications and publications, training costs etc.

	2024	2023
Property, plant and equipment related expenses	*25.690,86*	*27.534,25*
External non-IT services	*408.882,57*	*191.912,23*
Legal Expenses	*8.065,00*	*-*
Maintenance and security expenses	*3.355,00*	*2.811,41*
Office Supplies & maintenance	*21.597,62*	*8.574,04*
External IT services	*538.019,16*	*444.805,53*
Experts' expenses	*124.721,02*	*211.521,85*
Car & transport expenditures	*254,45*	*-*
Training costs	*54.676,86*	*45.733,08*
Recruitment costs	*14.590,28*	*723,71*
Missions	*73.415,45*	*55.059,81*
Communications & publications	*197.789,00*	*818.797,28*
Rent expenses	*346.830,73*	*349.957,63*
Losses on realisation of trade debtors	*568,78*	*(0,01)*
Insurances	*169,26*	*476,30*
Total	**1.818.626,04**	**2.156.907,11**

The increase in External non-IT costs (EUR 217 thousand) is mainly due to increases in interim staff costs and in audit and accounting fees. The rise in the cost for missions (EUR 18 thousand) is explained by the continued increase in "in-person" activities and business travel following the "freeze" during the Covid lockdown period up to 2022. Communication expenses decreased in 2024 to more "normal" levels because JU incurred in 2023 the large costs of the Stakeholder Forum which is a biannual event. The recruitment costs increased as a result of the recruitment process to hire of a new Head of Administration and Finance. External IT services were higher in 2024 (EUR 93 thousand), which is mainly related to the purchase of an online recruitment tool which was subsequently recharged to other JUs.

Rent expenses concern the CBE JU office in the 'White Atrium' building. The previous contract ended in 2024, an award decision was made at the beginning of 2025 to extend the lease to 31/12/2031.

Amounts committed to be paid during the remaining term of this lease contract include rent and related charges and are as follows:

	Future amounts to be paid			
	< 1 year	1- 5 years	> 5 years	Total
Buildings	*232.332,31*	*976.734,34*	*518.157,55*	*1.727.224,20*

4. OTHER SIGNIFICANT DISCLOSURES

4.1. CONTINGENT ASSETS

	31.12.2024	31.12.2023
Ex-post audit results	*942.690*	-

In mid-2023 an exercise was launched to assess and take action on a backlog of project-related audit implementation files, including a revision and increased automation of the related procedures. There are negative audit adjustments raised for several of the projects during the year, but the estimated remaining total amount is still under evaluation. Several recovery orders were already issued in 2024.

4.2. CONTINGENT LIABILITIES

The Joint Undertaking does not have any ongoing legal cases or any other events raising contingent liabilities.

4.3. OUTSTANDING COMMITMENTS NOT YET EXPENSED

The outstanding commitments not yet expensed comprise the budgetary RAL ('Reste à Liquider') less related amounts that have been included as expenses in the current year's statement of financial performance. The RAL represents the open budgetary commitments for which payments and/or decommitments have not yet been made. This is a normal consequence of the existence of multi-annual programmes.

	31.12.2024	31.12.2023
Outstanding commitments not yet expensed	*308.737.427*	*267.449.777*

The outstanding commitments not yet expensed are the result of the correction of the budgetary RAL with the estimated costs, determined by using the accrual-based principle, which is not reflected in the budgetary result, where the cash-based principle is used. The increase between the years is due to the high increase of EUR 51.829 thousand in the budgetary RAL, a decrease of EUR 4,9 million in the open vendor balance and an increase of EUR 15.534 thousand in the accruals, which is shown in the budget implementation reports (see chapter **6**).

4.4. IN-KIND CONTRIBUTIONS

According to both Council Regulation (EU) No 558/2014 and Council Regulation (EU) No 2021/2085, the Members other than the Union shall provide in-kind contributions to the Joint Undertaking.

Under the H 2020 Programme, in-kind contributions by Private Member beneficiaries and their affiliated entities consist of the costs incurred by them in implementing indirect actions less the contribution of the Joint Undertaking and any other Union contribution to those costs. For the purpose of valuing these in-kind contributions, the costs are determined in accordance with the usual cost accounting practices of the entities concerned, the applicable accounting standards of the country where the entity is established, and also the applicable International Accounting Standards and International Financial Reporting Standards. The costs shall be certified by an independent external auditor appointed by the entity concerned. The valuation method may be verified by the Joint Undertaking, should there be any uncertainty arising from the certification.

Further simplification was introduced under the Horizon Europe Programme. In that context, a simplified reporting mechanism was put in place for the Members, who are no longer required to report on non-eligible costs for in-kind contributions to operational activities. According to Art.2. (8) of the SBA: "in-kind contributions to operational activities means contributions by private members, constituent entities or the affiliated entities of either, by international organisations and by contributing partners, consisting of the eligible costs incurred by them in implementing indirect actions less the contribution of that joint undertaking and of the participating states of that joint undertaking to those costs". Consequently, in-kind contributions to operational activities are accounted for solely on the basis of eligible costs and reported and audited in accordance with the mechanism applicable to the specific grant agreement. Such accounting based on eligible costs allows for the automated calculation of in-kind contributions to operational activities via the Horizon Europe IT tools.

4.5. IN-KIND IN ADDITIONAL ACTIVITIES (IKAA)

The joint undertakings provide a systematic opportunity and incentive for Members other than the Union to combine their research and innovation activities with those of the joint undertaking. Additional activities do not receive financial support from the joint undertaking. However, they are accounted for as Members' in-kind contributions to additional activities when they contribute to the objectives of the joint undertaking and are directly linked to its activities, including non-eligible costs of indirect actions funded by the joint undertaking where this is provided for in the annual additional activities plan. That link can be established through the uptake of results from indirect actions funded by the joint undertaking or its preceding initiatives, or by demonstrating a significant Union added value. The respective costs should be certified by an independent audit body appointed by the entity concerned, subject to the valuation method being open to verification by the joint undertaking in the event of uncertainty. Council Regulation (EU) No 2021/2085 laid down more specific provisions concerning the scope of additional activities for each joint undertaking, to the extent that it is necessary to achieve the desired directionality and impact.

"Additional activity" means an activity, included in the annual additional activities plan annexed to the main part of the work programme, that does not receive financial support from the joint undertaking but contributes to its objectives, and is directly linked to the uptake of results from projects under that joint undertaking or its preceding initiatives or that has a significant Union added value.

In-kind contributions to additional activities are contributions by the Private Members, constituent entities or the affiliated entities of either, and by international organisations, consisting of the costs incurred by them in implementing additional activities less any contribution to those costs from the Union and from the participating states of that joint undertaking.

Art. 49 of the SBA defines the scope of CBE's additional activities:

(a) investments in new facilities demonstrating a new value chain, including investments in durable equipment, tools and accompanying infrastructure, in particular related to regional deployment and its sustainability verification;

(b) investments in a new innovative and sustainable production plant or flagship;

(c) investments in new research and innovation and justified infrastructure, including facilities, tools, durable equipment, or pilot plants (research centres);

(d) standardisation activities;

(e) communication, dissemination and awareness-raising activities.

4.6. CONTRIBUTIONS PER PROGRAMME

	EU cash (a)	Third country contribution (UK) (b)	Private members' cash (c)	Private members' IKOP (d)	Private members' IKAA (e)	**Total (f)=(a)+(b)+(c)+(d)+(e)**
H2020	*835.000.000,00*	-	*22.195.488,31*	*263.293.995,00*	*2.444.510.516,69*	***3.565.000.000,00***
Horizon Europe	*976.000.000,00*	*50.000.000,00*	*23.500.000,00*	*976.500.000,00*		***2.026.000.000,00***

Members contributions as of 31.12.2024									
Programme	EU Validated cash	EU not validated cash (PF)	Other members cash	Other members IKOP validated	Other members IKOP reported but not validated	IKAA certified	IKAA reported but not certified	Total	Achievement rate
H2020	*783.543.826,74*	-	*21.981.401,00*	*104.167.472,18*	*44.170.235,74*	*2.247.640.172,00*	*106.000.000,00*	**3.307.503.107,66**	**93%**
Horizon Europe	*214.846.236,44*	*31.919.907,56*	*3.406.214,50*	-	*11.871.889,94*	-	*108.759.230,08*	**370.803.478,52**	**18%**

2014-2020 (Horizon 2020) MFF: Total Members 'Contributions

H2020 contributions are in line with expectations. For what concerns the EU cash contributions validated at the end of 2024, it should be noted that EUR 92,2 million (12% of EUR 783,5 million) represent open pre-financing (based on paid cost claims and before accounting adjustments). As such they are not EU cash contributions validated by CBE JU as being spent in the projects, but they constitute a cash advance which remains a receivable until clearing.

Regarding the contributions by other Members at the end of 2024, the IKOP target was set at the closure of all the BBI JU calls in signed grants. It is not a legal target set in the founding regulation of the BBI JU initiative and the IKOP will contribute to achieving the overall legal target alongside the finalisation of BBI JU projects (18% of which are still ongoing). The specific legal target for IKAA contributions was already achieved in 2022 at the planning stage, and the planning cycle for these contributions will continue until the end of 2024. Therefore, IKAA will play a pivotal role in the achievement of the EUR 2,73 billion overall target of BIC contributions to the BBI initiative. In order to achieve this result, the IKAA planning process aims at around EUR 2,5 billion to be contributed by the end of the initiative.

2021-2027 (Horizon Europe) MFF: Total Members' Contributions

For the EU cash contributions validated at the end of 2024 under Horizon Europe, it shall be noted that three calls out of the seven planned (including the small NEBA call for 2023) have been implemented by the closure and EUR 211,6 million (98% of EUR 214,8 million) represent open pre-financing, and its accounting treatment follows the same steps described above for H2020 contributions. Regarding the contributions by other Members at the end of 2024 under Horizon Europe, there is a mainly pro rata estimation of EUR 16,5 million IKOP for the first CBE JU projects that started in 2023 and 2024, as few claims were received by year end. The EUR 106,5 million IKAA value for 2024 was communicated by other Members in the first multi-annual planning cycle done at the closure of the first call of CBE JU. The total value of this plan up to 2031 amounts to EUR 388 million.

4.7. RELATED PARTIES

The related parties of the JU are the key management personnel of these entities. As transactions between the JU and these parties take place as part of the normal operations of the JU and on terms and conditions that are normal for such transactions, Key management entitlements are disclosed in note **4.8** however, no other specific disclosures are required.

4.8. KEY MANAGEMENT ENTITLEMENTS

The Executive Director is remunerated in accordance with the Staff Regulations of the European Union, which establish the rights and obligations of all officials of the EU. The Staff Regulations are published on the Europa website.

	31.12.2024	31.12.2023
Executive Director	*AD 14*	*AD 14*

The Executive Director is remunerated in accordance with the Staff Regulations of the European Union that is published on the Europa website and is the official document describing the rights and the obligations of all officials of the EU. At its meeting of 17 June 2022, the CBE JU Governing Board took note of the previous Executive Director's resignation with effect from 1 September 2023. On 25 July 2023, the GB appointed Nicolo' Giacomuzzi-Moore as CBE JU's Executive Director ad interim as of 1 September 2023. He was officially nominated as the new Executive Director during the Governing Board meeting of 6 December 2023 and took up his official duties in early January 2024.

4.9. OTHER EVENTS

RUSSIA-UKRAINE WAR

The war does not affect materially the recognition and measurement of any assets and liabilities on the balance sheet nor of any revenue and expenses recognised in the statement of financial performance.

Based on the facts and circumstances at the time of preparation of these financial statements, in particular, the evolving situation, the financial effect of the war on subsequent reporting periods of the CBE JU cannot be reliably estimated.

4.10. OTHER INFORMATION

BREXIT - United Kingdom joins Horizon Europe Programme

As of 1 January 2024, the United Kingdom becomes an associated country to Horizon Europe. Its researchers will be able to participate in this research and innovation programme of the EU on the same terms as researchers from other associated countries and will have access to Horizon Europe funding.

4.11. EVENTS AFTER REPORTING DATE

At the time of preparation of these financial statements, the management is not aware of any events that should be disclosed as non-adjusting events or taken into account in these financial statements as adjusting events.

4.12. OBSERVATIONS ON MANAGEMENT AND CONTROL SYSTEMS

Not applicable.

5. FINANCIAL RISK MANAGEMENT

5.1. TYPES OF RISK

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate, because of variations in market prices. Market risk embodies not only the potential for loss, but also the potential for gain. It comprises currency risk, interest rate risk and other price risk (the entity has no significant interest rate risk and other price risk).

(1) **Currency risk** is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. This risk arises from the change in the price of a foreign currency against the functional currency of an entity.

(2) **Interest rate risk** is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. As an example, higher interest rates will lead to lower prices of fixed rate bonds (other things equal), and vice versa. The entity does not have any securities thus it is not exposed to the interest rate risk.

Credit risk is the risk of loss due to a debtor's non-payment or other failure to meet a contractual obligation. The default events include a delay in repayments, and bankruptcy.

Liquidity risk is the risk that an EU entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

5.2. CURRENCY RISKS

At the end of the year, the financial assets are composed of exchange receivables. The financial liabilities are composed of accounts payable. Their ending balances are quoted in EUR, the entity is thus not exposed to currency risk.

5.3. CREDIT RISK

At the end of the year, the financial assets comprise exchange receivables that are not past due for more than 30 days. As no credit loss is expected during the lifetime of those receivables the entity is not exposed to any significant credit risk.

5.4. LIQUIDITY RISK

The financial liabilities are mainly composed of accounts payable. All the accounts payable have remaining contractual maturity of less than 1 year.

CIRCULAR BIO-BASED EUROPE JOINT UNDERTAKING

FINANCIAL YEAR 2024

THE BUDGET IMPLEMENTATION REPORTS AND EXPLANATORY NOTES

1. BUDGETARY PRINCIPLES AND STRUCTURE

1.1. BUDGETARY PRINCIPLES

The establishment and implementation of the budget of Circular Bio-based Europe is governed by the following basic principles set out in the Chapter 2 of the Financial Rules of the Joint Undertaking:

Principles of unity and budget accuracy

This principle means that no revenue shall be collected and no expenditure effected unless booked to a line in the budget of the joint undertaking. No expenditure may be committed or authorised in excess of the appropriations authorised by the budget. An appropriation may be entered in the budget only if it is for an item of expenditure considered necessary.

Principle of annuality

The appropriations entered in the budget shall be authorised for a financial year which shall run from 1 January to 31 December.

Principle of equilibrium

Revenue and payment appropriations shall be in balance.

Principle of unit of account

The budget shall be drawn up and implemented in euro and the accounts shall be presented in euro.

Principle of universality

Total revenue shall cover total payment appropriations and all revenue and expenditure shall be entered in full without any adjustment against each other.

Principle of specification

Appropriations shall be earmarked for specific purposes at least by title and chapter.

Principle of sound financial management

Appropriations shall be used in accordance with the principle of sound financial management, namely in accordance with the principles of economy, efficiency and effectiveness.

Principle of economy

The principle of economy requires that the resources used by the JU in the pursuit of its activities shall be made available in due time, in appropriate quantity and quality and at the best price.

Principle of efficiency

The principle of efficiency concerns the best relationship between resources employed and results achieved.

Principle of effectiveness

The principle of effectiveness concerns the attainment of the specific objectives set and the achievementof the intended results.

Principle of internal control

The principle of internal control of budget implementation means that the JU budget shall be implemented in compliance with effective and efficient internal control in order to provide reasonable assurance of achieving effectiveness, efficiency and economy of operations; reliability of reporting; safeguarding of assets and information; prevention, detection, correction and follow-up of fraud and irregularities; inadequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multi-annual character of the programmes as well as the nature of the payments concerned.

Principle of transparency

The budget shall be established and implemented and the accounts presented in accordance with the principle of transparency. The budget and any amending budgets shall be published on the internet site of the joint undertaking within four weeks of their adoption and shall be transmitted to the Commission and the Court of Auditor.

1.2. STRUCTURE AND PRESENTATION OF THE BUDGET

Since 1 January 2015, no distinction between non-dissociated and dissociated appropriations is made. All appropriations follow the dissociated logic.

Following the provisions of the Financial Rules of the Joint Undertaking, the budget accounts shall consist of a statement of revenue and a statement of expenditure. The budget is distributed in the following titles:

Title 1

Budget lines relating to staff expenditure such as salaries and allowances for personnel working with the Joint Undertaking. It also includes recruitment expenses, staff missions, expenses for the socio-medical infrastructure and representation costs.

Title 2

Budget lines relating to all infrastructure, equipment and miscellaneous administrative expenditure.

Title 3

Budget lines providing for the implementation of the activities and tasks assigned to the Joint Undertaking in accordance with its establishing Council Regulation.

2. RESULT OF THE IMPLEMENTATION OF THE BUDGET

EUR '000

	Title	2024	2023
Revenue		**161.209**	**103.647**
of which:			
European Commission (incl. EFTA) contribution to administrative expenditure BBI	1	**-**	*1.953*
European Commission (incl. EFTA) contribution to operational expenditure BBI	1	**-**	*96.424*
Bio-based Industries Consortium contribution to administrative expenditure BBI	1	**-**	*2.776*
Joint Undertaking revenues BBI	1	*1*	*18*
Other income BBI	1	*235*	*1.009*
European Commission (incl. EFTA) contribution to administrative expenditure CBE	1	*1.751*	*823*
European Commission (incl. EFTA) contribution to operational expenditure CBE	1	*157.408*	*644*
Bio-based Industries Consortium contribution to administrative expenditure CBE	1	*1.751*	-
CBE Other income	1	*63*	-
Expenditure		**(158.181)**	**(123.710)**
of which:			
Staff expenditure	1	*(3.185)*	*(2.938)*
Administrative expenditure	2	*(2.642)*	*(1.643)*
Operational expenditure	3	*(152.347)*	*(119.129)*
Exchange rate differences		**(1)**	**-**
Budget result		**3.027**	**(20.063)**

3. RECONCILIATION OF ECONOMIC RESULT WITH BUDGET RESULT

EUR '000

	2024	2023
ECONOMIC RESULT OF THE YEAR	**(92.741)**	**(127.802)**
Adjustment for accrual items (items not in the budgetary result but included in the economic result)	**67.208**	**5.789**
Adjustments for accrual cut-off (net)	*(75)*	*5.855*
Unpaid invoices at year end but booked in charges (class 6)	*2.508*	*-*
Depreciation, amortisation and impairment of intangible and tangible assets	*26*	*28*
Recovery Orders issued in the year in class 7 and not yet cashed	*(423)*	*-*
Pre-financing paid in previous year and cleared in the year	*65.050*	*-*
Write-off receivables	*126*	*-*
Other income adjustment	*-*	*(94)*
Other individually immaterial items	*4*	*-*
Adjustment for budgetary items (item included in the budgetary result but not in the economic result)	**28.561**	**101.950**
Members' cash contributions collected in the year	*160.910*	*102.619*
Other income	*-*	*1.009*
Asset acquisitions (less unpaid amounts)	*(204)*	*(132)*
New pre-financing paid in the year and remaining open as at 31 December	*(132.149)*	*(1.539)*
Entitlements established in previous year and cashed in the year	*4*	*-*
Other individually immaterial	*-*	*(8)*
BUDGET RESULT OF THE YEAR	**3.027**	**(20.063)**

4. IMPLEMENTATION OF BUDGET REVENUE

4.1. Implementation of budget revenue

EUR '000

		Income appropriations		Entitlements established			Revenue				
	Item	Initial budget	Final budget	Current year	Carried over	Total	On entitlements of current year	On entitlements carried over	Total	%	Out-standing
		1	2	3	4	5=3+4	6	7	8=6+7	9=8/2	10=5-8
1005	*BBI Joint Undertaking revenues*	*-*	*-*	*-*	*1*	*1*	*-*	*1*	*1*	*-*	*-*
1006	*Other income BBI*	*-*	*-*	*883*	*2.846*	*3.729*	*232*	*4*	*235*	*-*	*3.494*
1007	*CBE European Commission (incl. EFTA) contribution*	*1.751*	*1.751*	*1.751*	*-*	*1.751*	*1.751*	*-*	*1.751*	*100%*	*-*
1008	*CBE European Commission (incl. EFTA) contribution*	*157.408*	*157.408*	*157.408*	*-*	*157.408*	*157.408*	*-*	*157.408*	*100%*	*-*
1009	*CBE Biobased Industries Consortium contribution t*	*1.751*	*1.751*	*1.751*	*-*	*1.751*	*1.751*	*-*	*1.751*	*100%*	*-*
1012	*CBE Other income*	*-*	*-*	*63*	*-*	*63*	*63*	*-*	*63*	*-*	*-*
Total Chapter 10		160.910	160.910	161.856	2.847	164.703	161.204	4	161.209	100%	3.494
Total Title 1		**160.910**	**160.910**	**161.856**	**2.847**	**164.703**	**161.204**	**4**	**161.209**	**100%**	**3.494**
2021	*BBI C2 reactivation of appropriations for administrative expenditure (2024)*	*2.465*	*2.465*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
2022	*BBI C2 reactivation of appropriations for operational expenditure (2024)*	*26.590*	*26.590*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
2032	*CBE C2 reactivation of appropriations for administrative expenditure (2024)*	*382*	*382*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
2033	*CBE C2 reactivation of appropriations for operational expenditure (2024)*	*929*	*929*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Total Chapter 20		30.365	30.365	-	-	-	-	-	-	-	-
Total Title 2		**30.365**	**30.365**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
GRAND TOTAL		**191.275**	**191.275**	**161.856**	**2.847**	**164.703**	**161.204**	**4**	**161.209**	**84%**	**3.494**

5. IMPLEMENTATION OF BUDGET EXPENDITURE

5.1. Breakdown & changes in commitment appropriations

5.1.1. Breakdown & changes in commitment appropriations – Title 1

EUR `000

		Budget appropriations				Additional appropriations			Total appropr. available
	Item	Initial adopted budget	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
1100	*BBI Staff costs*	*-*	*-*	*-*	*-*	*1.005*	*-*	*1.005*	*1.005*
1101	*CBE Staff costs*	*1.130*	*-*	*(16)*	*1.114*	*923*	*-*	*923*	*2.037*
1111	*CBE Trainees*	*-*	*-*	*25*	*25*	*-*	*-*	*-*	*25*
Total Chapter 11		1.130	-	9	1.139	1.927	-	1.927	3.066
1202	*CBE Sundry recruitment expenses*	*75*	*-*	*(62)*	*13*	*-*	*-*	*-*	*13*
Total Chapter 12		75	-	(62)	13	-	-	-	13
1301	*CBE Mission expenses, duty travel expenses and other expenses*	*60*	*-*	*58*	*118*	*-*	*-*	*-*	*118*
Total Chapter 13		60	-	58	118	-	-	-	118
1404	*CBE Medical service*	*265*	*-*	*(243)*	*22*	*-*	*-*	*-*	*22*
1405	*CBE Mobility costs and other social expenses for service*	*-*	*-*	*165*	*165*	*-*	*-*	*-*	*165*
1406	*CBE Training*	*-*	*-*	*75*	*75*	*-*	*-*	*-*	*75*
Total Chapter 14		265	-	(3)	262	-	1	1	263
1501	*CBE Staff teambuilding and related events*	*10*	*-*	*(2)*	*8*	*-*	*3*	*3*	*11*
Total Chapter 15		10	-	(2)	8	-	3	3	11
Total Title 1		**1.539**	**-**	**-**	**1.539**	**1.927**	**4**	**1.931**	**3.471**

5.1.2. Breakdown & changes in commitment appropriations – Title 2

EUR '000

		Budget appropriations				Additional appropriations			Total appropr. available
	Item	Initial adopted budget	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
2000	*BBI Rentals*	-	-	-	-	*170*	-	*170*	*170*
2001	*CBE Rentals*	*365*	-	*413*	*778*	-	-	-	*778*
Total Chapter 20		365	-	413	778	170	-	170	948
2101	*BBI Other IT costs*	-	-	-	-	*71*	-	*71*	*71*
2102	*CBE IT equipment & software purchase/development c*	*323*	-	*(78)*	*245*	*296*	*10*	*306*	*551*
2103	*CBE Other IT costs*	*127*	-	*45*	*172*	*12*	*35*	*47*	*218*
Total Chapter 21		450	-	(33)	417	379	45	424	841
2200	*CBE Movable property and associated office equipment*	*5*	-	*(5)*	-	-	-	-	-
Total Chapter 22		5	-	(5)	-	-	-	-	-
2304	*CBE Stationery and office supplies*	*35*	-	*(24)*	*11*	-	-	-	*11*
2306	*CBE Legal expenditure*	-	-	-	-	*2*	-	*2*	*2*
2307	*CBE Other current administrative expenditure*	-	-	*1*	*1*	*0*	-	-	*1*
Total Chapter 23		35	-	(24)	11	2	-	2	13
2401	*CBE Telecommunications and postal charges*	*26*	-	*(21)*	*5*	-	*4*	*4*	*9*
Total Chapter 24		26	-	(21)	5	-	4	4	9
2501	*CBE Expenditure on formal meetings*	*50*	-	*(1)*	*49*	-	-	-	*49*
Total Chapter 25		50	-	(1)	49	-	-	-	49
2600	*BBI Events and campaigns*	-	-	-	-	*44*	-	*44*	*44*
2602	*BBI Communications tools*	-	-	-	-	*90*	-	*90*	*90*
2603	*BBI Public relations*	-	-	-	-	*40*	-	*40*	*40*
2604	*CBE Events and campaigns*	*143*	-	*(27)*	*116*	*129*	-	*129*	*245*
2605	*CBE Materials*	*128*	-	*(103)*	*25*	*17*	-	*17*	*42*
2606	*CBE Communications tools*	*78*	-	*(58)*	*20*	-	-	-	*20*
2607	*CBE Public relations*	*75*	-	*(73)*	*2*	-	-	-	*2*
Total Chapter 26		424	-	(262)	162	320	-	320	482
2700	*BBI Studies, consultancy and other services*	-	-	-	-	*16*	-	*16*	*16*

EUR '000

	Item	Budget appropriations				Additional appropriations			Total appropr. available
		Initial adopted budget	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
2703	*CBE Studies, consultancy and other services*	*50*	-	*1*	*51*	-	-	-	*51*
2704	*CBE Service contracts*	*40*	-	*(40)*	*0*	-	*11*	*11*	*11*
2705	*CBE Audit costs*	*51*	-	*(2)*	*49*	-	-	-	*49*
2706	*BBI External staff*	-	-	-	-	*11*	-	*11*	*11*
2707	*CBE External staff*	*267*	-	*(27)*	*240*	-	-	-	*240*
Total Chapter 27		408	-	(68)	340	27	11	38	379
2901	*CBE Expert reviewers*	*200*	-	-	*200*	-	-	-	*200*
Total Chapter 29		200	-	-	200	-	-	-	200
Total Title 2		**1.963**	**-**	**-**	**1.963**	**899**	**60**	**959**	**2.921**

5.1.3. Breakdown & changes in commitment appropriations – Title 3

EUR '000

	Item	Budget appropriations				Additional appropriations			Total appropr. available
		Initial adopted budget	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
3000	*BBI Previous years' calls*	-	-	-	-	-	*398*	*398*	*398*
Total Chapter 30		-	-	-	-	-	398	398	398
3100	*BBI Current year call*	-	-	-	-	-	*1*	*1*	*1*
3101	*CBE Current year call*	*146.526*	-	-	*146.526*	*68.154*	-	*68.154*	*214.680*
Total Chapter 31		146.526	-	-	146.526	68.154	1	68.155	214.681
3200	*CBE Evaluators' contracts and meetings*	*1.000*	-	-	*1.000*	*529*	-	*529*	*1.529*
Total Chapter 32		1.000	-	-	1.000	529	-	529	1.529
Total Title 3		**147.526**	**-**	**-**	**147.526**	**68.683**	**399**	**69.082**	**216.608**

GRAND TOTAL		**151.028**	-	-	**151.028**	**71.509**	**462**	**71.972**	**223.000**

5.2. Breakdown & changes in payment appropriations

5.2.1. Breakdown & changes in payment appropriations – Title 1

EUR '000

	Item	Budget appropriations				Additional appropriations			Total appropr. available
		Initial budget adopted	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
1100	*BBI Staff costs*	*-*	*-*	*-*	*-*	*1.049*	*-*	*1.049*	*1.049*
1001	*CBE Staff costs*	*1.599*	*-*	*9*	*1.608*	*312*	*-*	*312*	*1.920*
1111	*CBE Trainees*	*-*	*-*	*25*	*25*	*-*	*-*	*-*	*25*
Total Chapter 11		1.599	-	34	1.632	1.361	-	1.361	2.994
1202	*CBE Sundry recruitment expenses*	*75*	*-*	*(42)*	*33*	*-*	*-*	*-*	*33*
Total Chapter 12		75	-	(42)	33	-	-	-	33
1300	*BBI Mission expenses, duty travel expenses and other expenses*	*-*	*-*	*-*	*-*	*2*	*-*	*2*	*2*
1301	*CBE Mission expenses, duty travel expenses and other expenses*	*60*	*-*	*18*	*78*	*-*	*-*	*-*	*78*
Total Chapter 13		60	-	18	78	2	-	2	80
1400	*BBI Medical service*	*-*	*-*	*-*	*-*	*1*	*-*	*1*	*1*
1401	*BBI Mobility costs and other social expenses for service*	*-*	*-*	*-*	*-*	*22*	*-*	*22*	*22*
1402	*BBI Training*	*-*	*-*	*-*	*-*	*2*	*-*	*3*	*3*
1404	*CBE Medical service*	*265*	*-*	*(221)*	*44*	*-*	*-*	*-*	*44*
1405	*CBE Mobility costs and other social expenses for service*	*-*	*-*	*165*	*165*	*-*	*-*	*-*	*165*
1406	*CBE Training*	*-*	*-*	*50*	*50*	*-*	*-*	*-*	*50*
Total Chapter 14		265	-	(6)	259	24	1	25	284
1500	*BBI Staff teambuilding and related events*	*-*	*-*	*-*	*-*	*1*	*-*	*1*	*1*
1501	*CBE Staff teambuilding and related events*	*10*	*-*	*(4)*	*6*	*-*	*3*	*3*	*9*
Total Chapter 15		10	-	(4)	6	1	3	4	10
Total Title 1		**2.009**	**-**	**-**	**2.009**	**1.389**	**4**	**1.392**	**3.401**

5.2.2. Breakdown & changes in payment appropriations – Title 2

EUR '000

	Item	Budget appropriations				Additional appropriations			Total appropr. available
		Initial budget adopted	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
2000	*BBI Rentals*	-	-	-	-	*397*	-	*397*	*397*
2001	*CBE Rentals*	*240*	-	*(77)*	*163*	-	-	-	*163*
Total Chapter 20		240	-	(77)	163	397	-	397	560
2100	*BBI IT equipment & software purchase/development costs*	-	-	-	-	*45*	-	*45*	*45*
2101	*BBI Other IT costs*	-	-	*12*	*12*	*100*	-	*100*	*112*
2102	*CBE IT equipment & software purchase/development costs*	*323*	-	*(14)*	*309*	*238*	*10*	*248*	*557*
2103	*CBE Other IT costs*	*127*	-	*43*	*170*	*10*	*35*	*45*	*214*
Total Chapter 21		450	-	41	491	393	45	438	929
2201	*CBE Movable property and associated office equipment*	*5*	-	*(5)*	-	-	-	-	-
Total Chapter 22		5	-	(5)	-	-	-	-	-
2302	*BBI Legal expenditure*	-	-	-	-	*2*	-	*2*	*2*
2304	*CBE Stationery and office supplies*	*35*	-	-	*35*	-	-	-	*35*
2306	*CBE Legal expenditure*	-	-	-	-	*2*	-	*2*	*2*
2307	*CBE Other current administrative expenditure*	-	-	-	-	*1*	-	*1*	*1*
Total Chapter 23		35	-	-	35	5	-	5	40
2401	*CBE Telecommunications and postal charges*	*26*	-	*(19)*	*7*	*9*	*4*	*13*	*20*
Total Chapter 24		26	-	(19)	7	9	4	13	20
2501	*CBE Expenditure on formal meetings*	*50*	-	*(10)*	*40*	-	-	-	*40*
Total Chapter 25		50	-	(10)	40	-	-	-	40
2600	*BBI Events and campaigns*	-	-	-	-	*506*	-	*506*	*506*
2601	*BBI Materials*	-	-	-	-	*53*	-	*53*	*53*
2602	*BBI Communications tools*	-	-	-	-	*90*	-	*90*	*90*
2603	*BBI Public relations*	-	-	-	-	*40*	-	*40*	*40*
2604	*CBE Events and campaigns*	*(56)*	-	*150*	*94*	*183*	-	*183*	*277*
2605	*CBE Materials*	*128*	-	*(33)*	*95*	*15*	-	*15*	*110*
2606	*CBE Communications tools*	*78*	-	*(62)*	*16*	-	-	-	*16*
2607	*CBE Public relations*	*75*	-	*(58)*	*17*	-	-	-	*17*
Total Chapter 26		225	-	(4)	222	888	-	888	1 109
2700	*BBI Studies, consultancy and other services*	-	-	-	-	*21*	-	*21*	*21*
2702	*BBI Audit costs*	-	-	-	-	*21*	-	*21*	*21*

EUR '000

	Item	Budget appropriations				Additional appropriations			Total appropr. available
		Initial budget adopted	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
2703	*CBE Studies, consultancy and other services*	*(96)*	-	*127*	*31*	-	-	-	*31*
2704	*CBE Service contracts*	*40*	-	*(20)*	*20*	-	*11*	*11*	*31*
2705	*CBE Audit costs*	*51*	-	-	*51*	-	-	-	*51*
2706	*BBI External staff*	-	-	-	-	*57*	-	*57*	*57*
2707	*CBE External staff*	*267*	-	*16*	*283*	-	-	-	*283*
Total Chapter 27		262	-	123	385	99	11	110	496
2900	*BBI Expert reviewers*	-	-	-	-	*67*	-	*67*	*67*
2901	*CBE Expert reviewers*	*200*	-	*(50)*	*150*	-	-	-	*150*
Total Chapter 29		200	-	(50)	150	67	-	67	217
Total Title 2		**1.493**	**-**	**-**	**1.493**	**1.858**	**60**	**1.918**	**3.411**

5.2.3. Breakdown & changes in payment appropriations – Title 3

EUR '000

	Item	Budget appropriations				Additional appropriations			Total appropr. available
		Initial budget adopted	Amending budgets	Transfers	Final adopted budget	Reactivated appropriations	Assigned revenue	Total	
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
3000	*BBI Previous years' calls*	-	-	-	-	*10.590*	*398*	*10.987*	*10.987*
3001	*CBE Previous years' calls*	*156.408*	-	*(156.408)*	-	-	-	-	-
Total Chapter 30		156.408	-	(156.408)	-	10.590	398	10.987	10.987
3100	*BBI Current year call*	-	-	-	-	*16.000*	*1*	*16.001*	*16.001*
3101	*CBE Current year call*	-	-	*156.408*	*156.408*	*529*	-	*529*	*156.937*
Total Chapter 31		-	-	156.408	156.408	16.529	1	16.530	172.938
3200	*CBE Evaluators' contracts and meetings*	*1.000*	-	-	*1.000*	-	-	-	*1.000*
Total Chapter 32		1.000	-	-	1.000	-	-	-	1.000
Total Title 3		**157.408**	**-**	**-**	**157.408**	**27.119**	**399**	**27.517**	**184.925**

GRAND TOTAL		**160.910**	**-**	**-**	**160.910**	**30.365**	**462**	**30.828**	**191.737**

5.3. IMPLEMENTATION OF COMMITMENT APPROPRIATIONS

5.3.1. Implementation of commitment appropriations – Title 1

EUR '000

	Item	Total approp. available	Commitments made					Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	from final adopt. budget	from re-activa-tions	from assign. revenue	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9
1100	*BBI Staff costs*	*1.005*	-	*1.005*	-	*1.005*	*100%*	-	-	-	-
1101	*CBE Staff costs*	*2.037*	*969*	*923*	-	*1.892*	*93%*	*145*	-	-	*145*
1111	*CBE Trainees*	*25*	*23*	-	-	*23*	*94%*	*1*	-	-	*1*
Total Chapter 11		3.066	993	1.927	-	2.920	95%	146	-	-	146
1202	*CBE Sundry recruitment expenses*	*13*	*4*	-	-	*4*	*31%*	*9*	-	-	*9*
Total Chapter 12		13	4	-	-	4	31%	9	-	-	9
1301	*CBE Mission expenses, duty travel expenses and other expenses*	*118*	*118*	-	-	*118*	*100%*	-	-	-	-
Total Chapter 13		118	118	-	-	118	100%	-	-	-	-
1404	*CBE Medical service*	*22*	*22*	-	-	*22*	*100%*	-	-	-	-
1405	*CBE Mobility costs and other social expenses for service*	*165*	*165*	-	-	*165*	*100%*	-	-	-	-
1406	*CBE Training*	*75*	*75*	-	-	*75*	*100%*	-	-	-	-
Total Chapter 14		263	262	-	-	262	100%	-	-	1	1
1501	*CBE Staff teambuilding and related events*	*11*	*8*	-	-	*8*	*71%*	-	-	*3*	*3*
Total Chapter 15		11	8	-	-	8	71%	-	-	3	3
Total Title 1		**3.471**	**1.384**	**1.927**	**-**	**3.312**	**95%**	**155**	**-**	**4**	**159**

5.3.2. Implementation of commitment appropriations – Title 2

EUR '000

	Item	Total approp. available	Commitments made					Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	from final adopt. budget	from re-activa-tions	from assign. revenue	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9
2000	*BBI Rentals*	*170*	*0*	*170*	*-*	*170*	*100%*	*-*	*-*	*-*	*-*
2001	*CBE Rentals*	*778*	*163*	*-*	*-*	*163*	*21%*	*614*	*-*	*-*	*614*
2011	*CBE Charges and works*	*-*	*-*	*-*	*-*	*0*	*100%*	*-*	*-*	*-*	*-*
Total Chapter 20		948	164	170	-	334	35%	614	-	-	614
2101	*BBI Other IT costs*	*71*	*-*	*71*	*-*	*71*	*100%*	*-*	*-*	*-*	*-*
2102	*CBE IT equipment & software purchase/development costs*	*551*	*245*	*165*	*3*	*413*	*75%*	*-*	*131*	*7*	*139*
2103	*CBE Other IT costs*	*218*	*172*	*12*	*-*	*183*	*84%*	*-*	*-*	*35*	*35*
2104	*CBE Stationery and office supplies*	*11*	*11*	*-*	*-*	*11*	*100%*	*-*	*-*	*-*	*-*
2106	*CBE Legal expenditure*	*2*	*-*	*-*	*-*	*-*	*-%*	*-*	*2*	*-*	*2*
2107	*CBE Other current administrative expenditure*	*1*	*1*	*-*	*-*	*1*	*100%*	*-*	*-*	*-*	*-*
Total Chapter 21		854	428	248	3	678	79%	-	133	42	176
2401	*CBE Telecommunications and postal charges*	*9*	*5*	*-*	*4*	*9*	*100%*	*-*	*-*	*-*	*-*
Total Chapter 24		9	5	-	4	9	100%	-	-	-	-
2501	*CBE Expenditure on formal meetings*	*49*	*34*	*-*	*-*	*34*	*69%*	*15*	*-*	*-*	*15*
Total Chapter 25		49	34	-	-	34	69%	15	-	-	15
2600	*BBI Events and campaigns*	*44*	*-*	*36*	*-*	*36*	*83%*	*-*	*8*	*-*	*8*
2602	*BBI Communications tools*	*90*	*-*	*90*	*-*	*90*	*100%*	*-*	*-*	*-*	*-*
2603	*BBI Public relations*	*40*	*-*	*40*	*-*	*40*	*100%*	*-*	*-*	*-*	*-*
2604	*CBE Events and campaigns*	*245*	*116*	*129*	*-*	*245*	*100%*	*-*	*-*	*-*	*-*
2605	*CBE Materials*	*42*	*25*	*17*	*-*	*42*	*100%*	*-*	*-*	*-*	*-*
2606	*CBE Communications tools*	*20*	*19*	*-*	*-*	*19*	*97%*	*1*	*-*	*-*	*1*
2607	*CBE Public relations*	*2*	*2*	*-*	*-*	*2*	*100%*	*-*	*-*	*-*	*-*
Total Chapter 26		482	161	313	-	474	98%	1	8	-	8
2700	*BBI Studies, consultancy and other services*	*16*	*-*	*16*	*-*	*16*	*100%*	*-*	*-*	*-*	*-*
2703	*CBE Studies, consultancy and other services*	*51*	*39*	*-*	*-*	*39*	*75%*	*13*	*-*	*-*	*13*
2704	*CBE Service contracts*	*11*	*-*	*-*	*11*	*11*	*100%*	*-*	*-*	*-*	*-*
2705	*CBE Audit costs*	*49*	*49*	*-*	*-*	*49*	*100%*	*-*	*-*	*-*	*-*
2706	*BBI External staff*	*11*	*-*	*11*	*-*	*11*	*100%*	*-*	*-*	*-*	*-*

EUR '000

	Item	Total approp. available	Commitments made					Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	from final adopt. budget	from re-activa-tions	from assign. revenue	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9
2707	*CBE External staff*	*240*	*240*	-	-	*240*	*100%*	-	-	-	-
Total Chapter 27		379	328	27	11	366	97%	13	-	-	13
2901	*CBE Expert reviewers*	*200*	*200*	-	-	*200*	*100%*	-	-	-	-
Total Chapter 29		200	200	-	-	200	100%	-	-	-	-
Total Title 2		**2.921**	**1.320**	**758**	**18**	**2.095**	**72%**	**643**	**141**	**42**	**826**

5.3.3. Implementation of commitment appropriations – Title 3

EUR '000

	Item	Total approp. available	Commitments made					Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	from final adopt. budget	from re-activa-tions	from assign. revenue	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9
3000	*BBI Previous years' calls*	*398*	-	-	-	-	-%	-	-	*398*	*398*
Total Chapter 30		398	-	-	-	-	**-%**	-	-	398	398
3100	*BBI Current year call*	*1*	-	-	-	-	-%	-	-	*1*	*1*
3101[3]	*CBE Current year call*	*214.680*	*139.526*	*68.154*	-	*207.680*[4]	*97%*	*7.000*	-	-	*7.000*
Total Chapter 31		214.681	139.526	68.154	-	207.680	**97%**	7.000	-	1	7.001
3200	*CBE Evaluators' contracts and meetings*	*1.529*	*719*	-	-	*719*	*47%*	*281*	*529*	-	*811*
Total Chapter 32		1.529	719	-	-	719	**47%**	281	529	-	811
Total Title 3		**216.608**	**140.245**	**68.154**	**-**	**208.399**	**96%**[5]	**7.281**	**529**	**399**	**8.209**
GRAND TOTAL		**223.000**	**142.949**	**70.839**	**18**	**213.806**	**96%**[6]	**8.079**	**670**	**445**	**9.194**

[3] For item 3101 – CBE current year call, an additional EUR 7,5 million of CA which will not be used for the 2024 call, will be decommitted and reactivated in the 2026 budget. This reduces the % execution to 93%

[4] The real execution after the 2025 GAP is EUR 197.539 thousand. So the % execution is 92%

[5] See footnote 4. Total execution following Call 2024 GAP is 91%.

[6] See footnotes 4 and 5. Total execution is 92.5%.

5.4. IMPLEMENTATION OF PAYMENT APPROPRIATIONS

5.4.1. Implementation of payment appropriations – Title 1

EUR '000

	Item	Total approp. availab.	Payments made					Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	from final adopt. budget	from re-activa-tions	from assig. rev.	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9
1100	*BBI Staff costs*	*1.049*	*-*	*1.008*	*-*	*1.008*	*96%*	*-*	*41*	*-*	*41*
1101	*CBE Staff costs*	*1.920*	*1.569*	*312*	*-*	*1.881*	*98%*	*39*	*-*	*-*	*39*
1111	*CBE Trainees*	*25*	*22*	*-*	*-*	*22*	*90%*	*2*	*-*	*-*	*2*
Total Chapter 11		2.994	1.591	1.320	-	2.912	97%	41	41	-	82
1202	*CBE Sundry recruitment expenses*	*33*	*1*	*-*	*-*	*1*	*3%*	*32*	*-*	*-*	*32*
Total Chapter 12		33	1	-	-	1	3%	32	-	-	32
1300	*BBI Mission expenses, duty travel expenses and other expenses*	*2*	*-*	*2*	*-*	*2*	*100%*	*-*	*-*	*-*	*-*
1301	*CBE Mission expenses, duty travel expenses and other expenses*	*78*	*62*	*-*	*-*	*62*	*80%*	*15*	*-*	*-*	*15*
Total Chapter 13		80	62	2	-	65	81%	15	-	-	15
1400	*BBI Medical service*	*1*	*-*	*1*	*-*	*1*	*100%*	*-*	*-*	*-*	*-*
1401	*BBI Mobility costs and other social expenses for service*	*22*	*-*	*22*	*-*	*22*	*100%*	*-*	*-*	*-*	*-*
1402	*BBI Training*	*3*	*-*	*2*	*-*	*2*	*82%*	*-*	*-*	*-*	*-*
1404	*CBE Medical service*	*44*	*19*	*-*	*-*	*19*	*43%*	*25*	*-*	*-*	*25*
1405	*CBE Mobility costs and other social expenses for service*	*165*	*129*	*-*	*-*	*129*	*78%*	*36*	*-*	*-*	*36*
1406	*CBE Training*	*50*	*27*	*-*	*-*	*27*	*54%*	*23*	*-*	*-*	*23*
Total Chapter 14		284	176	24	-	200	70%	83	-	-	84
1500	*BBI Staff teambuilding and related events*	*1*	*-*	*1*	*-*	*1*	*100%*	*-*	*-*	*-*	*-*
1501	*CBE Staff teambuilding and related events*	*9*	*6*	*-*	*1*	*7*	*73%*	*-*	*-*	*2*	*3*
Total Chapter 15		10	6	1	1	8	75%	-	-	2	3
Total Title 1		**3.401**	**1.836**	**1.348**	**1**	**3.185**	**94%**	**172**	**41**	**3**	**216**

5.4.2. Implementation of payment appropriations – Title 2

EUR '000

	Item	Total approp. availab.	Payments made					Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	from final adopt. budget	from re-activa-tions	from assig. rev.	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9
2000	*BBI Rentals*	*397*	*-*	*170*	*-*	*170*	*43%*	*-*	*227*	*-*	*227*
2001	*CBE Rentals*	*163*	*163*	*-*	*-*	*163*	*100%*	*-*	*-*	*-*	*-*
Total Chapter 20		560	163	170	-	333	59%	-	227	-	227
2100	*BBI IT equipment & software purchase/development costs*	*45*	*-*	*45*	*-*	*45*	*100%*	*-*	*-*	*-*	*-*
2101	*BBI Other IT costs*	*112*	*12*	*96*	*-*	*108*	*96%*	*-*	*5*	*-*	*5*
2102	*CBE IT equipment & software purchase/development costs*	*557*	*180*	*238*	*4*	*422*	*76%*	*129*	*-*	*6*	*135*
2103	*CBE Other IT costs*	*214*	*167*	*1*	*35*	*203*	*95%*	*3*	*9*	*-*	*12*
Total Chapter 21		929	359	379	39	777	84%	132	14	6	152
2302	*BBI Legal expenditure*	*2*	*-*	*2*	*-*	*2*	*100%*	*-*	*-*	*-*	*0*
2304	*CBE Stationery and office supplies*	*35*	*11*	*-*	*-*	*11*	*30%*	*25*	*-*	*-*	*25*
2306	*CBE Legal expenditure*	*2*	*-*	*-*	*-*	*-*	*-%*	*-*	*2*	*-*	*2*
2307	*CBE Other current administrative expenditure*	*1*	*-*	*1*	*-*	*1*	*100%*	*-*	*-*	*-*	*-*
Total Chapter 23		40	11	3	-	14	34%	25	2	-	27
2401	*CBE Telecommunications and postal charges*	*20*	*1*	*1*	*-*	*3*	*13%*	*6*	*7*	*4*	*17*
Total Chapter 24		20	1	2	-	3	15%	6	7	4	17
2501	*CBE Expenditure on formal meetings*	*40*	*33*	*-*	*-*	*33*	*83%*	*7*	*-*	*-*	*7*
Total Chapter 25		40	33	-	-	33	83%	7	-	-	7
2600	*BBI Events and campaigns*	*506*	*-*	*506*	*-*	*506*	*100%*	*-*	*-*	*-*	*-*
2601	*BBI Materials*	*53*	*-*	*53*	*-*	*53*	*100%*	*-*	*-*	*-*	*-*
2602	*BBI Communications tools*	*90*	*-*	*90*	*-*	*90*	*100%*	*-*	*-*	*-*	*-*
2603	*BBI Public relations*	*40*	*-*	*40*	*-*	*40*	*100%*	*-*	*-*	*-*	*-*
2604	*CBE Events and campaigns*	*277*	*94*	*183*	*-*	*277*	*100%*	*-*	*-*	*-*	*-*
2605	*CBE Materials*	*110*	*22*	*8*	*-*	*30*	*27%*	*74*	*7*	*-*	*80*
2606	*CBE Communications tools*	*16*	*11*	*-*	*-*	*11*	*70%*	*5*	*-*	*-*	*5*

EUR '000

	Item	Total approp. availab.	Payments made					Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	from final adopt. budget	from re-activa-tions	from assig. rev.	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9
2607	*CBE Public relations*	*17*	*2*	*-*	*-*	*2*	*11%*	*15*	*-*	*-*	*15*
Total Chapter 26		1.109	128	881	-	1.009	91%	93	7	-	100
2700	*BBI Studies, consultancy and other services*	*21*	*-*	*21*	*-*	*21*	*100%*	*-*	*-*	*-*	*-*
2702	*BBI Audit costs*	*21*	*-*	*21*	*-*	*21*	*100%*	*-*	*-*	*-*	*-*
2703	*CBE Studies, consultancy and other services*	*31*	*10*	*-*	*-*	*10*	*33%*	*21*	*-*	*-*	*21*
2704	*CBE Service contracts*	*31*	*-*	*-*	*-*	*-*	*-%*	*20*	*-*	*11*	*31*
2705	*CBE Audit costs*	*51*	*1*	*-*	*-*	*1*	*3%*	*50*	*-*	*-*	*50*
2706	*BBI External staff*	*57*	*-*	*55*	*-*	*55*	*96%*	*0*	*2*	*-*	*2*
2707	*CBE External staff*	*283*	*223*	*-*	*-*	*223*	*79%*	*60*	*-*	*-*	*60*
Total Chapter 27		496	235	97	-	332	67%	150	2	11	164
2900	*BBI Expert reviewers*	*67*	*-*	*67*	*-*	*67*	*100%*	*-*	*-*	*-*	*-*
2901	*CBE Expert reviewers*	*150*	*80*	*-*	*-*	*80*	*53%*	*70*	*-*	*-*	*70*
Total Chapter 29		217	80	67	-	147	68%	70	-	-	70
Total Title 2		**3.411**	**1.011**	**1.599**	**39**	**2.649**	**78%**	**482**	**260**	**21**	**763**

5.4.3. Implementation of payment appropriations – Title 3

EUR '000

	Item	Total approp. availab.	Payments made					Appropriations lapsing			
			from final adopt. budget	from re-activations	from assign. revenue	Total	%	from final adopt. budget	from re-activa-tions	from assig. rev.	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9	10=7+8+9
3000	*BBI Previous years' calls*	*10.987*	*-*	*3.985*	*379*	*4.364*	*40%*	*-*	*6.605*	*19*	*6.624*
Total Chapter 30		10.987	-	3.985	379	4.364	40%	-	6.605	19	6.624
3100	*BBI Current year call*	*16.001*	*-*	*15.115*	*1*	*15.115*	*94%*	*-*	*885*	*-*	*885*
3101	*CBE Current year call*	*156.937*	*131.620*	*529*	*-*	*132.149*	*84%*	*24.788*	*-*	*-*	*24.788*
Total Chapter 31		172.938	131.620	15.644	1	147.265	85%	24.788	885	0	25.673
3200	*CBE Evaluators' contracts and meetings*	*1.000*	*719*	*-*	*-*	*719*	*72%*	*281*	*-*	*-*	*281*
Total Chapter 32		1.000	719	-	-	719	72%	281	-	-	281
Total Title 3		**184.925**	**132.339**	**19.629**	**379**	**152.347**	82%	**25.069**	**7.490**	**19**	**32.578**
GRAND TOTAL		**191.737**	**135.186**	**22.576**	**419**	**158.181**	**82%**	**25.724**	**7.790**	**43**	**33.557**

6. OUTSTANDING COMMITMENTS

6.1. Outstanding commitments – Title 1

EUR '000

		Commitments outstanding at the end of previous year				Commitments of the current year			Total commitm. outstanding at year-end
	Item	Commitm. carried forward from previous year	Decommit. Revaluation Cancellations	Payments	Total	Commit-ments made during the year	Payments	Commit. outstanding at year-end	
		1	2	3	4=1+2-3	5	6	7=5-6	8=4+7
1100	*BBI Staff costs*	*6*	*(3)*	*3*	-	*1.005*	*1.005*	-	-
1101	*CBE Staff costs*	*20*	*(20)*	-	-	*1.892*	*1.881*	*11*	*11*
1110	*BBI Trainees*	*5*	*(5)*	-	-	-	-	-	-
1111	*CBE Trainees*	-	-	-	-	*23*	*22*	*1*	*1*
Total Chapter 11		31	(27)	3	-	2.920	2.909	12	12
1200	*BBI Sundry recruitment expenses*	*15*	*(15)*	-	-	-	-	-	-
1202	*CBE Sundry recruitment expenses*	-	-	-	-	*4*	*1*	*3*	*3*
Total Chapter 12		15	(15)	-	-	4	1	3	3
1300	*BBI Mission, duty travel and other expenses*	*5*	*(3)*	*2*	-	-	-	-	-
1301	*CBE Mission, duty travel and other expenses*	-	-	-	-	*118*	*62*	*55*	*55*
Total Chapter 13		5	(3)	2	-	118	62	55	55
1400	*BBI Medical service*	*1*	-	*1*	-	-	-	-	-
1401	*BBI Mobility costs and other social expenses for service*	*33*	*(6)*	*22*	*5*	-	-	-	*5*
1402	*BBI Training*	*2*	-	*2*	-	-	-	-	-
1404	*CBE Medical service*	-	-	-	-	*22*	*19*	*3*	*3*
1405	*CBE Mobility costs and other social expenses for service*	-	-	-	-	*165*	*129*	*36*	*36*
1406	*CBE Training*	-	-	-	-	*75*	*27*	*48*	*48*
Total Chapter 14		36	(6)	25	5	262	176	87	92
1500	*BBI Staff teambuilding and related events*	*4*	*(3)*	*1*	-	-	-	-	-
1501	*CBE Staff teambuilding and related events*	-	-	-	-	*8*	*7*	*1*	*1*
Total Chapter 1501		4	(3)	1	-	8	7	1	1
Total Title 1		**91**	**(55)**	**31**	**5**	**3.312**	**3.154**	**157**	**162**

6.2. Outstanding commitments – Title 2

EUR '000

		Commitments outstanding at the end of previous year				Commitments of the current year			Total commitm. outstanding at year-end
	Item	Commitm. carried forward from previous year	Decommit. Revaluation Cancellations	Payments	Total	Commit. made during the year	Payments	Commit. outstanding at year-end	
		1	2	3	4=1+2-3	5	6	7=5-6	8=4+7
2000	*BBI Rentals*	-	-	-	-	*170*	*170*	-	-
2001	*CBE Rentals*	-	-	-	-	*163*	*163*	-	-
Total Chapter 20		-	-	-	-	334	333	1	1
2100	*BBI IT equipment & software purchase/development costs*	*52*	*(7)*	*45*	-	-	-	-	-
2101	*BBI Other IT costs*	*199*	*(126)*	*55*	*18*	*71*	*52*	*19*	*37*
2102	*CBE IT equipment & software purchase / development costs*	*314*	-	*314*	-	*413*	*108*	*304*	*304*
2103	*CBE Other IT costs*	*30*	*(10)*	*20*	-	*183*	*182*	*1*	*1*
Total Chapter 21		595	(143)	434	18	667	343	324	342
2300	*BBI Stationery and office supplies*	*3*	*(2)*	-	-	-	-	-	-
2302	*BBI Legal expenditure*	*2*	-	*2*	-	-	-	-	-
2304	*CBE Stationery and office supplies*	-	-	-	-	*11*	*11*	-	-
2307	*CBE Other current administrative expenditure*	-	-	-	-	*1*	*1*	-	-
Total Chapter 23		5	(2)	2	-	11	11	-	-
2400	*BBI Telecommunications and postal charges*	*2*	*(2)*	-	-	-	-	-	-
2401	*CBE Telecommunications and postal charges*	-	-	-	-	*9*	*3*	*7*	*7*
Total Chapter 24		2	(2)	-	-	9	3	7	7
2500	*BBI Expenditure on formal meetings*	*18*	*(18)*	-	-	-	-	-	-
2501	*CBE Expenditure on formal meetings*	-	-	-	-	*34*	*33*	*1*	*1*
Total Chapter 25		18	(18)	-	-	34	33	1	1
2600	*BBI Events and campaigns*	*472*	*(3)*	*469*	-	*36*	*36*	-	-
2601	*BBI Materials*	*80*	*(26)*	*53*	-	-	-	-	-
2602	*BBI Communications tools*	*7*	*(6)*	-	-	*90*	*90*	-	-
2603	*BBI Public relations*	-	-	-	-	*40*	*40*	-	-

EUR '000

		Commitments outstanding at the end of previous year				Commitments of the current year			Total commitm. outstanding at year-end
	Item	Commitm. carried forward from previous year	Decommit. Revaluation Cancellations	Payments	Total	Commit. made during the year	Payments	Commit. outstanding at year-end	
		1	2	3	4=1+2-3	5	6	7=5-6	8=4+7
2604	*CBE Events and campaigns*	*152*	*(64)*	*88*	*-*	*245*	*189*	*56*	*56*
2605	*CBE Materials*	*5*	*-*	*5*	*-*	*42*	*26*	*16*	*16*
2606	*CBE Communications tools*	*-*	*-*	*-*	*-*	*19*	*11*	*8*	*8*
2607	*CBE Public relations*	-	-	-	-	2	2	-	-
Total Chapter 26		*715*	*(100)*	*615*	*-*	*474*	*394*	*80*	*80*
2700	*BBI Studies, consultancy and other services*	*5*	*-*	*5*	*-*	*16*	*16*	*-*	*-*
2702	*BBI Audit costs*	*23*	*(3)*	*21*	*-*	*-*	*-*	*-*	*-*
2703	*CBE Studies, consultancy and other services*	*-*	*-*	*-*	*-*	*39*	*10*	*28*	*28*
2704	*CBE Service contracts*	*-*	*-*	*-*	*-*	*11*	*-*	*11*	*11*
2705	*CBE Audit costs*	*-*	*-*	*-*	*-*	*49*	*1*	*48*	*48*
2706	*BBI External staff*	*50*	*(6)*	*44*	*-*	*11*	*11*	*-*	*-*
2707	*CBE External staff*	*-*	*-*	*-*	*-*	*240*	*223*	*17*	*17*
Total Chapter 27		*78*	*(9)*	*69*	*-*	*366*	*263*	*103*	*103*
2900	*BBI Expert reviewers*	*96*	*(30)*	*67*	*-*	*-*	*-*	*-*	*-*
2901	*CBE Expert reviewers*	*-*	*-*	*-*	*-*	*200*	*80*	*120*	*120*
Total Chapter 29		*96*	*(30)*	*67*	*-*	*200*	*80*	*120*	*120*
Total Title 2		**1.510**	**(303)**	**1.189**	**18**	**2.095**	**1.460**	**635**	**653**

6.3. Outstanding commitments – Title 3

EUR '000

		Commitments outstanding at the end of previous year				Commitments of the current year			
	Item	Commitm. carried forward from previous year	Decommit. Revaluation Cancellations	Payments	Total	Commit. made during the year	Payments	Commit. outstanding at year-end	Total commitm. outstanding at year-end
		1	2	3	4=1+2-3	5	6	7=5-6	8=4+7
3000	*BBI Previous years' calls*	*12.181*	*(546)*	*4.364*	*7.271*	*-*	*-*	*-*	*7.271*
Total Chapter 30		*12.181*	*(546)*	*4.364*	*7.271*	*-*	*-*	*-*	*7.271*
3100	*BBI Current year call*	*39.705*	*(1.070)*	*15.115*	*23.519*	*-*	*-*	*-*	*23.519*
3101	*CBE Current year call*	*251.684*	*(1.821)*	*131.349*	*118.514*	*207.680*	*800*	*206.880*	*325.394*
Total Chapter 31		*291.389*	*(2.892)*	*146.465*	*142.033*	*207.680*	*800*	*206.880*	*348.913*
3200	*CBE Evaluators' contracts and meetings*	*529*	*-*	*-*	*529*	*719*	*719*	*-*	*529*
Total Chapter 32		*529*	*-*	*-*	*529*	*719*	*719*	*-*	*529*
Total Title 3		**304.099**	**(3.438)**	**150.828**	**149.833**	**208.399**	**1.519**	**206.880**	**356.713**
GRAND TOTAL		**305.699**	**(3.795)**	**152.048**	**149.856**	**213.806**	**6.133**	**207.673**	**357.529**

7. GLOSSARY

Administrative appropriations

Appropriations to cover the running costs of the entities (staff, buildings, office equipment).

Adopted budget

Draft budget becomes the adopted budget as soon as approved by the budgetary authority.

Amending budget

Decision adopted during the budget year to amend (increase, decrease, transfer) aspects of the adopted budget of that year.

Appropriations

Budget funding.

The budget forecasts both commitments (legal pledges to provide finance) and payments (cash or bank transfers to the beneficiaries). Appropriations for commitments and payments often differ — differentiated appropriations — because multiannual programmes and projects are usually fully committed in the year they are decided and are paid over the years as the implementation of the programme and project progresses.

Assigned revenue

Revenue dedicated to finance specific items of expenditure.

Budget result

The difference between income received and amounts paid, including adjustments for carry-overs, cancellations and exchange rate differences.

For agencies, the resulting amount will have to be reimbursed to the funding authority.

Budget implementation

Consumption of the budget through expenditure and revenue operations.

Budget item / Budget line / Budget position

Revenue and expenditure are shown in the budget structure in accordance with a binding nomenclature, which reflects the nature and purpose of each item, as imposed by the budgetary authority. The individual headings (title, chapter, article or item) provide a formal description of the nomenclature.

Budgetary commitment

Operation by which the authorising officer responsible reserves the budget appropriations necessary to cover for subsequent payments to honour legal commitments.

Cancellation of appropriations

Appropriations which have not been used by the end of the financial year and which cannot be carried over, shall be cancelled.

Carryover of appropriations

Exception to the principle of annuality in so far as appropriations that could not be used in a given budget year may, under strict conditions, be exceptionally carried over for use during the following year.

Commitment appropriations

Commitment appropriations cover the total value of legal obligations (contracts, grant agreements or decisions) that could be signed in the current financial year.

De-commitment

Operation whereby the authorising officer responsible cancels wholly or partly the reservation of appropriations previously made by means of a budgetary commitment.

Differentiated appropriations.

Differentiated appropriations are used to finance multiannual operations; they cover, for the current financial year, the total cost of the legal obligations entered into for operations whose implementation extends over more than one financial year.

Economic result

Impact on the balance sheet of expenditure and revenue based on accrual accounting rules.

Entitlements established

Right to collect income from a debtor as recognised through the issuing of a recovery order.

Exchange rate difference

The difference resulting from currency exchange rates applied to the transactions concerning countries outside the euro area, or from the revaluation of assets and liabilities in foreign currencies at the date of the accounts.

Expenditure

Term used to describe spending the budget from all types of funds sources.

Grants

Direct financial contributions from the budget to third-party beneficiaries, engaged in activities that serve Union policies.

Lapsing appropriations

Unused appropriations to be cancelled at the end of the financial year. Lapsing means the cancellation of all or part of the authorisation to make expenditures and/or incur liabilities, as represented by an appropriation.

For joint undertakings (and EIT), as specified in their Financial Rules, any unused appropriations may be entered in the estimate of revenue and expenditure of up to the following three financial years (the so-called "N+3" rule). Hence, lapsing appropriations for JUs can be re-activated until financial year "N+3".

Legal basis / basic act

The legal act adopted by the legislative authority (usually the Council and European Parliament) specifying the objective of a Union spending programme, the purpose of the appropriations, the rules for intervention, expiry date and the relevant financial rules to serve as a legal basis for the implementation of the spending programme.

Legal commitment

The act whereby the Authorising Officer enters into an obligation towards third parties which results in acharge for the Union budget.

Common forms of legal commitments are contracts in the case of procurement, grant agreements andgrant decisions.

Non-differentiated appropriations

Appropriations which meet annual needs and must therefore be committed during the budget year. Only amounts qualifying for automatic carryover can be disbursed in the following year. Non -differentiated appropriations which have not been used, i.e. committed, by the end of the year, are cancelled (unless, exceptionally, permission is given by a Commission decision for a non-automatic carryover). Non-differentiated appropriations apply to administrative expenditure and commitment appropriations equal payment appropriations.

Operational appropriations

Operational appropriations finance the different policies, mainly in the form of grants or procurement.

Outstanding commitments

Outstanding commitments (or RAL, from the French 'reste à liquider') are defined as the amount of appropriations committed that have not yet been paid. They stem directly from the existence of multiannual programmes and the dissociation between commitment and payment appropriations.

Payment appropriations

Payment appropriations cover expenditure due in the current year, arising from legal commitments entered in the current year and/or earlier years.

RAL (Reste à liquider)

Amount remaining to be paid on a budgetary commitment at a given moment. Cf. Outstanding commitments

Surplus

Positive difference between revenue and expenditure, which has to be returned to the funding authority. Cf. Budget result

Transfer between budget lines

Transfers between budget lines imply the relocation of appropriations from one budget line to another, in the course of the financial year, and thereby they constitute an exception to the budgetary principle of specification.

5.11. MATERIALITY CRITERIA

The ‘materiality’ concept provides the Authorising Officer with a basis for assessing the importance of the weaknesses/risks that have been identified and thus whether those weaknesses should be subject to a formal reservation to his declaration.

When deciding whether something is material, both qualitative and quantitative terms have been considered.

In qualitative terms, assessing the significance of any weakness takes the following factors into account:

- The nature and scope of the weakness;
- The duration of the weakness;
- The existence of compensatory measures (mitigating controls that reduce the impact of the weakness);
- The existence of effective corrective action to correct the weaknesses (action plans and financial corrections) that have had a measurable impact.

In quantitative terms, in order to make a judgement on the significance of a weakness, the officer quantifies the potential maximum (financial) impact.

Whereas the BBI JU control strategy is multiannual (i.e. the effectiveness of the JU’s control strategy can only be assessed at the end of the programme, when the strategy has been fully implemented and any errors corrected), the Executive Director is required to sign a declaration of assurance for each financial year. In order to determine whether to qualify his declaration of assurance with a reservation, the effectiveness of the JU’s control system must be assessed, not only for the year of reference, but more importantly, with a multiannual perspective.

The control objective for BBI JU is set out in the Commission proposal for the Council Regulation on the Bio-based Industries Joint Undertaking. It is to ensure that the ‘residual error rate’ – i.e. the level of errors that remain undetected and uncorrected – on an annual basis, remains between 2-5 %t, with the ultimate aim of achieving a residual level of error as close as possible to 2 % at the closure of the multiannual programme. Progress towards this objective is to be (re)assessed annually, in view of the results of the ex-post audit strategy. As long as the residual error rate is not close to 2 % at the end of a reporting year within the programme life cycle, the Authorising Officer may also look at other management information to identify the overall impact of the situation and determine whether or not to include a reservation.

If it is not possible to make an adequate calculation of the residual error rate for reasons other than audit deficiencies, the consequences are to be assessed quantitatively by estimating the likely exposure for the reporting year. The relative impact on the declaration of assurance would then be considered by analysing the available information on qualitative grounds and considering evidence

from other sources and areas (e.g. information available on error rates in more experienced organisations with similar risk profiles).

EFFECTIVENESS OF CONTROLS

The starting point for determining the effectiveness of the controls in place is the 'representative error rate' (RepER) expressed as a percentage of errors in favour of the BBI JU, detected by ex-post audits with respect to the actual amounts of BBI JU contributions accepted after ex-ante controls.

The representative error rate will be based on the weighted average error rate (WAER) for a population, from which a random sample has been drawn according to the following formula:

$$WAER\% = \frac{\sum (er)}{RepA} = RepER\%$$

Where:

Σ (er) = sum of all individual errors in the sample (in value). Only looks at errors in favour of the JU[75];

RepA = total amount of the representative audited sample expressed in EUR;

Second step: calculating the residual error rate.

In order to allow for the impact of the ex-post controls, this error level is to be adjusted by subtracting:

- errors detected and corrected as a result of implementing audit conclusions;
- errors corrected as a result of the extrapolation of audit results to non-audited contracts with the same beneficiary.

This results in a residual error rate that shows how much error is left in the auditable population after the outcome of ex-post audits. It is calculated by using the following formula:

$$ResER\% = \frac{[RepER\% * (P-A) – RepERsys\% * E]}{P}$$

[75] Adjustments in favour of the beneficiary are considered as 0 for the purpose of calculating the WAER.

Where:

ResER% = residual error rate, expressed as a percentage

RepER% = representative error rate, or error rate detected in the representative sample, in the form of the WAER, expressed as a percentage and calculated as described above (WAER%)

RepERsys% = systematic portion of the RepER% (the RepER% is composed of complementary portions reflecting the proportion of 'systematic' and 'non-systematic' errors detected) expressed as a percentage of errors in favour of the BBI JU detected by ex-post audits measured with respect to the amounts of BBI JU eligible contributions accepted after ex-ante controls. Only errors in favour of the JU that are more than 2 % (threshold for extrapolation) will be taken into consideration[76].

P = total amount of the auditable population of cost claims, expressed in EUR

A = total cost accepted by Financial Officer, expressed in EUR related to the representative sampled list

E = total non-audited amounts of all audited beneficiaries, expressed in EUR. This will comprise the total amount of all non-audited but validated and paid costs for all audited beneficiaries, excluding those beneficiaries for which an extrapolation is ongoing

This calculation will be performed on a point-in-time basis, i.e. all the figures will be provided as of a certain date.

[76] Adjustments in favour of the Beneficiary are considered as 0 for the purpose of calculating the RepERsys.

5.12. LIST OF EVENTS IN WHICH CBE JU PARTICIPATED

Date	Event	Place	Type of participation
11/01/2024	Circular Bio-based Europe: Openings for Danish companies	Copenhagen, Denmark	Speaker
31/01/2024	IBISBA Inspiring biotech solutions mini-summit	Paris, France	Speaker
07/02/2024	Synergies between EU missions and European partnerships	Brussels, Belgium	Speaker
08/02/2024	EU-US workshop on bioeconomy	Online	Speaker
09/02/2024	ECOSYSTEX Insights webinar	Online	Speaker
15/02/2024	Talent 4BBI winter school	Brussels, Belgium	Speaker
28/02/2024	2nd World Biopolymers and Bioplastics Innovation 2024	Amsterdam, Netherlands	Speaker
06/03/2024	BIOEAST bioeconomy conference	Budapest, Hungary	Speaker
13/03/2024	Bioeconomy Changemakers Festival	Brussels, Belgium	Speaker, exhibitor
19/03/2024	Science Business round table on “white” biotech and biomanufacturing	Brussels, Belgium	Speaker
19/03/2024	BIOKET 2024	Reims, France	Speaker, exhibitor, session organiser
20/03/2024	Circular choices: Building EU open strategic autonomy through bioeconomy and innovation	Brussels, Belgium	Speaker
12/04/2024	European Partnership Stakeholder Forum 2024	Brussels, Belgium	Speaker
23/04/2024	CBE JU Info Day 2024	Brussels, Belgium	Organiser, speaker, exhibitor
24/04/2024	CHAMPION stakeholder event	Brussels, Belgium	Speaker
13/05/2024	COST connect: bio-based resources, materials and solutions	Brussels, Belgium	Speaker
22/05/2024	SWEETWOODS biorefinery inauguration	Imavere, Estonia	Speaker
30/05/2024	Exploring the role and potentialities of living labs in European partnerships	Brussels, Belgium	Speaker
24/06/2024	EUBCE 2024	Marseille, France	Speaker, exhibitor
26/06/2024	World Bio Markets	The Hague, Netherlands	Speaker, exhibitor
28/06/2024	IPIFF webinar	Brussels, Belgium	Speaker
04/07/2024	EU Presidency event on bioeconomy	Brussels, Belgium	Participant
13/09/2024	Overcoming investment barriers in forest sector - workshop	Brussels, Belgium	Speaker

18/09/2024	ERA conference	Brussels, Belgium	Participant
24/09/2024	European Biotech Week	Online	Speaker
30/09/2024	EU agencies exhibition at the European Parliament	Brussels, Belgium	Exhibitor
02/10/2024	Circular Biocarbon biorefinery inauguration	Zaragoza, Spain	Speaker
03/10/2024	IFIB 2024	Bologna, Italy	Speaker
15/10/2024	ECOSYSTEX conference	Milan, Italy	Speaker
22/10/2024	UNLOCK networking event	Brussels, Belgium	Speaker
22/10/2024	PEFerence start of the production event	Delfzijl, Netherlands	Speaker
23/10/2024	European farmers and agri-cooperatives congress	Bucharest, Romania	Speaker
23/10/2024	Global Bioeconomy Summit 2024	Nairobi, Kenya	Speaker, exhibitor
23/10/2024	European Process Industry Conference - A.SPIRE	Brussels, Belgium	Speaker
05/11/2024	ECOMONDO	Rimini, Italy	Speaker, exhibitor
13/11/2024	Sustainable Industry Week	Cologne, Germany	Speaker, exhibitor
19/11/2024	EBU anniversary	Brussels, Belgium	Speaker
20/11/2024	European Business Summit	Brussels, Belgium	Speaker
28/11/2024	Bioeconomy Regions Summit: Place-Based Forest Bioeconomy Transitions	Brussels, Belgium	Speaker
04/12/2024	European Presidency event on bioeconomy	Budapest, Hungary	Speaker

5.13. LIST OF ACRONYMS / ABBREVIATIONS

AAR	Annual Activity Report
APIK	All Participants In-Kind contributions
AWP	Annual Work Plan
BBI JU	Bio-Based Industries Joint Undertaking
BIC	Bio-based Industries Consortium
BOA	Back Office Arrangement
CEO	Chief Executive Officer
CA	Contractual Agent or Commitment Appropriation
CBE JU	Circular Bio-based Europe Joint Undertaking
CIC	Common Implementation Centre
CO_2	Carbon dioxide
CSA	Coordination and Support Actions
DEMOS-IA	Innovation Action for demonstrators
DG AGRI	Directorate-General Agriculture & Rural Development
DG GROW	Directorate-General Internal Markets, Industry, Entrepreneurship and SMEs
DG HR	Directorate-General for Human Resources
DG RTD	Directorate-General Research and Innovation
DPO	Data Protection Officer
EC	European Commission
ED	Executive Director
ECA	European Court of Auditors
ED	Executive Director
EFTA	European Free Trade Association
EIB	European Investment Bank
EU	European Union
F&T Portal	Funding & Tender opportunities Portal
FAQ	Frequently Asked Question
FC	Financial Contribution
FDCA	Furan Dicarboxylic Acid
FLAGS-IA	Innovation Action for Flagship
FWC	Framework Contract
GA	Grant Agreement
GAP	Grant Agreement preparation

GB	Governing Board of the BBI JU and CBE JU
GDP	Gross Domestic Product
GHG	Green House Gas
HE	Horizon Europe
HES	Higher or Secondary Education
IA	Innovation Action
IAS	Internal Audit Service
ICF	Internal Control Framework
ICT	Information and communication technology
IFIB	International Forum on Industrial Biotechnology and Bioeconomy
IKAA	In-kind contributions by BIC's constituent entities to additional activities
IKOP	In-kind contributions by BIC's constituent entities to operational activities
IPR	Intellectual Property Rights
IT	Information Technology
JU	Joint Undertaking
KIPS	Key Impact Pathways
KPI	Key Performance Indicator
LA	Lactic Acid
LISO	Local Informatics Security Officer
MAP	Multi-annual Planning
MGA	Model Grant Agreement
MS	Member State of the European Union
MSW	Municipal Solid Waste
OFMSW	Organic Fraction of Municipal Solid Waste
OLAF	European Anti-Fraud Office
OTH	Other type of organisations
PA	Payment Appropriation
PEF	Polyethylene furanoate
PET	Polyethylene terephthalate
PRC	Private- for- Profit
PUB	Public Body (excluding research and education)
R&D	Research and Development
REA	Research Executive Agency
REC	Research Organisation
RIA	Research and Innovation Actions
SC	Scientific Committee of the BBI JU

SDG	Sustainable Development Goal
SIR	Specific Implementing Rules
SIRA	Strategic Innovation and Research Agenda for BBI JU
SLA	Services Legal Agreement
SMEs	Small and Medium-Size Enterprises
SO	Strategic Orientation provided in the Strategic Innovation and Research Agenda
SRG	States' representatives group of the CBE JU
SRIA	Strategic Research and Innovation Agenda for CBE JU
TA	Temporary Agent
ToR	Terms of Reference
TRL	Technology Readiness Level
TTG	Time to Grant
TTI	Time to Inform
TTP	Time to Pay
UN	United Nations
WPS	Widening Participation Strategy