

A competitive bioeconomy for a sustainable future

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Head of the Programme Unit

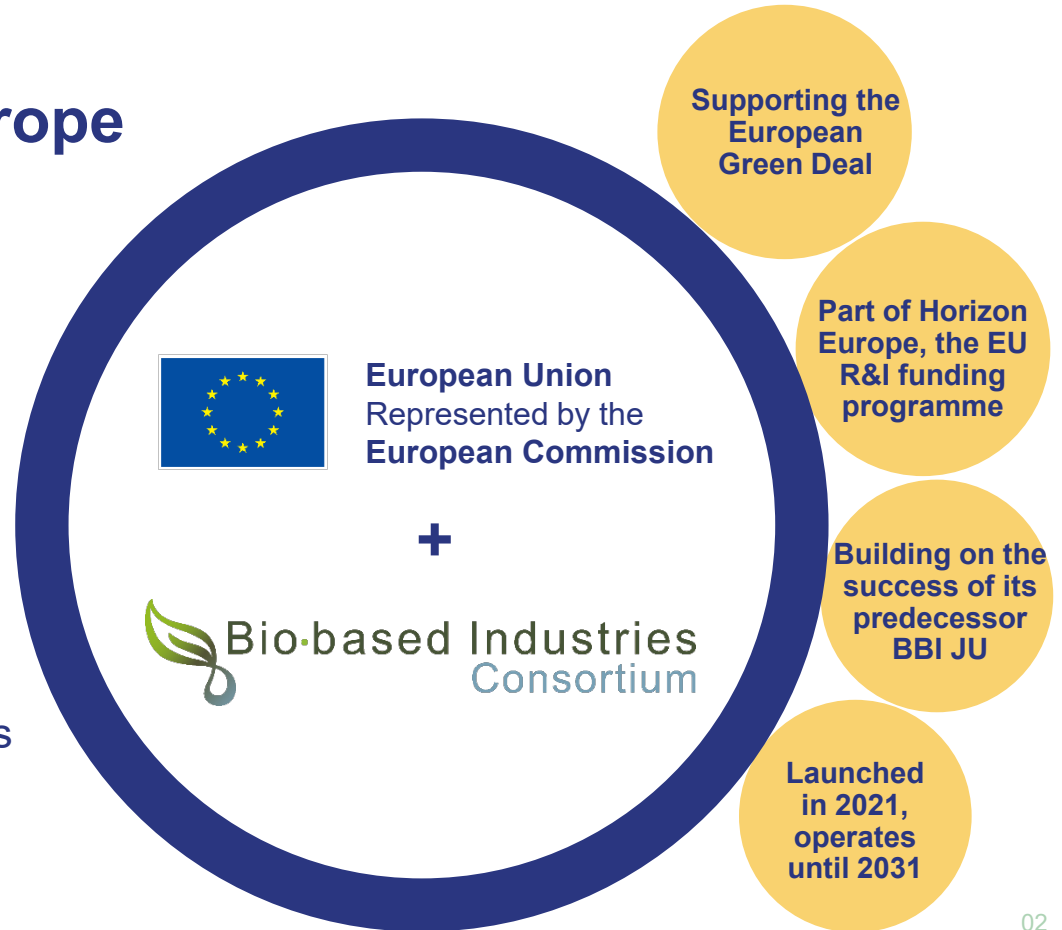
*“Bioeconomia circolare per la transizione
ecologica: nuove competenze e bisogni formativi”*
24 May 2024



Circular Bio-based Europe Joint Undertaking

€2 billion public-private initiative

CBE JU is funding projects that deliver bio-based solutions - materials and products made from waste and biomass - in an innovative, sustainable and circular way



Supporting the European Green Deal



Contributing significantly to the **2030 climate targets**, paving the way for climate neutrality by 2050



Increasing the **sustainability and circularity** of production and consumption systems



Developing and expanding the **sustainable sourcing and conversion of biomass** into bio-based products

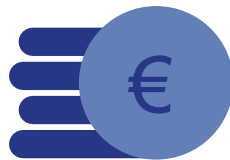


...Supporting the **deployment** of bio-based innovation **regional level**, with a view to reviving rural and coastal regions

CBE JU three key objectives



Accelerate the **innovation** process and development of bio-based innovative solutions



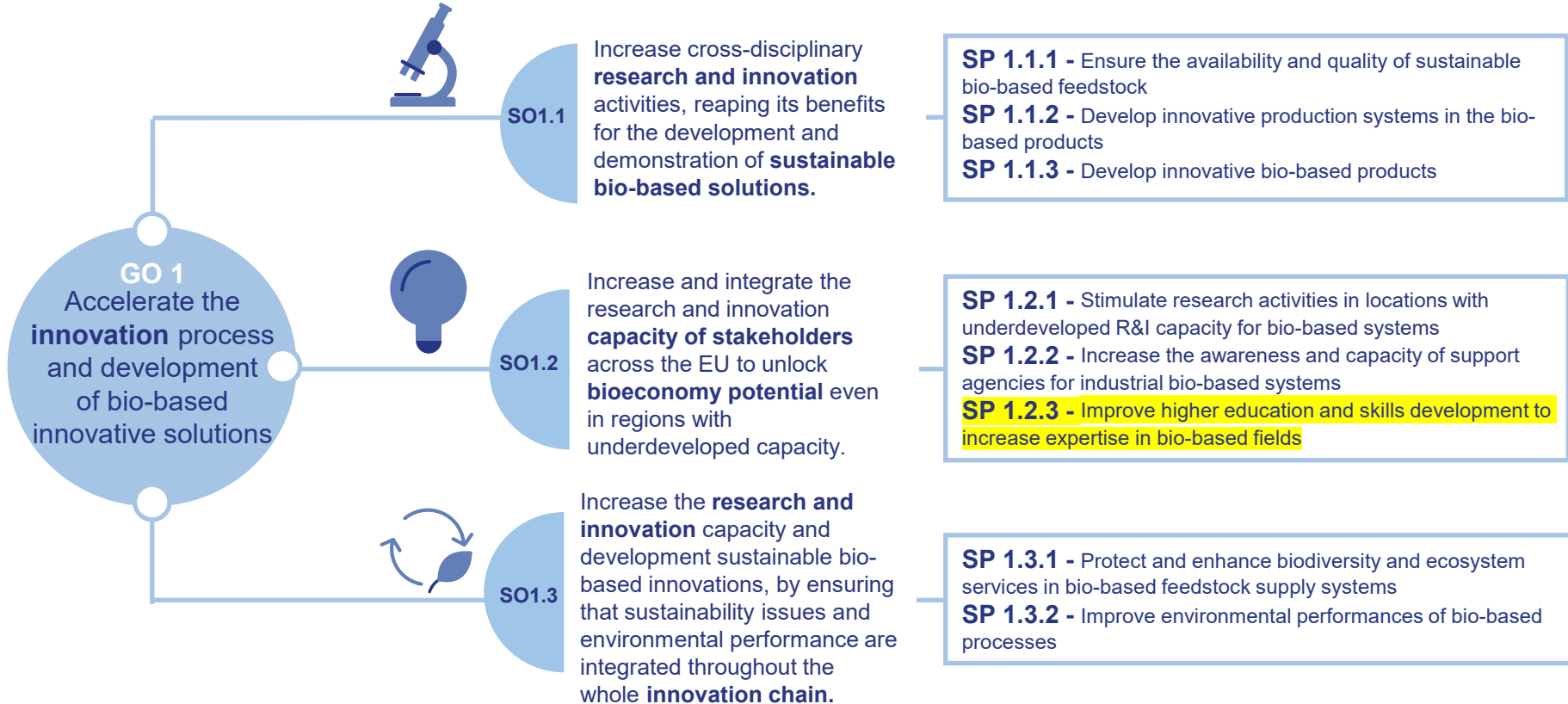
Accelerate **market deployment** of the existing mature bio-based innovative solutions



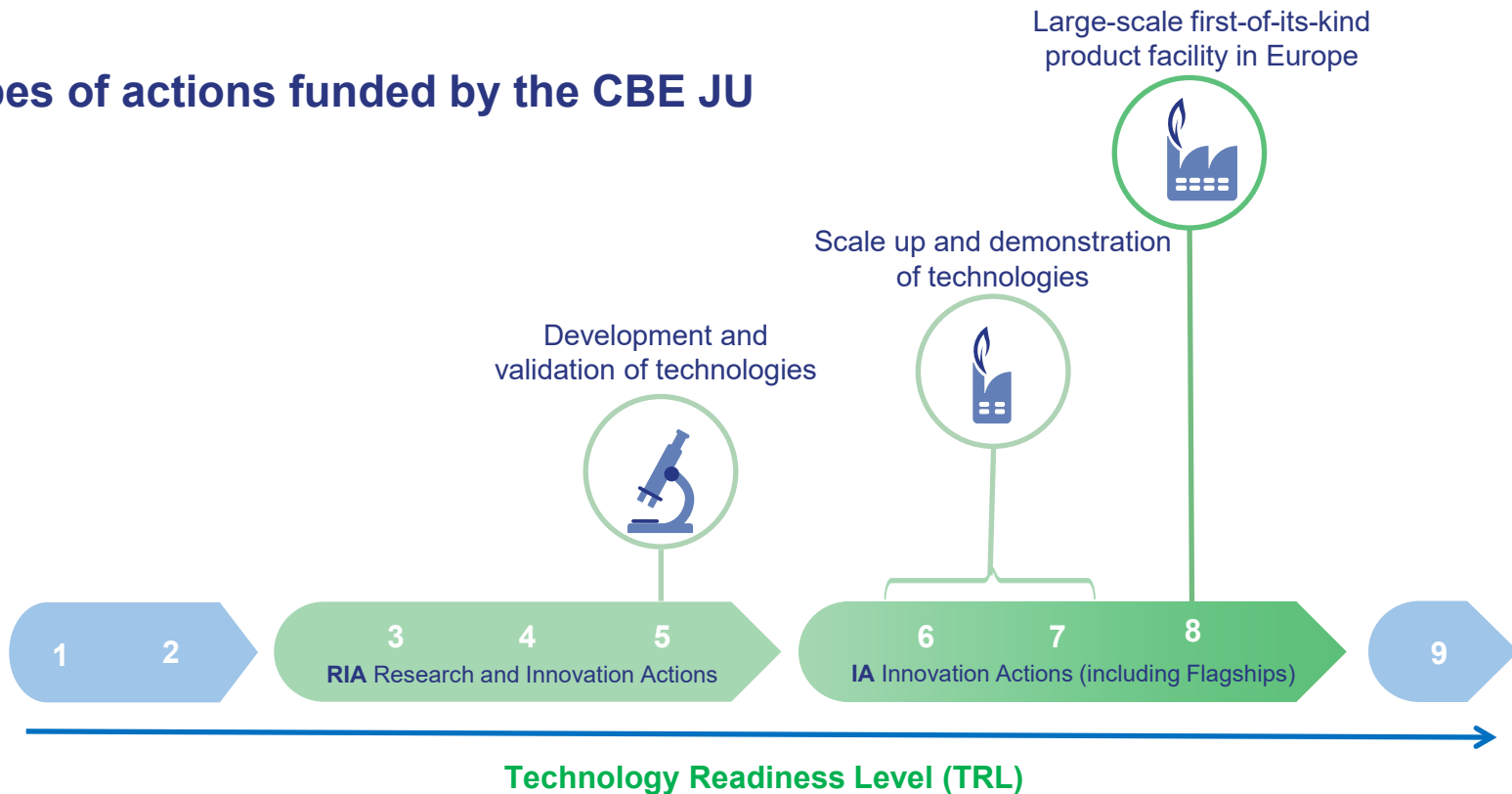
Ensure a high level of **environmental performance** of bio-based industrial systems



For each CBE objective we defined strategic priorities, together with specific action areas



Types of actions funded by the CBE JU



CSA: Coordination and Support Actions (no link with TRLs)

CBE JU portfolio

2014-2023



192
projects



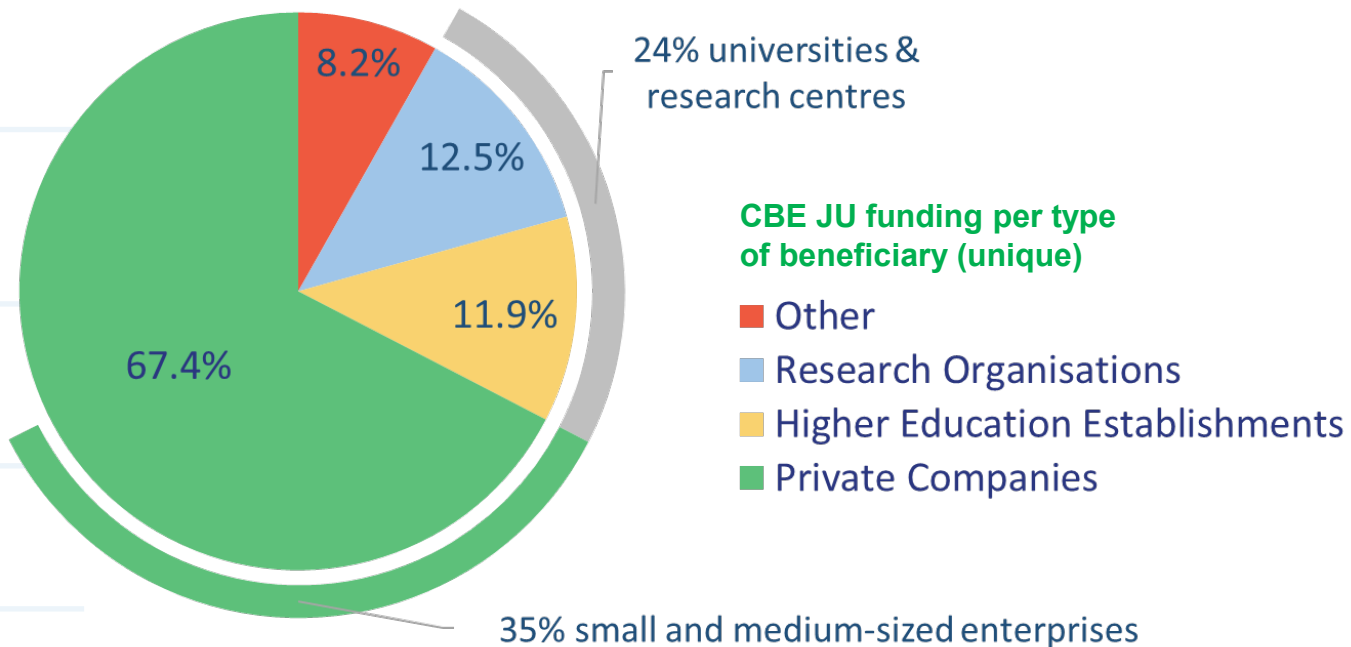
1,552
beneficiaries



€1,117 million
CBE JU
funding



43
countries



Data: CORDA, May 2024

Italy



First-of-its-kind industrial biorefinery



Demonstration plant

Opportunities for the bioeconomy

Socio-economic benefits

- REINDUSTRIALISATION
- RURAL DEVELOPMENT
- JOB CREATION

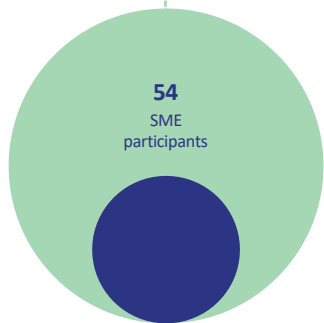
Main resources in CBE JU projects



FORESTRY RESIDUES

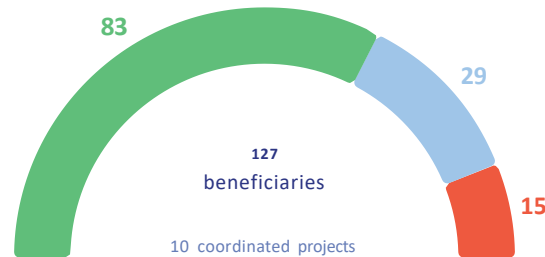
AGRO RESIDUES

MUNICIPAL WASTE



€21 million SME funding

€93 million CBE JU funding in Italy



FIRST2RUN

Biorefinery location

Porto Torres, Sardinia

Company

Novamont

Resource

Cardoons grown on marginal lands

Products

Bio-based compostable coffee pods.

Benefit

This Italian-led company developed bio-based solutions by collaborating with local farmers in Sardinia. Together, they turned cardoon plant oil into bio-based materials and products in this industrial biorefinery showing Italy's leadership in the bio-based sector.

- Private companies
- Universities & research centres
- Other



Check all the projects in the country

CBE JU-funded

 Flagship biorefinery

 Demonstration plant



Number of projects per country

BBI JU Annual Work Programme 2020 - Coordination and Support Actions (CSA) topic

BBI2020.SO4.S3 — Create And Interlink Bio-based Education Centres To Meet Industry's Needs Of Skills And Competences



Preparing the creation of Bio-Based Education Centres to meet industry needs and boost the contribution of the bioeconomy to societal challenges

Project lead: Alma Mater Studiorum – University of Bologna (Italy)

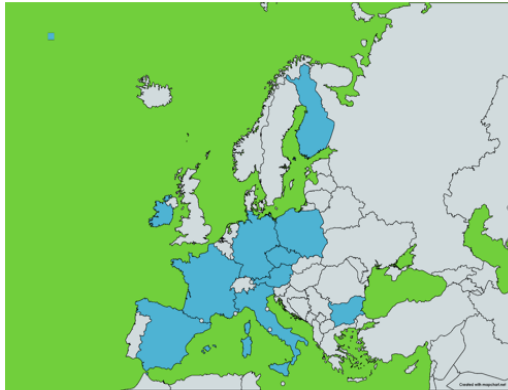


JU contribution: € 1.499-953,69

Duration: 01.09.2021 – 29.02.2024

14
RTOs

5
SMEs



Benefits to society and the environment



Better education and training in the field of bioeconomy



Higher ability to innovate and exchange knowledge



Indirect positive effects on economic, social and environmental sustainability



Contribution to EU policy

- Identification of education and training instruments and solutions to support the objectives of the European Green Deal

European Year of Skills



The EYS has started on **9 May 2023** and has run for 12 months, with many actions and initiatives to be launched and promoted.

Aims to address **skills gaps** in the European Union and boost the EU skills strategy, which will help reskill people with the **focus on digital and green technology skills**.

Help people get the right skills for **quality jobs and helping companies**, in particular **small and medium enterprises** by highlighting national efforts as well as -existing and new EU initiatives and EU funding possibilities. It will support skills-related activities and events across Europe.

Throughout the year, various stakeholders, including the Commission, the European Parliament, Member States, social partners, public and private employment services, chambers of commerce and industry, education and training providers, as well as workers and businesses, will work together to **promote skills development**.



Results factsheet

https://year-of-skills.europa.eu/about/results-european-year-skills_en

New European Bauhaus Academy

HORIZON-JU-CBE-2023-2-S-01: CBE JU supporting activities for the New European Bauhaus Academy, a network for re-skilling and upskilling towards a sustainable construction ecosystem

Type of action	Coordination and Support Action
Indicative budget	The total indicative budget for the topic is EUR 1 million

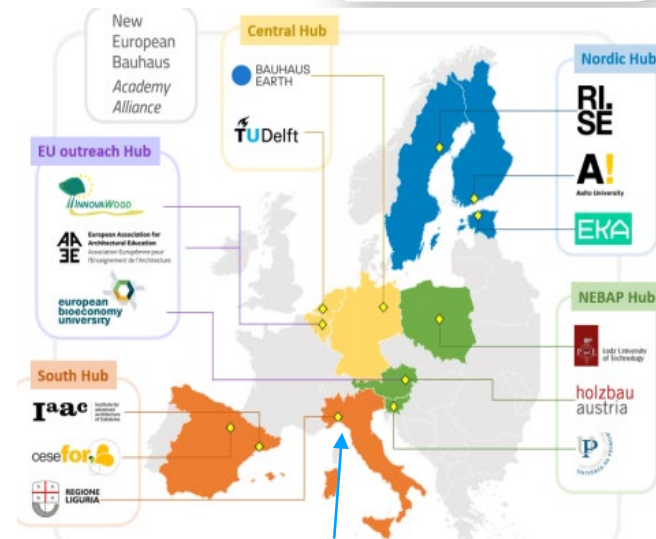
Training network for sustainable construction

Over the next two years, the NEBA Alliance will develop an international alliance of educational actors and training providers, which will **connect five local and regional hubs across Europe** to offer **training services, curricula, and programmes on sustainable construction solutions** via a digital platform.

The NEBA Alliance, led by the Slovenian University of Primorska, is composed of 14 partners. Its expertise covers a large part of Europe, which will facilitate both regional and national construction sectors. It includes academic entities, research centres, public bodies, and European networks.



CBE JU-funded NEBA Alliance project launch with Commissioner Iliana Ivanova



Regione Liguria will be involved in establishing the Southern hub



Brussels, 20.3.2024
COM(2024) 137 final

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

**Building the future with nature: Boosting Biotechnology and Biomanufacturing in the
EU**

3.4. Skills

European biotech and biomanufacturing companies face rapidly evolving skills needs. Compared to other products, biotech products are more complex to develop and their manufacturing requires highly specialised equipment and a highly qualified and multi-disciplinary workforce. In light of this and in the context of the European Year of Skills, continuing training, up- and re- skilling are particularly important to meet the constantly evolving industry needs, in line with the EU target that 60% of adults participate in training each year by 2030²⁶. Deep expertise is required in life sciences-related fields but also in digital technologies (AI, big data, robotics), in regulatory frameworks and in quality assurance and control. For some biotech products, especially in the field of medicines, centres of excellence and specific skills are needed for the final administration of the product to patients.

In addition, the EU is at risk of losing these skills because researchers and companies are attracted to other parts of the world with more supportive environments to develop their biotech projects.

4.5. Strengthening Biotech-related skills

The 'Pact for Skills', under the EU Skills Agenda, addresses the most pressing industry skills gaps with active involvement of industry and key actors in education and training. Large-Scale and Regional Skills Partnerships can play a significant role in providing upskilling and reskilling opportunities on biotech and biomanufacturing related topics for the working-age population, especially in the agri-food health and textile sectors, where Large-Scale Skills Partnerships are already in place⁵⁴. A specific large-scale partnership for the biotech and biomanufacturing could also be explored, taking into account the particular skills challenges of an area in very rapid evolution. Such partnerships can be co-financed through the Blueprint Alliances activity of the Erasmus+ programme.

Moreover, the expanding number of dynamic European Universities alliances and Erasmus+ partnerships and alliances for innovation can also strengthen the development of high-level skills and competences required by the biotech sector.

Biotech industrial clusters and Regional Innovation Valleys can, thanks to the close collaboration centres, allow industry to advise universities on the design of the curricula and content for biotech related higher education courses, so that they can better adjust to the needs of EU biotechnology and biomanufacturing companies.

The STEP is a new budgetary tool with the objective to support the development of critical technologies and to address shortages of labour and skills in the three STEP sectors, including in the biotech sector. In the context of cross-industry labour and skills shortages, skills development is key and can be done through various education and training projects with the support of different stakeholders, especially social partners⁵⁵.

To grow and retain talent within the EU, attracting skilled third country nationals to work in the biotech sector can also help address skills gaps. Once operational, the EU Talent Pool will provide the first EU-wide platform to help match employers with skilled third country nationals needed on the EU labour market.⁵⁶

In addition, the New European Bauhaus Academy will support upskilling linked to circularity and biotech and biomanufacturing in the built environment. The Commission will explore expanding the concept to other sectors that have a direct impact on the life of the citizens such as textiles.



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