

European Bioeconomy Scientific Forum 2025

Boosting regional and international bioeconomy collaboration and skills







"The EBSF's setup offered the perfect platform for meeting the bioeconomy community. I enjoyed the opportunity to discuss the future bioeconomy with young scientists, colleagues from other European and international Universities, and representatives of companies and politics."

Iris Lewandowski,

Professor, Chair of Biobased Resources in the Bioeconomy, Chief Bioeconomy
Officer, University of Hohenheim



"The EBSF2025 was a great opportunity for me to gather insightful views that make policy making fit for purpose and based on scientific evidence. The University of Eastern Finland and the other members of the European Bioeconomy University alliance successfully organised an inspiring event that demonstrated the international relevance of the bioeconomy and the innovative deployments this policy has for local communities. Finally, the workshops provided a great opportunity to gather ideas for action."

Giuseppe Pellegrino,

Policy Officer, The European Commission Directorate-General for Research and Innovation



"It was refreshing - and frankly energising - to talk, listen, and reflect on how the bioeconomy can reach new heights, with real step-changes coming from the next generation of scientists, researchers, and entrepreneurs who will actually make it happen."

Mario Augusto Maia,

Managing Partner, Cogent Venture Partners

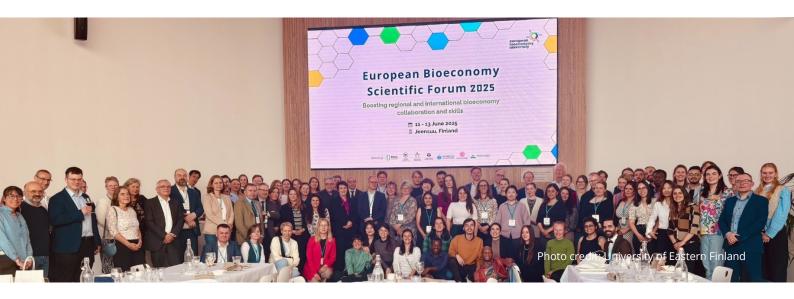


"It was an honour to participate in such an important event that fosters meaningful scientific exchange. Beyond the outstanding structure, what impressed me most was the human quality behind it all—the warmth, openness, and collaborative spirit. Evidently, this forum was built not only on excellence but also on shared values and respect."

Rosa M. Alzamora.

Associate Professor, University of Concepción, Chile





The European Bioeconomy Scientific Forum (EBSF) is the biannual official event of the European Bioeconomy University (EBU) Alliance. EBSF2025 took place from June 11 to 13 at the University of Eastern Finland in Joensuu and Koli National Park, Finland. The forum addressed essential matters in advancing the bioeconomy, including regional and international collaboration, knowledge exchange across geographical and domain boundaries, the roles of youth and universities, and the necessary innovation skills.

The Forum's keynote speakers covered various topics, such as the bioeconomy in the new European Commission's agenda, the status of the global bioeconomy and its perspectives and challenges, regional and national bioeconomy initiatives and platforms. The speakers at the Young Professionals session shared their visions of the bioeconomy and career stories in entrepreneurship, investment, and sustainability management. Several speeches focused on bioeconomy education and research carried out by universities.

EBSF2025 gathered 106 participants representing 37 organisations from 15 countries, including Europe, as well as Chile and Japan. Most of the forum attendees were representatives from universities and research institutes. Participants outside the academic community included the European Commission, national government bodies, bioeconomy networks and platforms, and the private sector.

The level of engagement among forum participants was high, with 60% contributing to the programme through oral presentations, including keynote 24 speakers and 38 poster pitching presenters. The gender balance of the forum participants was 55% female and 45% male.



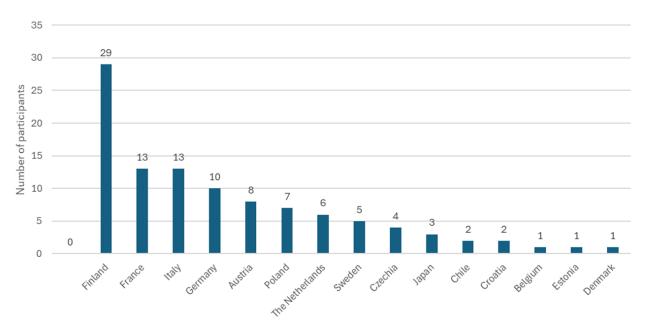


Figure 1. Countries of affiliation for participants of EBSF 2025

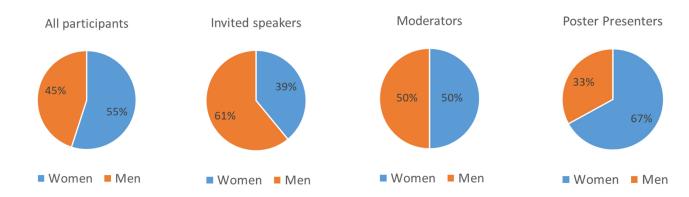


Figure 2. Gender balance of EBSF 2025 participants

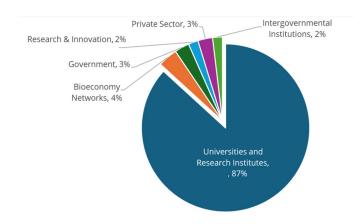


Figure 3. EBSF 2025 participants represented various types of institutions

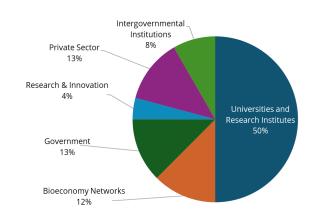


Figure 4. EBSF 2025 speakers represented various types of institutions



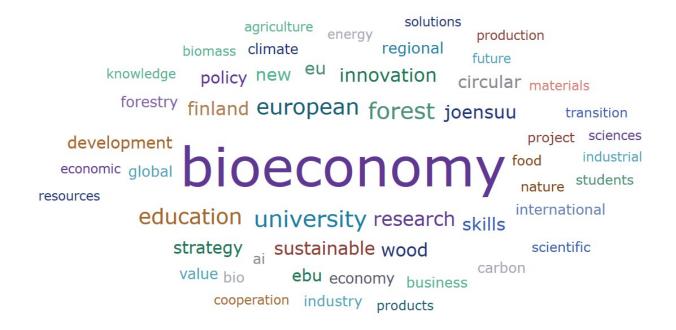


Figure 5. Word cloud created from the speakers' presentations in EBSF2025 — the most frequently used words (generated using ATLAS.ti).



Figure 6. The clusters of issues and aspects of the bioeconomy addressed at the EBSF 2025 speakers (coded using ATLAS.ti).



Summary of the speakers' presentations and discussions - key issues addressed at the EBSF 2025

Sustainability

The forum highlighted the importance of a sustainable bioeconomy, emphasising initiatives and policies that promote the efficient use and sustainable sourcing of renewable bioresources, as well as support sustainable practices across various sectors.

Innovation

Innovation was one of the key themes, with discussions on the role of research and new technologies in driving the bioeconomy forward. Participants shared examples of innovative projects that utilise biotechnologies and advanced materials to create sustainable bioproducts as an alternative to fossil-based materials.

Collaboration

Collaboration among stakeholders, including educational institutions, industry, governments and intergovernmental bodies, was emphasised as crucial for reaching bioeconomy objectives. The forum highlighted successful partnerships that have resulted in impactful projects and knowledge sharing among the European Bioeconomy University members, as well as beyond this alliance.

Entrepreneurship

Entrepreneurship was discussed as a key driver of innovation within the bioeconomy. The forum featured success stories of startups that have emerged from research initiatives, emphasising the need for supportive ecosystems for new ventures. The career stories of entrepreneurs, sustainability managers, and venture investors from Denmark, Finland, and Estonia provided excellent illustrations for this forum topic.

Policy Development

The forum participants were briefed on the bioeconomy policies within the new European Commission agenda, including the EU Bioeconomy Strategy and the Circular Economy Act, as well as research and innovation policies related to the bioeconomy, such as the EU Startup and Scaleup Strategy and the European Life Science Strategy. The global bioeconomy policy update covered the G20 Bioeconomy Initiative and the bioeconomy perspective in the new geopolitical context.

Skills Development

Skill development was emphasised as crucial for preparing the workforce for the bioeconomy. The forum discussed educational initiatives designed to equip individuals with the necessary skills to thrive in this evolving sector.



Creativity

Creativity in problem-solving and product development was encouraged, with examples of innovative approaches to utilising waste materials and developing new bio-based products shared during the forum sessions.

Environmental Concerns

Participants emphasised the importance of sustainable practices and monitoring in reducing negative environmental impacts to ensure bioeconomy initiatives contribute positively to ecological health and benefit both nature and people.

Professional Development

Professional development opportunities were highlighted, particularly in the context of lifelong learning and the need for continuous skill enhancement in the bioeconomy sector.

Education

Education was identified as a foundational element for the bioeconomy, with calls for interdisciplinary curricula that incorporate sustainability and bioeconomy principles at all educational levels from primary and secondary schools to vocational schools, universities, and on-the-job training. Thus, bioeconomy was considered an interdisciplinary and intersectoral approach. The role of AI technologies in bioeconomy education was also addressed.

Sustainable Ecosystems

The forum participants discussed the impact of bioeconomy-driven biomass extraction on biodiversity and ecosystem sustainability. Although it was not a key forum theme, the need for integrated ecosystem management approaches considering ecological limits and resource efficiency was addressed.

Strategic Planning

Strategic planning was deemed essential for the successful implementation of bioeconomy initiatives. The forum highlighted the importance of aligning local, national, and EU strategies to achieve common goals.

Stakeholder Engagement

Engagement with various stakeholders, including industry leaders and local communities, was emphasised as vital for the success of bioeconomy projects. The forum showcased examples of effective stakeholder involvement in decision-making processes. Collaboration with youth stakeholders, including the International Advisory Council on Global Bioeconomy (IACGB) Bioeconomy Youth Champions, was a key focus of the forum. Encouraging young participants to become involved in the bioeconomy involved sharing career pathways and success stories. The pitching presentation session provided a platform for young researchers and innovators to showcase their work.



Workshop 1. Horizon Scanning: Insights Into Exploring Future Signals

The workshop brought together students, researchers, and local stakeholders to introduce them to the horizon scanning methodology, what signals are, and why they matter. Small groups evaluated a predefined set of signals for their implications for bioeconomy research and education. The workshop was organised in collaboration with the European Forest Institute's Bioeconomy Programme.

Aha! What a signal

Horizon scanning is a method for systematically detecting and assessing signals, early warnings, and signs of change, such as ideas, events, and phenomena that may impact society, the environment, and policy.

These signals are data for monitoring ongoing changes and serve as material to imagine possible futures, including the drivers of radical change. Therefore, in the workshop, participants focus on seeking "aha moments" with a sample of signals distributed for the groups to work on.

Lessons learned:

- Surprise is a crucial element for a sign of change: while trend is a phenomenon known to many, signal is debatable for its possible implications and outlook.
- Signals are interpreted in a context: for detecting and assessing signals, you need practice, but most importantly, interaction with people from different backgrounds.
- Surprise is good if you know how to wait for it.

You can find more information here:





Workshop 2. Empowering Youth in the Bioeconomy

The workshop focused on enhancing young people's involvement in Europe's bioeconomy through two dynamic sessions. The first session focused on key barriers such as limited international collaboration, lack of entrepreneurial support, and the absence of country-specific solutions. Participants emphasized that poor communication and visibility of existing opportunities are major obstacles. Solutions included student-led outreach, peer mentoring, better promotion, and stronger involvement in international programs and support services.

The second part of the workshop session highlighted the critical role of universities in driving systemic change. Through initiatives like the EBU Label and HOMA!, universities were seen as central to fostering bioeconomy awareness and innovation across all education levels. Recommendations included introducing bioeconomy concepts early in schools, offering paid internships, promoting interdisciplinary learning, and involving students in policy and research. Overall, early exposure, practical experience, and clear communication were identified as key to empowering youth and ensuring a sustainable bioeconomy future in Europe.





Workshop 3. Universities and Global Collaboration in the Bioeconomy

The workshop brought together 22 global participants to build on the outcomes of the Global Bioeconomy Summit 2024 in Nairobi. The event explored how universities can enhance international cooperation in bioeconomy education, research, and innovation. Structured around two dynamic sessions, the workshop examined both strategic challenges and actionable steps for building regional and global university alliances, strengthening networks, and aligning institutional efforts to support sustainable bioeconomy transitions worldwide.

The first part of the workshop, "Setting the Stage – Challenges and Opportunities," laid the groundwork for understanding the broader context of global collaboration in the bioeconomy. Damiano Cilio from BOKU opened the session by presenting key outcomes from the GBS2024 workshop in Nairobi, highlighting lessons learned and actionable insights from regional initiatives. This was followed by a keynote from Rafael Popper, who explored the evolution from regional efforts to the formation of global alliances, emphasising the importance of shared vision, mutual benefits, and long-term institutional commitment. The session culminated in a high-level panel discussion featuring Carmen Bravo, Eva Schulev-Steindl, Iris Lewandowski, and Nagano Takanori, who collectively identified the fundamental building blocks of a global network. Their dialogue focused on strategic governance, inclusive leadership, policy alignment, and the integration of diverse stakeholders—setting a compelling foundation for the workshop's next steps.





In the second part, participants addressed the importance of formalising a global university alliance in the bioeconomy field. Discussions emphasised that such a structure must have a clear legal framework, distributed and rotational leadership, and transparent governance, while remaining adaptive to the diverse needs and capacities of its members. Participants agreed that formalisation enhances credibility, access to funding, and long-term impact. Simultaneously, a strong call was made for integrating local and regional networks into a broader global framework through mutual engagement, equitable funding models, and codesigned initiatives that ensure North-South reciprocity and shared ownership. It also focused on actionable solutions, particularly around education and capacity building. Participants advocated for modular and flexible curricula that address regional contexts while aligning with global sustainability goals. They highlighted the importance of integrating communication, digital, and entrepreneurial skills into bioeconomy education.

Additionally, global collaboration should be strengthened through student and faculty exchanges, joint academic programs, and inclusive open-access learning tools. Overall, the workshop reinforced that meaningful global collaboration in the bioeconomy must be inclusive, reciprocal, and built on trust, co-creation, and long-term commitment from both academia and policy.





Young talents on stage: Poster Pitching Session

Young and enthusiastic researchers and innovators delivered pitch presentations. The pitching session featured three groups:

- biotechnologies and bio-businesses
- bioresource management and governance
- bioeconomy policies and stakeholders.

Thus, the forum offered a platform for 38 young professionals to showcase their projects and improve their public speaking skills. Furthermore, all pitching presenters participated in a competition, with the top selections awarded based on the audience's and jury's preferences.

"This research started in the Vienna EBSF session that took place in 2023, where I met a researcher with whom I shared interests. We decided to bring forward this idea and here, again at EBSF, I was able to present our research and be able to be awarded with that", describes one of the happy awardees, Lorena Díaz Fernández de Quincoces, who presented her research conducted in collaboration with the University of Hohenheim.





bioeconomy sustainable innovation

collaboration forest biomass sustainability change forestry transition valorization assessment climate economy ecosystem model optimization phenols planning policy strategy approach bio-based biodiversity business circular coatings conservation development ecosystems engagement europe european forest-based functional governance horizon management marine modelling multi-actor networks participation partnerships protein regional scanning service services social stakeholder stakeholders strategies supply advantage airborne armoricana clean co-creation coating consumers distillate ericaceae gamification groups growth hackathon italian landscape lignin-polyurethane needle process processes productivity providers public regionalization specialisation trade value

Figure 7. Word cloud generated from the keywords in submitted EBSF2025 poster abstracts (created using the Webropol App). The size of each word indicates its frequency within the source text.

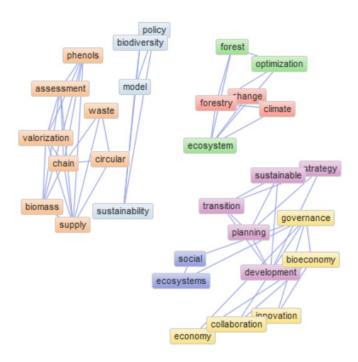


Figure 8. Word map generated from the keywords in submitted EBSF2025 poster abstracts (created using the Webropol App). The map illustrates the frequency of word repetition and relationships between them; words that frequently appear together are placed adjacent to each other.



These engaging workshops and a walking trip through the Koli national park's forested hills provided an excellent conclusion to the forum.





Contributors and supporters of EBSF2025

University of Eastern Finland's EBU Presidency Team and the forum organising committee members

In 2025-2026, the University of Eastern Finland holds the EBU's Presidency, and Rector Tapio Määttä serves as the current Chair of the Presidency. The Scientific Coordinator and the Speaker of the Presidency Chair is Teppo Hujala, the Chief Secretary is Denis Dobrynin, and the Operational Coordinator is Nataša Lovrić. The UEF Presidency team also includes Helen Reijonen, Piritta Torssonen, and Jukka Tikkanen. Hailey Ciantar and Andrea Ramos Huapaya joined UEF Presidency team in 2025 to contribute to the EBSF2025 organisation.

EBU Coordination Group

The forum organising committee thanks the EBU Coordination Group members who provided valuable comments on the EBSF2025 concept, contributed to the forum organisation as moderators and speakers, and participated in the forum communication.

The sponsors of the EBSF2025

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- Joensuu University Foundation

This report is prepared by Denis Dobrynin, with contributions from Nataša Lovric, Päivi Pelli, Hailey Ciantar, Andrea Ramos Huapaya, and Teppo Hujala.

European Bioeconomy University

Driven by demand, accomplished by intellectual leadership

The transition to the Bioeconomy is one of the major economic, social and environmental challenges facing the European Union in the coming years. The European Bioeconomy University will tackle this enormous challenge by educating a new generation of truly European experts, fostering rigorous, relevant and responsible research, and transferring knowledge into society and the economy.

The European Bioeconomy University (EBU) is an alliance of the eight leading European universities in this field. It will act not only as a think tank for knowledge generation, but also as a creative hub for knowledge transfer to transform diversity into creativity, support the European approach of democratic, transparent and participative processes and foster actual change in an innovative and sustainable way.

More information about EBU:

• https://www.european-bioeconomy-university.eu/ https://www.linkedin.com/company/european-bioeconomy-university/

















