



BIObec Implementation and Replication Working Group workshop

21 October 2022

Report of the Workshop

Context

The BIObec project, funded by BBI JU under Horizon 2020, aims at leveraging education to unlock the full potential of the European bioeconomy, by building bridges between the bio-based industry and the education system.

BIObec concept merges the traditional idea of an education centre – such as a university or a vocational education and training centre – with that of a knowledge hub: the **Bio-Based Education Centres (BBECs) will act as multi-level knowledge hubs bridging the gaps between academic institutions, students, innovation entities and policymakers.**

BIObec seeks to set the basis for the development of BBECs **in six different European regions** to answer the needs of the bio-based industry at local, regional, and national levels. These BBECs are expected to ensure a wide geographical coverage in Europe and address a wide range of topics linked to the variety of value chains and the different institutional contexts, paving the way for replication in other regions.

The **core nucleus** for the future implementation of the BBECs is the **Implementation and Replication Working Group (IRWG)**, that will participate to project initiatives in the role of stakeholders and will facilitate the replication of the BIObec's experience beyond the project's efforts.

The IRWG members are local stakeholders, interested in implementing and replicating the BBECs experience in other EU Regions and countries by co-developing a roadmap applicable for potential additional BBECs across Europe.

Objectives

The first IRWG workshop aimed at:

- stimulating the discussion around bioeconomy education
- defining a more integrated, connected and wider approach for the BBECs future implementation
- exploring the opportunity to transfer and replicate the BBECs formats into additional territorial bioeconomy ecosystems
- engaging additional IRWG members

Report of the workshop

The event engaged **75 registered participants and 67 unique visitors** joining the Zoom meeting throughout the workshop, with **an average of 60 participants connected**. Most of the participants expressed a great interest in being involved in the BIObec



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future activities as new members of the IRWG. The stakeholders involved covered a wide range of organisations based in Europe and operating in the bioeconomy industry, research and education sectors, namely:

- Universities
- Training organisations
- Research centers
- Ecosystem facilitators
- Industries and clusters
- Public administration
- NGOs

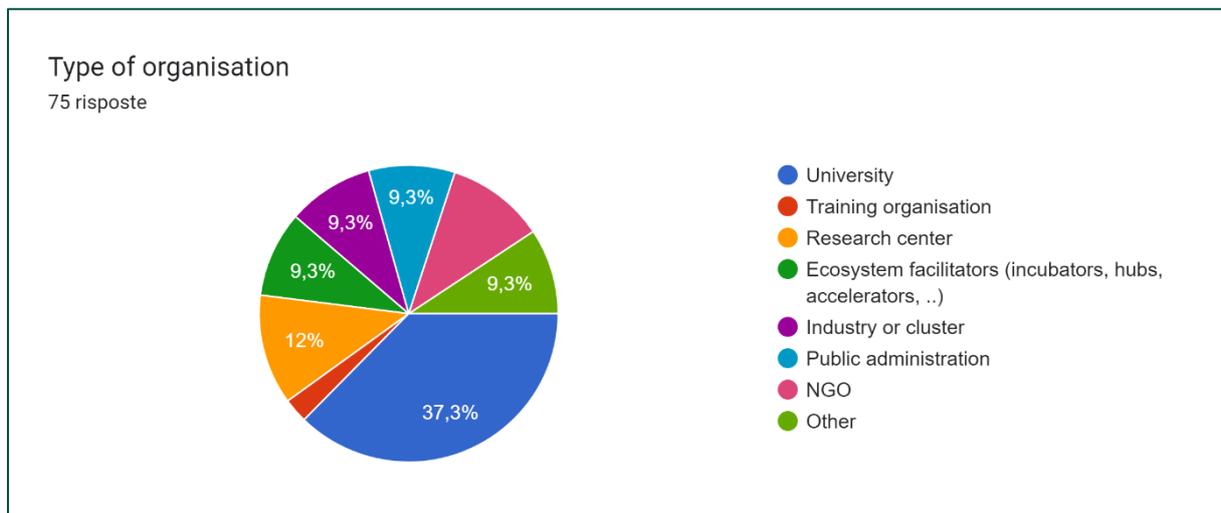


Figure 1: Infographic showing the type of organisations in which the participants of the workshop were involved

During the first part of the workshop the BIObec partners gave an overview on the role of the IRWG, highlighting also the most relevant EU funded projects in bioeconomy education, targeting different levels of education, and how BIObec can have a role in this domain.

The **outcomes** stemming from the studies conducted by BIObec on the current **needs and inspirational case studies** in bioeconomy education were also presented to the participants in order to trigger the debate and in light of their potential involvement in one of the **6 Bio-based Education Centres (BBECs)**, specifically:

- Mediterranean Europe
- North-West Europe – Finland
- North-West Europe – Denmark
- North-West Europe – Ireland
- Central - Eastern Europe (Poland and the Czech Republic)
- Central - Eastern Europe - Germany



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The **value proposition for each of the BBECs** has been tailored taking into consideration the geographical specificities and needs of each region: a brief presentation of the key characteristics, business models and governance structures of the BBECs was also provided during the workshop.

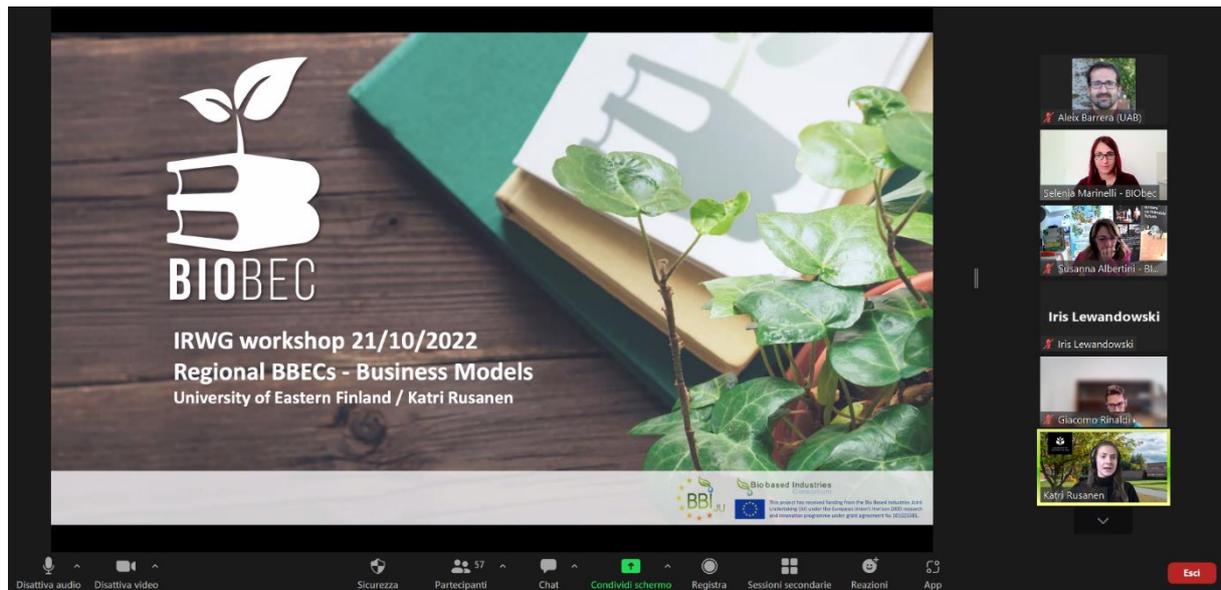


Figure 2: Highlight from the workshop - Presentation of the 6 Regional BBECs Business Models

The final part of the workshop was dedicated to an **interactive panel discussion**, engaging the participating stakeholders in an exercise to identify possible collaborations in light of the implementation and replication of the BBECs.

The discussion was animated by asking:

- What is your interest in the BBEC?
- How the BBECs could be implemented/replicated in your context?

The inputs provided by the participants were collected through a [MIRO board](#) and the following tables resume the main outcomes with the key contacts and responsible partners per each BBEC.

During the interactive exercise, in addition to the possibility to express an interest in one of more specific regional BBECs, the stakeholders were also able to locate themselves at a more transversal European level.



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Figure 3: Screenshot of the MIRO board

Outcomes collected from the MIRO board

European level	
What is your interest in the BBEC?	<p>CMQ Bioeco: We are campus of trades and qualifications in bioeconomy field pilot bu University of Reims Champagne Ardenne, France. We would like to share our experiences and learn from yours. We are also interested in developing our international network, develop Erasmus and other opportunities for our students and teachers.</p>
	<p>Contributing to increase collaboration on education for the green transition at EU level and build capacity (in line with the Council recommendation on learning for the green transition and sustainable development) (EU Commission Education for Climate Coalition https://education-for-climate.ec.europa.eu/community/), "https://education-for-climate.ec.europa.eu/community/"</p>
	<p>Cluster SPRING - engage with stakeholders and disseminate bioeconomy. It operates mainly in Italy but interested also at European level</p>
	<p>University of Zagreb Faculty of Agriculture Branka Šakić Bobić: Increase bioeconomy knowledge of our students, improve curricula</p>



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	<p>Potential case study for implementing GreenComp, the European Sustainability competence framework https://publications.jrc.ec.europa.eu/repository/handle/JRC128040,"https://publications.jrc.ec.europa.eu/repository/handle/JRC128040"</p>
	<p>Creating and sharing knowledge around circular bioeconomy --> turn this knowledge into practice through education and training activities</p>
	<p>I am a Bioeconomy Ambassador and I want to use my role to empower organization like yours to reach out to young people. My name is Carmen Sciotti.</p>
	<p>As company Lenzing, we already offer one-day on site trainings for students, which are part of curricula of Austrian Universities of (Applied) Sciences. We are willing to expand the program to a wider audience. There is also on site supervision of PhD and Masterstudents in cooperation with European Universities (who grant the academic title). Support by Biobec would be welcome to put this on a broader basis (currently, only two to three persons in the company can offer these trainings). Trian the trainers program sounds interesting.</p>
	<p>My name is Federica Imperadrice. I am an anthropologist with a background in international development. Hence, I am strongly interested in boosting engagement of local NGOs and associations</p>
How the BBECs could be implemented/repliated in your context?	<p>The Coe BBE is located in the south of the Netherlands. It is a research and education focussed initiatives with strong links to companies and governments. It acts already 10 years as a BBEC.</p> <p>Read about us here Meet our Bioeconomy Youth Ambassadors! (europa.eu) we have a diverse set of competences and live all over Europe :),"https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/meet-our-bioeconomy-youth-ambassadors-2022-08-04_en"</p>

Mediterranean Europe	
<p>Key responsible for the BBEC: Davide Viaggi - davide.viaggi@unibo.it; Giacomo Maria Rinaldi - giacomomaria.rinald2@unibo.it</p>	
<p>What is your interest in the BBEC?</p>	<p>Anastasio J. Villanueva (IFAPA-Institute of Agricultural and Fisheries Research and Training, Spain) Researcher with university teaching duties on the field of circular bioeconomy, specialized in agri-food and environmental economics and policy. I collaborate with the Andalusian Cluster of Circular Bioeconomy (coordinated by IFAPA and the regional</p>



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	<p>government), which is expected to start soon, and has training (at different levels) at its cent., https://www.unia.es/cursos/guias/Folleto_3966_Experto_subproductos.pdf, https://www.imrd.ugent.be/, https://www.bioeconomiaandalucia.es/cluster-de-bioeconomia"</p>
	<p>I'm a university. I think BBEC should contribute to teachers and trainers' competences update. It's difficult to find positions to directly know what's happening in the companies.</p>
	<p>Cluster SPRING - engage with stakeholders and disseminate bioeconomy</p>
	<p>IRELANDS NATIONAL CLUSTER IRISH BIOECONOMY FOUNDATION</p>
	<p>In Food Hub SRL SB we have 3 areas. I think that the most important for this project is the one that is about Dissemination, Communication, Education and Exploitation. We are the bigger Italian Agri-Food Tech Community and we are surrounded by a network of Experts who ensure the quality of our information and training offer.</p>
	<p>Rebeca Ramos. I am working in a Technological center (TECNOVA) as a head of two department. I would like to know more about the competences and the training process of student (bachelor and master, mainly). We are interested on biotechnology and bio-based products.</p>
	<p>We are currently mapping innovation in the Italian agri-food sector, and we are going to expand this project to Europe in the future. The output of the project is a database, as well as a report, that will be useful to understand how innovation is evolving in our sector. The aim is to create the right link between different players in order to facilitate the innovation in our sector.</p>
	<p>I'm university researcher and I would like involving myself and/or my team (post-doc, PhD students) in BBEC activities (educational but also training activities) I'm university researcher and I would like involving myself and/or my team (post-doc, PhD students) in BBEC activities (educational but also training activities). Our interest are in field of industrial biotechnology, biorefinery design and bio-based products. ISABELLA PISANO UNIVERSITY OF BARI</p>
	<p>Teacher and researcher from University of Seville (Spain). Nowadays, coordinator of a project focus on the incorporation of circular economy in the Economy teaching</p>



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	<p>BioökonomieREVIER is a cross sectoral transformation cluster in the coal phase our region Rhenish Revier in western Germany. We are focussing on implementing an circular and integrated regional bioeconomy (model region). We want to network with European bioeconomy initiatives and are located at Forschungszentrum Jülich.</p>
	<p>We are Sardegna Ricerche, regional agency, we are not educational entity</p>
	<p>Frangiskos Kolisis (National Technical University of Athens) I will be happy to have Educational Material from BIObec</p>
<p>How the BBECs could be implemented/replicated in your context?</p>	<p>TECNOVA: Having a strong connection among the different agents involved, and creating a platform to be in contact</p>
	<p>PAOLA Pittia Univ Teramo work on training students - bioeconomy - agrifood - consortium for a in Erasmus Traineeship Starting from regional industry-research clusters Setting initiatives to sensibilise/fertilise the possible target actors</p>
	<p>I would like use BBEC platform in order to share our project results. For example I think to MSCA public engagement activities or other projects with multidisciplinary approaches involving research but also policymaker and other stakeholder.</p>
	<p>I work at the Department of Applied Economics at the University of Seville (Spain). I think that we can add BBEC into our activities (mbmarinus.es)</p>
	<p>Frangiskos Kolisis (National Technical University of Athens) can contribute in addition to my expertise in Industrial Biotechnology with Long Life Educational courses In Bioeconomy & Biotechnology/ Bioethics as well as Biotechnology and Biolaw</p>

North-West Europe – Finland

Key responsible for the BBEC: Katri Rusanen- katri.rusanen@uef.fi; Jouni Pykalainen - jouni.pykalainen@uef.fi

<p>What is your interest in the BBEC?</p>	<p>I'm curious about this Hub, because I am organizing a Biobased Battle between Universities of Applied Sciences of Finland and The Netherlands (end goal: Living Lab)</p>
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North-West Europe – Denmark

Key responsible for the BBEC: Knud Tybirk - kt@foodbiocluster.dk



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North-West Europe – Ireland	
Key responsible for the BBEC: Eve Savage - eve.savage@mtu.ie; Helena McMahon - helena.mcmahon@mtu.ie	
What is your interest in the BBEC?	Kevin Ryan Project Manager Irish Bioeconomy Foundation
	I'm university researcher and I would like involving myself and/or my team (post-doc, PhD students) in BBEC activities (educational but also training activities) ISABELLA PISANO UNIVERSITY OF BARI
	Eve.Savage@mtu.ie Higher Education University and directors of Ireland's Knowledge Centre for Climate Carbon & Community Action (IKC3)
	IRELANDS NATIONAL CLUSTER IRISH BIOECONOMY FOUNDATION
How the BBECs could be implemented/replicated in your context?	I would like use BBEC platform in order to share our project results. For example I think to MSCA public engagement activities or other projects with multidisciplinary approaches involving research but also policymaker and other stakeholder.

Central - Eastern Europe (Poland and the Czech Republic)	
Key responsible for the BBEC: Damian Kuznowicz - d.kuznowicz@procivis.org.pl; George Sakellaris - g.sakellaris@gmail.com	
What is your interest in the BBEC?	EPRD We would like to contribute in consulting services, project management, creating consortiums for bioeconomy projects
	Magdalena Kowalczyk Institute of Biochemistry and Biophysics Polish Academy of Sciences (IBB PAS). We would like to service PhD studies on the bioeconomy thematic pillars in cooperation with industry, interlinking academic institution with students and industry, popularizing science in scholars and at various types of public events.
	My name is Dawid Bedla and I represent the University of Agriculture in Kracow. We are in the process of preparing a bioeconomy textbook as one of a result of the implementation of the Erasmus+ project
	BIOEAST Thematic Working Group initiated by the BIOEAST Initiative - the macro regional group focus on the education coordinated by the BIOEAST HUB CZ is supporting the Central and Easter BioBec Centre You can get in touch with us on www.bio-



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	<p>hub.cz,"https://bioeast.eu/download/bioeast_a4_leporello_02_educati_on_print/, https://www.bioeast.eu/, https://www.bio-hub.cz/"</p>
How the BBECs could be implemented/replicated in your context?	<p>Magdalena Kowalczyk (IBB PAS)</p> <ul style="list-style-type: none"> • expertise in the following bioeconomy sectors: food, medical products, renewable energy,(biofuels), sewage treatment, agriculture (microbial fertilizers); • experience in teaching PhD students; • innovation activities; - collaboration with industrial partners; • popularization of science

Central - Eastern Europe (Germany)	
<p>Key responsible for the BBEC: Lina Mayorga - lina.mayorgaduarte@uni-hohenheim.de; Iris Lewandowski - iris_lewandowski@uni-hohenheim.de</p>	
What is your interest in the BBEC?	<p>I'm university researcher and I would like involving myself and/or my team (post-doc, PhD students) in BBEC activities (educational but also training activities). Our interest are in field of industrial biotechnology, biorefinery design and bio-based products. ISABELLA PISANO UNIVERSITY OF BARI</p>
	<p>IRELANDS NATIONAL CLUSTER IRISH BIOECONOMY FOUNDATION</p>
	<p>I'm an academic research centre at the heart of a biorefinery. It brings together the complementary scientific and technical expertise of about 90 researchers (green chemistry, biomaterials, etc.). We train in research through research doctoral students (30 per year), post-doctoral students (15 per year) and interns (30 per year) We also have a third place activity. Industrialists, the general public and local authorities come together to discuss the bioeconomy, visit our center or the biorefinery. We would like to be involved in making the network benefit from the ecosystem of our center.</p>
How the BBECs could be implemented/replicated in your context?	<p>I would like use BBEC platform in order to share our project results. For example I think to MSCA public engagement activities or other projects with multidisciplinary approaches involving research but also policymaker and other stakeholder.</p>
	<p>connect industry and training</p>



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