



BIO CIRCULAR CITIES

Exploring the circular
bioeconomy potential
in cities

Recommendations from the Advisory Board for Replication

Deliverable D1.8 of WP1

Credits

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LIST OF ACRONYMS

ACRONYM	DESCRIPTION
AB	Advisory Board
BBI	Biobased Industries
BCC	Biocircularcities project
CBE	Circular Bioeconomy
EU	European Union
LCA	Life Cycle Analysis
LCC	Life Cycle Costing
MAB	Metropolitan Area of Barcelona
MCN	Metropolitan City of Naples
PP	Pazardzhik Province
SDGs	Sustainable Development Goals
WP	Work Package

EXECUTIVE SUMMARY

This deliverable provides a comprehensive summary of the recommendations and strategies proposed by the Advisory Board of the Biocircularities (BCC) project on replicating the outcomes of the project. The Advisory Board (AB), consisting of 7 experts from various fields, played a crucial role in providing guidance and insights throughout the project's duration.

The document first introduces the selection process of the AB members, which followed a snowball strategy. A core group of experts was initially identified through the network of BCC consortium partners, and additional members were selected using the CORDIS platform to ensure a diverse range of expertise and perspectives.

The recommendations from the Advisory Board are presented in three key areas: (i) replicating the LCA and LCC approach for biowaste value chains; (ii) replicating biowaste-related policy recommendations, and (iii) scaling up the BCC web-based tool. Each section outlines the findings, recommendations, and strategies discussed during the interviews with the AB members.

An important factor discussed during the project was the utilization of local partners as 'ambassadors' of the BCC project. These partners play a crucial role in the selection of relevant local stakeholders for contributing to the local Living Labs and advocating for the project's objectives and replicating its methodologies in their respective regions. In addition, the Advisory Board members and peer reviewers were identified as key 'replicators' of the project, actively promoting and disseminating its outcomes to their networks and spheres of influence.

For replicating the LCA and LCC approach to analyze the sustainability of biowaste streams, the AB highlights the significance of documentation and knowledge transfer, capacity-building collaborations, data availability and standardization, and dissemination and awareness-raising efforts. These steps will support the replication of the approach in other regions and facilitate meaningful benchmarking and comparison of results. They also stressed the importance of organizing training sessions, workshops, and webinars to disseminate the approach and methodologies as well as to enhance understanding among key stakeholders such as industry and policymakers.

One of the key recommendations highlighted by the AB is the importance of developing policy recommendations that are applicable to other regions. While taking into account the different priorities and contexts of each country, the policy recommendations based on the drivers and barriers for the implementation of circular bioeconomy in the selected policy frameworks at EU level and at national, regional and local level in the pilot areas, as well as on selected international best practices, can serve as valuable references. The project's policy recommendations are designed to address the challenges and opportunities specific to biowaste value chains and provide a framework for sustainable development. Additionally, deliverable D3.1 was highlighted as an important outcome of the project since it provides an overview of the policy framework and the good practices related to circular bioeconomy (CBE) and biowaste management both at the European and local level in the selected areas of study.

To scale up the BCCs web-based tool, the AB highlighted the significance of open-source development, integration within existing platforms and databases, knowledge exchange, and promotion. They recommended collaborating with other ongoing Horizon projects, such as BIOEAST, to incorporate the web-based tool link into their platform and maximize its impact.

In conclusion, the BCC project is committed to following the recommendations provided by the AB. The project organized final on-site events in each pilot area to present the LCA and LCC results, the main identified drivers and barriers for the CBE implementation, as well as the introduction to the use of the web tool, inviting a wider audience of regional stakeholders. Joint webinars (“The Biocircularities Trilogy”) with other EU projects such as SUSTRACK and TECH4BIOWASTE on policy recommendations, LCA/LCC results, and the web tool will maximize knowledge exchange. In addition, the deliverable on policy recommendations (D3.3) will serve as a valuable resource for ongoing and upcoming projects. The project also aims to utilize initiatives such as BIOEAST, and the European Bioeconomy Network for result dissemination and to develop customized factsheets to facilitate the exploitation of the project results.

The recommendations and strategies outlined in this document provide a roadmap for replicating and scaling up the BCC project’s outcomes, ensuring the wider adoption of sustainable biowaste management strategies and supporting the development of a circular bioeconomy in Europe.

AIM OF THE DELIVERABLE

The aim of Deliverable 1.8 is to present the recommendations derived from the AB for replication within the BCC project. This deliverable serves as a key resource that captures the valuable insights, expertise, and guidance provided by the AB members throughout the project.

By consolidating the recommendations from the AB, this deliverable aims to provide actionable guidance for replicating the BCC project’s principles and findings in other urban areas. The recommendations are intended to assist policymakers, researchers, and practitioners in implementing sustainable biowaste management practices and CBE strategies within their respective regions.

Through the dissemination of these recommendations, this deliverable strives to facilitate knowledge transfer, foster collaboration, and inspire innovative approaches to biowaste management. It aims to support decision-makers and stakeholders in effectively addressing the challenges and opportunities associated with biowaste management, while promoting environmental sustainability, economic viability, and social well-being.

Ultimately, the aim of Deliverable 1.8 is to contribute to the broader goal of advancing sustainable biowaste management practices and CBE principles across Europe and beyond, fostering a more sustainable and resilient future for urban areas.

1. Introduction

The BCC project is dedicated to promoting sustainable biowaste management practices and CBE principles within urban areas. The primary goal of the project is to identify untapped bio-based waste streams, analyze the current state of organic waste management, and develop new biocircular value chains. To achieve these objectives, the project focuses on three pilot case studies: municipal organic waste (Metropolitan Area of Barcelona, MAB), agro-industrial biowaste (Metropolitan City of Naples, MCN), and forest residues (Province of Pazardzhik, PP).

Deliverable 1.8 serves as a significant milestone within the BCC project, as it presents the recommendations from the AB for replication. The AB, comprising experts and stakeholders from relevant fields, played a pivotal role in providing guidance, insights, and expertise throughout the project. Their contributions were instrumental in shaping the project's methodologies, findings, and the development of CBE strategies.

To capture the valuable perspectives of the AB, a comprehensive methodology was implemented. This methodology involved organizing three AB meetings at M6, M12, and M18 of the project. These meetings provided a platform for in-depth discussions, exchange of ideas, and the exploration of challenges and opportunities in promoting sustainable biowaste management practices.

After the three AB meetings, individual semi-structured online interviews were conducted with each AB member. These interviews further delved into specific topics discussed during the meetings and provided an opportunity to gather personalized insights and recommendations. The interviews were designed to encourage open-ended responses, ensuring a comprehensive exploration of key project aspects.

The interviews were recorded and transcribed, facilitating a thorough analysis of the key arguments, information and data provided. By employing a thematic analysis approach, common themes and patterns were identified across the interviews. The synthesis of these findings led to the formulation of valuable recommendations that offer guidance for replication of the BCC project in other urban areas.

This deliverable outlines the methodology used, presents the key findings from the AB meetings and interviews, and offers actionable recommendations derived from the AB's expertise. The insights provided in this document are aimed at enhancing sustainable biowaste management practices, promoting CBE principles, and fostering collaboration between stakeholders and decision-makers involved in biowaste management systems.

By leveraging the collective knowledge and experiences of the AB, this deliverable serves as a valuable resource for policymakers, researchers, and practitioners seeking to replicate and implement effective biocircular value chains in their respective regions. The recommendations provided herein aim to inspire innovation, drive sustainable development, and accelerate the transition towards a more circular and sustainable future.

2. Methodology

The methodology employed for Deliverable 1.8 of the BCC project involved a comprehensive approach to gather insights and recommendations from the AB members. The methodology consisted of three key components: Advisory Board meetings, semi-structured online interviews, and subsequent data analysis.

1. Advisory Board Meetings

The AB played a crucial role in providing guidance, insights, and expertise throughout the BCC project. To ensure active engagement and collaboration with the board, three AB online meetings were organized at key stages of the project. The meetings were conducted on the following dates:

- Meeting 1: March 2022
- Meeting 2: September 2022
- Meeting 3: April 2023

Thematic topics tackled during the three meetings are represented below in Figure 1. The AB meetings offered an opportunity for the project consortium to receive feedback and guidance from the AB members. The members critically reviewed the project's progress, methodologies, and outputs, providing constructive feedback and recommendations for improvement.

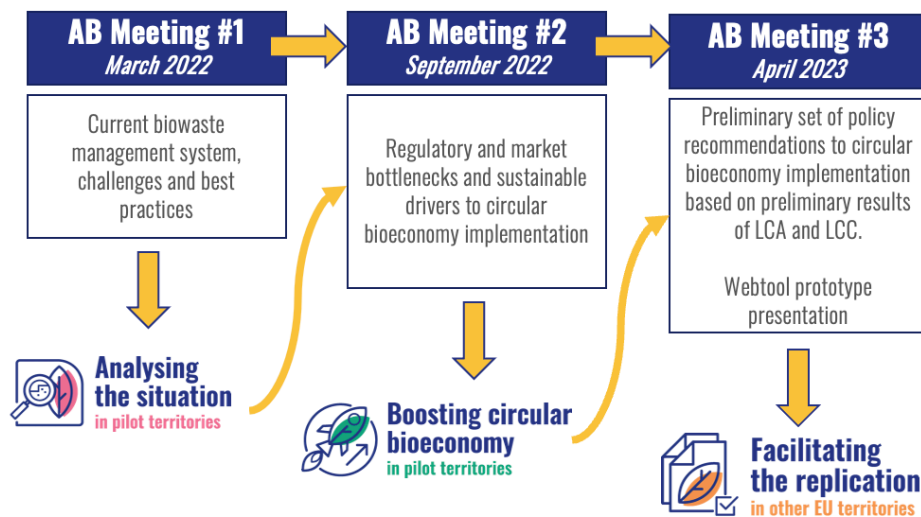


Figure 1: Advisory Board meeting and thematic topics

The first AB meeting focused on the current situation of biowaste management in the pilot areas. This meeting aimed to gather insights on the existing challenges, opportunities, and best practices in the targeted regions. The AB members provided valuable input regarding the methodologies, enabling the project to tailor its approach and recommendations accordingly.

The second AB meeting centered around regulatory and market bottlenecks and drivers towards sustainability. This meeting delved into the policy and market landscape affecting biowaste value chains, identifying barriers and enablers for sustainable bioeconomy development. The AB members shared their expertise and experiences, helping to identify critical areas for policy intervention and market transformation.

The third AB meeting focused on the facilitation of replication to other regions. With the aim of expanding the project's impact, this meeting explored strategies for replicating the project's approaches, the BCC web tool, and policy recommendations in other cities and regions. The AB members provided insights on the challenges and opportunities associated with replication, ensuring that the project's outcomes can be effectively transferred and adapted to diverse contexts.

2. Semi-Structured Online Interviews

After the 3rd AB meeting, 1:1 online interviews were conducted with each AB member. These interviews aimed to delve deeper into the discussions and gather individual perspectives on the project's progress, challenges, and potential recommendations for replication. The interviews were semi-structured, allowing flexibility while ensuring the key topics and questions were addressed consistently across all interviews.

3. Question Preparation

Prior to each interview, a set of pre-determined questions was prepared based on the topics discussed during the AB meetings. These questions were designed to elicit insights and recommendations from the AB members regarding the project's objectives, methodologies, and findings. The questions were formulated to encourage open responses and thoughtful discussions.

4. Recording and Transcription

During the interviews, audio recordings were made to ensure accuracy and to capture the entirety of the discussions. These recordings were then transcribed to create written transcripts, providing a detailed account of the conversations between the project team and the AB members. The transcriptions served as a valuable resource for data analysis and extraction of key themes and recommendations.

5. Data Analysis

The data obtained from the transcriptions were analyzed using a thematic analysis approach. The transcripts were carefully reviewed, and common themes and patterns were identified across the interviews. Key insights, recommendations, and recurring topics were noted and organized into meaningful categories. The interviews were transcribed and then coded to capture the main ideas and concepts discussed by the participants. These codes provided a systematic way to categorize and organize the data, enabling the researchers to gain a deeper understanding of the interviewees' perspectives and insights. These codes included:

Policy Recommendations: This code was used to identify specific suggestions, guidelines, and strategies proposed by the interviewees regarding policy development and implementation in the context of biowaste management. It encompassed recommendations related to regulations, incentives, stakeholder engagement, and collaboration among different actors.

Replication Strategies: This code focused on the strategies and approaches suggested by the interviewees to replicate the biocircular model and LCA/LCC approaches in other cities and regions. It involved identifying actions such as documentation and knowledge transfer, capacity-building collaborations, data availability and standardization, and dissemination and awareness-raising efforts.

Collaboration and Partnerships: This code captured discussions around the importance of collaboration and partnerships in advancing the biowaste value chains. It included topics such as the engagement of local partners, collaborations with research institutions and universities, and the establishment of networks and platforms for knowledge exchange and joint policy recommendations.

Web-based Tool and Technology: This code involved discussions related to the BCC web-based tool and its potential for assisting policymakers and industry stakeholders in designing biowaste management strategies. It encompassed topics such as the features and functionalities of the tool, its integration with existing platforms and databases, and the need for knowledge transfer and training to maximize its utilization.

These codes, among others, were applied during the thematic analysis process to identify patterns, trends, and recurring themes across the interviews. The analysis provided valuable insights into the perspectives and recommendations of the interviewees, informing the development of policy recommendations and replication strategies within the BCC project.

6. Synthesis and Recommendations

Upon completion of the data analysis, the synthesized findings from the AB meetings and individual interviews were compiled. The recommendations from the AB were identified, focusing on the project's objectives and how the lessons learned could be applied to replicate the BCC approach in other contexts. These recommendations were further refined and structured to form the basis of Deliverable 1.8, providing actionable guidance for replication.

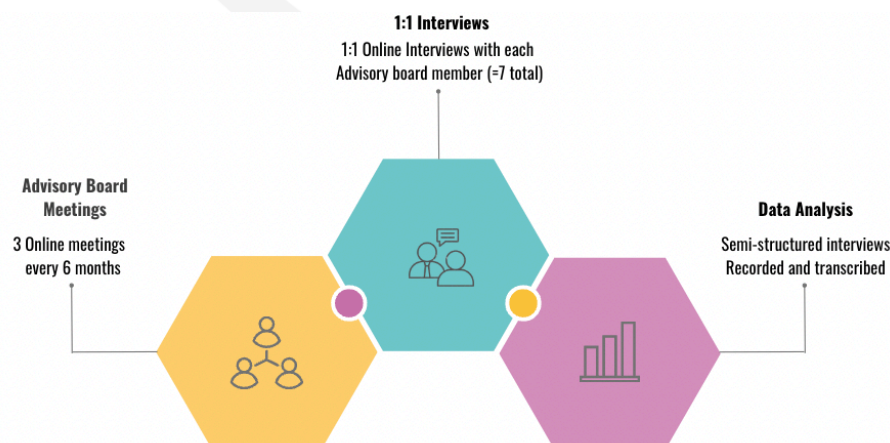


Figure 2: General methodology for obtaining Advisory Board recommendations for replication

By combining the collective expertise of the AB members, the AB meetings and subsequent interviews provided valuable insights and recommendations to enhance the BCC project and its potential for replication in different urban areas.

3. The purpose of the Biocircularcities Advisory Board

3.1 Advisory Board member's selection process

The BCC AB members have been selected for their working knowledge and experiences in the following fields:

- Waste management policy and urban strategy
- Circular bioeconomy research institutions and agencies
- Bio-based Industry
- International collaboration

The selection process for the AB members followed a snowball strategy. Initially, a core group of experts and stakeholders, using the network of BCC consortium partners, were identified and invited to be part of the AB. These individuals possessed diverse expertise in areas such as bioeconomy, circular economy, waste management, and policy development. Their involvement ensured that the AB would provide valuable insights and guidance throughout the project. In addition, potential AB members were identified using the CORDIS platform to identify projects in related fields.

To further expand the AB and ensure a comprehensive representation of perspectives, the initial members were then asked to suggest additional experts who could contribute to the project. This snowball approach allowed for the inclusion of individuals who were highly knowledgeable and experienced in relevant fields but may not have been directly connected to the project initially. By leveraging the expertise and networks of the existing members, the project was able to identify and invite additional professionals who could provide valuable input and insights.

The selection process prioritized individuals who demonstrated a deep understanding of bioeconomy and circular economy, as well as those with practical experience in implementing sustainable biowaste management strategies. Moreover, diversity in terms of geographical representation and professional backgrounds was considered to ensure a well-rounded and inclusive AB.

By using the snowball strategy for selecting AB members, the BCC project benefited from a diverse range of expertise and perspectives. The members were able to provide valuable insights, guidance, and recommendations based on their extensive knowledge and experience. This collaborative and inclusive approach fostered a sense of ownership and commitment among the AB members, ensuring their active involvement in shaping the project's outcomes and replication strategies.

Furthermore, each member of the AB has signed a Letter of Agreement and Consent form (Annex 2) to formalize their commitment and involvement in the project. This agreement outlines the roles, responsibilities, and expectations of the AB members, ensuring a clear understanding of their contributions and the collaborative nature of their engagement. The BCC AB comprises seven (7) diverse experts who bring their unique perspectives

and knowledge to support the project's objectives (see a short biography of the AB members in ANNEX 1). The following individuals are members of the AB:

Barna Kovacs from [BIOEAST \(Hungary\)](#): Barna Kovacs represented BIOEAST in the AB, contributing his knowledge on bioeconomy strategies and policies. His insights into the challenges and opportunities in the Central and Eastern European context enhanced the project's regional **perspective** and promoted cross-border collaboration.

Elvira Buonocore from **the Department of Science and Technology at the [University of Naples \(Italy\)](#)**: Elvira Buonocore's affiliation with the University of Naples ensured a strong academic perspective in the AB. She provided expertise on scientific research methodologies and offered insights into the potential of bio-based waste streams in urban areas.

Francesc Giro from the [Catalan Waste Agency \(Spain\)](#): Francesc Giro's role in the Catalan Waste Agency positioned him as a key stakeholder in waste management practices. He brought extensive experience in waste policy and regulation, providing valuable feedback on the project's outcomes and contributing to the development of sustainable waste management strategies.

Holger Gerdes from [Ecologic Institute \(Belgium\)](#): Holger Gerdes' affiliation with the Ecologic Institute brought an environmental policy and sustainability perspective to the AB. He provided expertise on the ecological aspects of biowaste management and offered insights into policy recommendations for promoting circular economy practices.

John Vos from [Biomass Technology Group \(Netherlands\)](#): John Vos brought his expertise in biomass technology to provide valuable insights into the efficient valorization of bio-based waste streams. He contributed by sharing his knowledge on innovative technologies and their applicability to biowaste management.

Nora Szarka from [DBFZ-German Biomass Research Center \(Germany\)](#): Nora Szarka's expertise in biomass research and sustainable resource management provided valuable insights into the scientific aspects of biowaste valorization.

Sara Cantone from [SPRING - Italian Circular BioEconomy Cluster \(Italy\)](#): Sara Cantone's involvement with SPRING strengthened the AB's connection to the circular bioeconomy sector. Her expertise in circular business models and bio-based value chains informed discussions on the replication and scalability of the project's outcomes.

Terms of membership

Members of the AB are appointed for the duration of the project (from 2021 to 2023). Although individual members of the AB may be selected because of their affiliations with key organizations, they serve on the AB in their individual capacity to represent the interests and views of their stakeholder communities. Equally, members of the AB could not delegate another person to carry out the role expected from them or be replaced by any other person without prior written agreement. The contribution of AB members was on a pro bono basis and was facilitated through digital means in order to avoid travel expenses and associated environmental impacts.

Although active engagement is expected, participation in the AB activities is entirely voluntary. There were no adverse consequences if an AB member decides not to participate or to withdraw at any stage. In fact, AB members could withdraw their participation at any time by informing the AB Manager, Mergime Ibrahim. They could also request for their data to be withdrawn without giving a reason and without prejudice.

3.2 Tasks and roles of the AB members

The BCC AB is an essential component of the project, established to facilitate knowledge sharing and expertise exchange with the consortium throughout key stages of the project. Comprising experts from various domains, the AB members bring a wealth of experience and insights to support the project's objectives.

The BCC AB is set up and operated to share knowledge and expertise with the consortium in key stages of the project. The following points summarize the role of the AB:

- Provide expertise on the needs and problems that their stakeholder groups are currently facing as well as meaningful feedback on the BCC ideas, pilot actions, and project outcomes.
- Suggest RESEARCH AND INNOVATION projects that can participate in BCC activities and/or join the community.
- Act as a consultation body for the BCC consortium by providing valuable feedback aimed at aligning project outcomes with the underlying concept and scope.
- Facilitate access to important European and international stakeholder communities and drive the widespread acceptance and replication of BCC results by informing and inviting their contacts and networks to benefit from them.
- Supporting contact with market actors and stakeholders, in terms of inviting them to participate in project activities.
- Support the uptake of the policy recommendations, by acting as project ambassadors, informing and inviting their networks across the CIRCULAR BIOECONOMY community to benefit from the BCC value propositions as they become available.

Ad-hoc interactions:

Throughout the project, the support of the AB (either as a whole or of individual members with specific expertise) was sought and employed for ad hoc needs such as:

- The identification of needs and problems of their stakeholder groups, with meaningful feedback on the BCCs ideas, pilot actions and project outcomes.
- The identification of synergetic projects that can participate in BCC activities and/or join the community.
- The identification of potential REPLICATORS.
- The validation and improvement of the exploitation plans designed and put into motion for the sustainable exploitation of the project's results.
- The elaboration of guidelines and recommendations for replicating the results of the project in the form of a meaningful replication guide and toolkit.

The participation of AB members in the BCC project offered numerous benefits, fostering open discussions, networking opportunities, and access to valuable insights. AB members had the unique chance to engage in honest and transparent conversations, avoiding any misleading assertions. This promoted meaningful exchanges of ideas

and facilitated the generation of innovative solutions in the field of biowaste management and the circular bioeconomy. Additionally, AB members receive up-to-date information on the latest projects and developments within the field, enabling them to stay informed and contribute to the advancement of the circular bioeconomy. The benefits for AB members included:

- Open and honest discussions without resort of any misleading assertions.
- Networking opportunities and visibility as an expert stakeholder in the CBE community.
- A dedicated [section](#) on the BCC website/platform highlights the profiles of the AB members with a photo and short professional resume.
- First-hand access to meaningful insights generated exclusively within the context of the project and its activities.
- Unique opportunity to comment on the results and web tool offered by BCC.
- Information on the newest projects within the field.

4. Findings and Recommendations

An important factor discussed during the AG meetings and bilateral meetings was the utilization of the project's local partners as "ambassadors" of the BCC project. Leveraging the expertise and networks of the local partners was identified as a valuable strategy for promoting the project and its outcomes in other regions. Furthermore, the AB members themselves and project peer reviewers were seen as potential "replicators" of the project, playing a crucial role in disseminating the project's methodologies, results, and policy recommendations to their respective networks and spheres of influence.

By engaging the project's local partners as ambassadors, their deep understanding of the project's objectives and outcomes can be effectively communicated to stakeholders in other regions. Their first-hand experience in implementing the BCC approach and their credibility within their own communities can greatly contribute to the successful replication and adoption of the project's strategies and methodologies.

Similarly, the AB members and peer reviewers, as experts in their respective fields, can act as replicators of the project by sharing their knowledge and experiences with other projects, initiatives, and policy-making bodies. Their involvement in the project and endorsement of its methodologies and recommendations lend credibility and influence on the replication efforts.

By strategically utilizing the project's local partners as ambassadors and leveraging the expertise of the AB members and peer reviewers as replicators, the BCC project aims to extend its impact beyond the project's duration. This approach ensures that the project's methodologies, LCA/LCC results, web-based tool and policy recommendations reach a wider audience and contribute to the broader transition towards a sustainable and circular bioeconomy.

4.1 Replicating the Pilot Value Chains' LCA and LCC Approach

The application of Life Cycle Assessment (LCA) and Life Cycle Cost (LCC) approaches in evaluating the biowaste value chains has provided valuable insights into the environmental and economic aspects of the current state and alternative scenarios (WP2). The findings indicate that such assessments can help identify opportunities for improving the sustainability and cost-effectiveness of biowaste management practices. The LCA analysis has revealed the environmental impacts associated with different stages of the value chain, highlighting areas where interventions can be made to minimize resource consumption, emissions, and waste generation. The LCC assessment has shed light on the economic feasibility of alternative scenarios, enabling decision-makers to make informed choices based on cost considerations.

Recommendations:

DOCUMENTATION AND KNOWLEDGE TRANSFER | The AB emphasized the need to develop comprehensive guidelines and manuals that outline the step-by-step process of conducting Life Cycle Assessment (LCA) and Life Cycle Costing (LCC) assessments specifically tailored for the pilot value chains. These guidelines should encompass detailed instructions, methodologies, and practical examples to facilitate the replication of these approaches in other regions. The documentation should serve as a valuable resource for policymakers, industry stakeholders, and researchers seeking to implement LCA and LCC methodologies in their respective contexts.

CAPACITY-BUILDING COLLABORATIONS | The AB highlighted the importance of establishing collaborations with relevant organizations, such as universities, research institutions, or bioeconomy networks, to offer training workshops focused on LCA and LCC methodologies. These collaborative efforts can target policymakers, industry stakeholders, and researchers, providing them with the necessary knowledge and skills to effectively apply these approaches and understand the results achieved. By strengthening the capacity of individuals and organizations in other regions, the replication of LCA and LCC assessments can be facilitated.

DATA AVAILABILITY AND STANDARDIZATION | The availability of primary data or of reliable standardized data were identified as crucial factors for successful replication. The AB recommended promoting the standardization and harmonization of data collection methodologies to ensure replicability across different regions. This will enable easier data exchange, comparison of results, and meaningful benchmarking. Collaborations with data providers, biowaste management agencies, and research institutions can play a vital role in ensuring the availability of reliable and up-to-date data necessary for conducting LCA and LCC analyses in European contexts.

DISSEMINATION AND AWARENESS-RAISING | The AB stressed the importance of actively disseminating the findings and benefits of applying LCA and LCC methodologies to investigate the sustainability of proposed biocircular value chains. They recommended utilizing various channels, such as publications, conferences, webinars, and stakeholder engagement events, to raise awareness among potential replicators. By sharing success stories, lessons learned, and tangible outcomes, the awareness and understanding of LCA and LCC methodologies

can be enhanced, encouraging other cities and regions to adopt similar approaches in their own bioeconomy initiatives.

The AB emphasized that these recommendations should be accompanied by the involvement of local partners and the network of other project consortium partners. Leveraging existing collaborations and networks will enhance the replication efforts and ensure the successful transfer of knowledge and best practices to other regions. Furthermore, considering the diverse priorities and contexts of different cities and regions, the recommendations serve as general overarching approaches that can be tailored and customized to meet the specific needs and circumstances of each replication effort.

Replication Strategies:

The AB emphasized the importance of establishing regional partnerships (level up from local level to regional level) as a key strategy for replicating the LCA and LCC approaches used in the project. They highlighted the need to collaborate with regional bioeconomy initiatives, waste management associations, and policy-making bodies in other regions. Through these partnerships, the methodologies can be adapted to the specific characteristics and challenges of organic waste and residues management in each region. Sharing knowledge, experiences, and best practices will be crucial in supporting the successful replication of new sustainable value chains based on the CBE concept.

Funding support was identified as a critical aspect of replication. The AB recommended seeking funding opportunities from EU programs and initiatives that focus on bioeconomy, circular economy, or sustainable development. Proposals for replication projects can include activities such as capacity-building, data collection efforts, and the application of LCA and LCC approaches to assess the sustainability of proposed biowaste value chains in other regions. Securing adequate funding will be essential in ensuring the resources and support necessary for successful replication.

Training and knowledge exchange were highlighted as effective strategies to facilitate replication. The AB suggested organizing training programs/webinars and workshops in collaboration with local partners in target regions such as the final on-site events in each pilot area. These initiatives would provide practical, hands-on training on LCA and LCC methodologies, data collection techniques, and interpretation of results. Additionally, they emphasized the importance of facilitating knowledge exchange and networking among stakeholders to foster a community of practice in applying these approaches to evaluate the sustainability of biowaste value chains.

The AB stressed the need to recognize and consider the unique characteristics and priorities of each region. Customizing the LCA and LCC approaches to align with local biowaste management infrastructure, regulatory frameworks, market conditions, and stakeholder engagement strategies will ensure that the assessments are relevant and actionable in the target regions. This localized approach will maximize the effectiveness and applicability of the methodologies.

Implementing these recommendations and replication strategies, the LCA and LCC approaches used in the project can be effectively applied to evaluate the specific needs of similar European contexts. The AB emphasized that these strategies should be implemented in collaboration with local partners who can act as ‘ambassadors’ and the network of other project consortium partners. Leveraging existing collaborations and networks will enhance the replication efforts and ensure the successful transfer of knowledge and best practices. Ultimately, the replication of the best practices will contribute to a broader understanding of the environmental and economic implications of biowaste value chains, supporting the development of sustainable and cost-effective bioeconomy initiatives across the EU. All the steps for replication are summarized in the table below:

STEPS	DESCRIPTION
STEP 1: KNOWLEDGE TRANSFER AND DOCUMENTATION	Develop comprehensive guidelines and manuals for conducting LCA and LCC assessments tailored to bio-based value chains. Include clear instructions, methodologies, and examples. Emphasize the importance of knowledge transfer and documentation.
STEP 2: CAPACITY-BUILDING COLLABORATIONS	Establish collaborations with universities, research institutions, and bioeconomy networks to offer capacity-building programs and training workshops on LCA and LCC methodologies. Target policymakers, industry stakeholders, and researchers. Facilitate knowledge exchange and networking.
STEP 3: DATA AVAILABILITY	Encourage local partners to provide primary data to ensure reliable results. Collaborate with data providers, waste management agencies, and research institutions to ensure trustworthy and up-to-date data for LCA and LCC analyses.
STEP 4: DISSEMINATION AND AWARENESS-RAISING	Actively disseminate the findings and benefits of LCA and LCC approaches through publications, conferences, webinars, and stakeholder engagement events. Raise awareness among potential replicators.

4.2 Replicating Biocircular Policy Recommendations

Based on the insights gained from the 1:1 interviews with the AB members and the board meetings, the replication of biocircular policy recommendations relevant for the three BCC pilot value chains (WP3) is regarded as a critical aspect for other cities and regions. The AB emphasized the significance of these recommendations in guiding and shaping policies to foster sustainable and circular bioeconomies. They highlighted the need for strategic approaches to replicate and exploit the work conducted by the current consortium, especially considering that the consortium itself may not be able to continue the project's efforts. Also, the [D3.1](#) was recognized as an essential resource. This deliverable offers a comprehensive overview of the policy framework and good practices related to CBE and biowaste management at both European and local levels in the selected areas of study. Both, the deliverable D3.1 and the project's policy recommendations, will be instrumental in informing decision-makers, policymakers, and industry stakeholders interested in understanding the policy landscape and identifying effective strategies for advancing CBE initiatives.

The following strategies and recommendations were derived from the interview summaries to support the replication of biowaste-related policy recommendations.

Recommendations

The AB, based on the insights shared during the 1:1 interviews and joint board meetings, highlighted the following recommendations for replicating the biowaste-related policy recommendations in other cities and regions:

APPLICABILITY OF POLICY RECOMMENDATIONS TO OTHER REGIONS | One recommendation that emerged from the discussions was the importance of providing policy recommendations in a way that is transferable to other regions. While it is essential to acknowledge that each country and region has its own unique priorities and circumstances, the policy recommendations developed by BCC based on the drivers and barriers identified in the selected value chains and pilot areas can serve as valuable references.

The BCC policy recommendations are rooted in a thorough understanding of the bio-based value chains and the specific challenges faced in the three pilot areas. By addressing these challenges and leveraging the identified drivers and barriers, the recommendations aim to facilitate the transition towards a more sustainable and circular bioeconomy. While the recommendations are tailored to the local context, they also encompass broader principles and strategies that can be adapted and applied in other regions.

When sharing the policy recommendations, it is important to emphasize their contextual nature and the need for customization to suit the specific circumstances of each region. However, the underlying principles and approaches can serve as a foundation for policy development in other areas. This includes promoting resource efficiency, fostering collaboration between stakeholders, establishing supportive regulatory frameworks, and incentivizing the adoption of sustainable practices.

Carefully considering the local priorities and adapting the policy recommendations accordingly, stakeholders in other regions can draw inspiration from the BCC framework and adapt it to their specific contexts. This approach allows for the transfer of knowledge and lessons learned while maintaining the flexibility needed to address region-specific challenges and opportunities. Ultimately, the policy recommendations of BCC serve as a valuable starting point and reference for policymakers, providing a roadmap towards a more sustainable and circular bioeconomy, while allowing for customization to ensure alignment with the unique characteristics of each region.

COLLABORATIVE NETWORKS AND PLATFORMS | The AB emphasized the importance of engaging with existing bioeconomy networks, circular economy platforms, and policy-oriented organizations. These collaborations can provide valuable opportunities to share policy recommendations and integrate them into ongoing initiatives. By actively participating in knowledge-sharing events, policy forums, and working groups, the recommendations can reach a wider audience and facilitate collaboration with other projects and initiatives. This approach fosters cooperation, enables the sharing of best practices, and enhances the replication of successful policies.

POLICY ADVOCACY AND LOBBYING | The AB members emphasized the need to establish partnerships with advocacy organizations and industry associations that are active in the bioeconomy and circular economy sectors. These partnerships can collectively advocate for the adoption of the policy recommendations. Engaging with relevant policymakers at the regional, national, and EU level was also emphasized as a crucial step. By highlighting the benefits and potential impacts of implementing the recommendations, stakeholders can generate support and influence policy decisions, thereby facilitating their replication in other regions.

Replication Strategies

To effectively replicate the biowaste-related policy recommendations, the following strategies were identified based on the interview summaries:

INTEGRATION AND COLLABORATION WITH OTHER SIMILAR INITIATIVES

The AB emphasized the importance of joining forces with other initiatives and projects, such as the ROOTS initiative, to develop joint policy recommendations. While it may be challenging to align timing and resources with other initiatives, the benefits of a unified and collective approach are significant. By collaborating with other projects and initiatives, the replication of policy recommendations can be strengthened, and a cohesive framework for advancing the bioeconomy can be established.

One potential avenue for collaboration is to leverage existing platforms and networks like BIOEAST, the European Bioeconomy Network, etc. By integrating the policy recommendations into their project proposals, action plans, or policy guidelines, the BCC project can tap into an established network and amplify the impact of their recommendations. Collaborating with these initiatives can also provide opportunities to advocate for the inclusion of the policy recommendations as evaluation criteria or requirements for future bioeconomy-related projects. This not only enhances the visibility and recognition of the recommendations but also aligns policy objectives with funding priorities, further promoting their adoption.

Furthermore, joint policy recommendations can benefit from the diverse expertise and perspectives brought by different initiatives. By pooling resources, knowledge, and experiences, a more comprehensive and robust set of recommendations can be developed. This collaborative approach ensures that the policy recommendations reflect the needs and priorities of multiple stakeholders, leading to more effective and inclusive strategies for the advancement of the bioeconomy.

KNOWLEDGE EXCHANGE

The importance of facilitating knowledge exchange and capacity-building activities was highlighted. Organizing workshops, webinars, and training sessions in collaboration with local partners and stakeholders can help to disseminate the policy recommendations and enhance understanding. These activities provide a platform for discussing challenges, sharing experiences, and exchanging best practices. They also equip stakeholders with the necessary skills and knowledge to implement the recommendations in their respective regions. By encouraging networking and collaboration among stakeholders, a community of practice is created that supports the long-term

replication and sustainability of the policy recommendations. Webinars can feature presentations by experts, interactive discussions, and Q&A sessions. It is recommended that these webinars are recorded and archived to create a repository of online resources that stakeholders can access at their convenience, and to develop user-friendly guides, toolkits, and manuals that provide step-by-step instructions and practical examples on how to implement the recommendations.

By incorporating these recommendations and replication strategies, the biowaste-related policy recommendations developed in the project can be effectively replicated in other cities and regions. The AB emphasized the importance of using collaborative networks, policy advocacy and lobbying, integrating the recommendations into other programs and initiatives, and facilitating knowledge exchange and capacity-building. These approaches ensure the wide dissemination and adoption of policy recommendations, supporting the development of a sustainable and circular bioeconomy across the EU.

4.3 Scaling Up the Biocircularities Web-based Tool

The BCC project has successfully developed a web-based tool (WP4) aimed at assisting policymakers and industrial stakeholders in initiating the design of relevant and effective biowaste management strategies. This innovative tool provides valuable insights and data to support decision-making processes and promote sustainable practices within the bioeconomy. As the project nears its completion, it is crucial to consider how this web-based tool can be replicated and scaled up to benefit other regions, projects, and initiatives. The 1:1 interviews with the AB members have shed light on the key findings and recommendations for replicating and expanding the reach of this tool. This section will delve into the strategies and recommendations based on these interviews, providing guidance on how to successfully replicate and scale up the BCC web-based tool in other contexts. By adopting these strategies, stakeholders can harness the power of this tool to enhance biowaste management practices and contribute to the sustainable development of the bioeconomy on a broader scale.

Recommendations

OPEN-SOURCE DEVELOPMENT AND COLLABORATION | The AB emphasized the importance of transitioning the web-based tool to an open-source license. This would enable community contributions, updates, and enhancements, ensuring the tool remains relevant and adaptable over time. Also, it is very important to ensure the intellectual property of the tool. Collaborating with other bioeconomy or biowaste management projects was also highlighted to share expertise and resources, fostering collaboration for the development and maintenance of the tool.

INTEGRATION WITH EXISTING PLATFORMS AND DATABASES | The AB members highlighted the need to explore opportunities for integrating the functionality of the web-based tool into existing bioeconomy databases, decision support systems, or digital platforms. This integration would streamline access to the tool's features and promote its adoption by leveraging established platforms with existing user bases. Collaborating with ongoing

EU-funded projects or initiatives that share similar goals and objectives can facilitate the incorporation of the tool into their digital infrastructure, maximizing its reach and impact.

Replication Strategies:

KNOWLEDGE TRANSFER AND TRAINING | To facilitate replication, it is essential to offer training sessions, webinars, tutorials, or guidelines on using and adapting the web-based tool. By providing comprehensive guidelines to stakeholders, projects, and initiatives interested in utilizing the tool, its potential benefits can be effectively communicated and understood. Developing user guides and documentation that provide clear instructions on deploying, customizing, and maintaining the tool in different contexts will further support its successful replication.

PROMOTION AND DISSEMINATION | The AB stressed the importance of actively promoting the availability and benefits of the web-based tool. This can be achieved through various communication channels such as websites, social media, newsletters, and relevant networks. Targeted outreach efforts, including participation in conferences, workshops, or events, should be undertaken to showcase the capabilities and potential impact of the tool. By raising awareness and generating interest among stakeholders and potential replicators, the tool's adoption and replication can be facilitated.

Implementing these recommendations and replication strategies, the web-based tool developed within the BCC project can be easily replicated and scaled up in other regions. The findings from the 1:1 interview provide valuable insights for guiding the replication process, ensuring the tool's continued impact and utilization by other ongoing projects or upcoming EU-funded initiatives in the bioeconomy sector.

5. Conclusion

In alignment with the recommendations provided by the AB, the BCC project has taken concrete steps to ensure the replication and dissemination of its outcomes. The project is committed to following the proposed strategies and utilizing various avenues for knowledge exchange, capacity-building, and collaboration.

To showcase the LCA/LCC results and drivers and barriers to CBE implementation as well as to launch the web-based tool, the BCC project held final local events on-site in each pilot area in June 2023. Key local stakeholders were invited to attend these events to present their own experience (e.g., on separate biowaste collection or innovative bio-based products in MAB) and engage in discussions on the project results. Recognizing the value of wider participation, efforts were made to invite stakeholders from other regions as well, fostering knowledge sharing and expanding the replication potential.

In addition to the final local events, the project will organize three webinars called "[BioCircularcities Trilogy](#)":

- *Episode 1:* “Supporting local players with the transition to circular bioeconomy and lifting the current barriers” - disseminate the BCC policy recommendations and LCA/LCC results and presentation on drivers and barriers for CBE implementation by Sustrack.
- *Episode 2:* “Identifying the most promising biocircular technological options, the BCC Webtool in action”: and presentation of the BCC web tool and the Tech4Biowaste database - connecting users and suppliers of biowaste treatment technologies.
- *Episode 3:* “The journey of the three pilot territories”

The project recognizes the benefits of joint webinars and seeks to collaborate with other initiatives and projects, as it facilitates a broader reach, increases visibility, and maximizes the impact of the project's outcomes.

The deliverable on policy recommendations, developed as part of the project, will serve as a valuable resource for stakeholders seeking to implement sustainable biowaste management strategies. These recommendations will be shared through various channels, including the BIOEAST and the European Bioeconomy Network platform, ensuring widespread dissemination and uptake by relevant stakeholders and initiatives in the bioeconomy domain.

Furthermore, the project aims to develop customized factsheets that highlight the project's results and pilot activities. These factsheets serve as a comprehensive and accessible resource for ongoing and upcoming EU projects and initiatives, facilitating the replication and exploitation of the project's outcomes. The Exploitation and Sustainability Plan, outlined in Deliverable 5.7, will provide a roadmap for replication and implementation, drawing upon lessons learned from the case studies, stakeholder workshops, peer reviews, and consultations with the AB. This plan will consolidate the project's outcomes into an exploitable package, maximizing their impact and ensuring long-term sustainability.

In summary, the BCC project is committed to following the recommendations provided by the AB and has integrated them into its approach for replication and dissemination. By organizing final local events, webinars, and leveraging bioeconomy related platforms, the project aims to share its findings, launch the web-based tool, and disseminate the policy recommendations to a wide range of stakeholders. With the development of customized factsheets and an exploitation roadmap, the project is dedicated to facilitating the replication and utilization of its outcomes by ongoing and upcoming EU projects and initiatives, contributing to the advancement of sustainable bioeconomy practices.

ANNEX 1 – Advisory Board Members Short Biography

ELVIRA BUONOCORE



Elvira Buonocore is a Senior Researcher of Ecology at the Department of Science and Technology of Parthenope University of Naples, Italy. She holds a PhD in “Environment, Resources and Sustainable Development” with the title of Doctor Europaeus. Her research activities take place at the laboratory of “Ecodynamics and Sustainable Development” and the UNESCO Chair laboratory on “Environment, Resources and Sustainable Development” at Parthenope University where she contributes to research projects and the academic supervision of Bachelor, Master, and PhD students. Her main research interests are systems ecology and ecological modelling, human ecology, environmental assessment and accounting, LCA, natural capital and ecosystem services assessment, nature conservation and protected areas, UNESCO-MAB biosphere reserves, urban metabolism and food security and the implementation of the SDGs.

SARA CANTONE



Sara Cantone has a background in Pharmaceutical Chemistry and Technology. She is a start-upper in the field of green chemistry and nowadays works as a consultant in the private and public sectors for the development of collaborations, implementation of projects, and training activities, with a specific focus on the circular bioeconomy.

Holger Gerdes



Holger Gerdes is a Senior Fellow at the Ecologic Institute and coordinator of the Institute's bioeconomy activities. He evaluates and applies participatory tools for effective natural resource management in the emerging bioeconomy. Currently, Holger Gerdes coordinates the project "Concepts, Tools and Applications for Community-driven Bioeconomy Development in European Rural Areas" (SCALE-UP), funded under the Horizon Europe programme. Before, he coordinated the Horizon 2020 projects "Bio-based Strategies and Roadmaps for Enhanced Rural and Regional Development in the EU" (BE-Rural) and "Promoting Stakeholder Engagement and Public Awareness for a Participative Governance of the European Bioeconomy" (BioSTEP). He is also responsible for the Ecologic Institute's contribution to the long-term research project "Sustainable Subsoil Management as Part of the Bioeconomy" (Soil³).

Francesc Giró i Fontanals



Francesc Giró i Fontanals, graduated in Agricultural Engineering, is currently the Director of Strategic Planning of the Waste Agency of Catalonia. His entire professional career has been as a technical expert and researcher in the field of separate municipal biowaste collection and biological biowaste treatment between ESAB-Polytechnic University of Catalonia, as a researcher and teacher (1987-1993), and the Waste Agency of Catalonia, as a technician (1993-2011), Deputy Director (2011-2016) and Director of Strategic Planning (2016 to date). He is also founder and member of the European Compost Network. For more than 30 years, he has worked with high commitment to develop and promote the implementation of separate biowaste collection and recycling. In recent years, he coordinated the elaboration of the "Waste & Resources Prevention and Management Programme, PRECAT20".

Barna Kovacs



Barna Kovacs currently works as a counsellor at the Permanent Representation of Hungary to the EU. He has been appointed as the Secretary General of the BIOEAST Initiative, Vice-Chair of the FACCE JPI, and SCAR member on behalf of Hungary. His responsibilities cover following discussion in the Council on bioeconomy research and innovation.

Previously, he worked as a scientific and policy officer in the European Commission's Directorate-General Unit for Research and Innovation, Bioeconomy Strategy Unit, for the European Parliament, and for the Hungarian Ministry of Agriculture and the Hungarian Statistical Office. He holds a PhD from the Budapest University of Economics and Public Administration. His scientific background includes management and business administration, focusing on the socio-economic aspects of agriculture, localized agri-food systems, food safety and security, as well as innovation aspects of origin labelled products.

Nora Szarka



Nora Szarka is a Group Leader at the German Biomass Research Center (DBFZ) in Leipzig, Germany. Before that, she worked as a project engineer at the Unidad de Desarrollo Tecnológico at the University of Concepción, Chile, and as a researcher at the Chair of Systems Analysis and Environmental Engineering of the University of Leoben, Austria. Her research focuses on the development of supply scenarios and utilisation strategies for bioenergy and bioeconomy in a medium and long term perspective, method development and modelling of potential competing uses between material and energetic biomass applications, system analysis of the demand-oriented provision of bioenergy, and the analysis and evaluation of bioenergy and bioeconomy technologies and supply chains.

John Vos



John Vos is a senior consultant with a background in business management and over 30 years of experience in the bioenergy and bioeconomy sectors. He is involved in the initiation, formulation, implementation and management of international collaboration projects, with a special emphasis on EU-funded projects. John has a track record working on studies and projects that seek to inform stakeholders from all parts of society (chemical industry, public procurers, brand owners, citizens of all ages etc.) about the opportunities offered by the bioeconomy and/or support the market uptake of fuels, materials and products derived from biomass. He is currently coordinator of the H2020 project MUSIC (facilitating the market uptake of intermediate bioenergy carriers) and the BBI JU project Tech4Biowaste (developing a database on biowaste valorisation technologies). He is a Task Leader in the ongoing BBI JU projects BIOSWITCH and Allthingsbio.PRO and will also take on this role in the upcoming bioeconomy governance projects BioGov.Net and GenB.

ANNEX 2 – Letter of Agreement to participate in the Biocircularcities Advisory Board

Letter of Agreement to participate in the BIOCIRCULARCITIES Advisory Board

18/10/22

I, Holger Gerdes, hereby declare my intention to become a member of the "Advisory Board" formed under the project BIOCIRCULARCITIES, which is funded by the European Commission under the HORIZON 2020 Framework Programme.

1. I understand that the project aims at supporting the development of innovative and comprehensive regulatory frameworks and roadmaps aligned with circular bioeconomy principles, centred on 'bio-based waste' and based on feedback from multi-stakeholder participatory processes.
2. I acknowledge that the objectives of the project are very interesting to me. I further believe that my experience and professional expertise addressed by the project can significantly contribute to its objectives.
3. I intend to be involved in the Advisory Board voluntary.
4. I have read the description of the operational framework of the Advisory Board (the overview) as well as the expected contribution of its members and I express my willingness to contribute and complement to the project work, acting as the Advisory Board member.
5. The results of the Advisory Board activities will be the exclusive property of the BIOCIRCULARCITIES consortium. However, the Advisory Board members will be considered as co-authors and their names will be included in the public deliverables and publications that will be developed throughout the project lifetime based on the results of the Advisory Board activities.

This letter of interest is not legally binding and simply demonstrates my intention to support the BIOCIRCULARCITIES project:

- On the interaction between "circular economy" and "bioeconomy" as well as combine different policy regulations such as: taxation, waste management, innovation, industry, agriculture and trade.
- To consider not only supply-side (feedstock generation) but also demand-side (market of bio-based products) policy measures to achieve effective actions.
- To coordinate the multi-level governance efforts/actions and include measures at multiple levels from local waste management plans, through regional infrastructures and planning (e.g. biorefinery deployment) as well as national and EU long-term investments.
- To consider the expectations and the perceptions of the different actors involved in the bioeconomy value chain to have a holistic view of the bioeconomy in the specific context analysed. In order to support the development of such frameworks it is needed to generate information that encompass different aspects (environmental, economic, technical, socio-cultural, legal and political) and different perceptions about the state of the art and the evolution of bioeconomy and in particular the circular use of bio-based waste, the existing and upcoming barriers and opportunities.

CONSENT FORM

Without expectation of compensation or other remuneration, now or in the future, I hereby give my consent to FUNDACIO ENT, the coordinator of the BIOCIRCULARCITIES project, to use my name, image and/or any interview statements from me in its publications and media activities (including the Internet) for strictly research and dissemination purposes in the context of the EU H2020 BIOCIRCULARCITIES project. This consent includes, but is not limited to:

- (a) Permission to interview, film, photograph or otherwise make a video reproduction of me and/or record my voice;
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- (c) Permission to use quotes from the workshop discussions or interview(s), the film, photograph(s) or reproduction(s) of me, and/or recording of my voice, in part or in whole, in its publications, other print media and electronic media (including the Internet) and/or in mailings for educational and awareness purposes.

This consent is given and does not require prior approval by me.

NAME Holger Gerdes

Profession Senior Fellow

Institution Ecologic Institute

E-mail and phone number holger.gerdes@ecologic.eu / +49 30 86880 148

Signature





Letter of Agreement to participate in the BIOCIRCULARCITIES Advisory Board

03/03/2022

I, Sara Cantone, hereby declare my intention to become a member of the “Advisory Board” formed under the project BIOCIRCULARCITIES, which is funded by the European Commission under the HORIZON 2020 Framework Programme.

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This consent is given and does not require prior approval by me.

Sara Cantone

Consultant

cantotidi@gmail.com, +39 3389057934





Letter of Agreement to participate in the BIOCIRCULARCITIES Advisory Board

<01/03/22/>

I, Elvira Buonocore, hereby declare my intention to become a member of the “Advisory Board” formed under the project BIOCIRCULARCITIES, which is funded by the European Commission under the HORIZON 2020 Framework Programme.

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This consent is given and does not require prior approval by me.

NAME	Elvira Buonocore
Profession	Researcher
Institution	Parthenope University of Naples, Italy
E-mail and phone number	elvira.buonocore@uniparthenope.it
Signature	



Letter of Agreement to participate in the BIOCIRCULARCITIES Advisory Board

28/02/2022

I, **JOHN VOS**, hereby declare my intention to become a member of the "Advisory Board" formed under the project BIOCIRCULARCITIES, which is funded by the European Commission under the HORIZON 2020 Framework Programme.

1. I understand that the project aims at supporting the development of innovative and comprehensive regulatory frameworks and roadmaps aligned with circular bioeconomy principles, centred on 'bio-based waste' and based on feedback from multi-stakeholder participatory processes.

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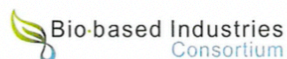
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- To consider not only supply-side (feedstock generation) but also demand-side (market of bio-based products) policy measures to achieve effective actions.
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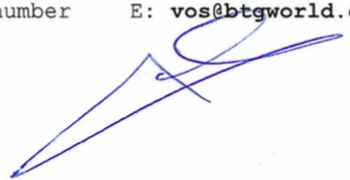
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This consent is given and does not require prior approval by me.

NAME	John Vos
Profession	Senior Consultant / EU Projects Manager
Institution	BTG Biomass Technology Group BV
E-mail and phone number	E: vos@btgworld.com; T: +31 6 2153 4939
Signature	



Letter of Agreement to participate in the BIO CIRCULAR CITIES Advisory Board

16/03/2022

I, Barna Kovacs, hereby declare my intention to become a member of the "Advisory Board" formed under the project BIO CIRCULAR CITIES, which is funded by the European Commission under the HORIZON 2020 Framework Programme.

1. I understand that the project aims at supporting the development of innovative and comprehensive regulatory frameworks and roadmaps aligned with circular bioeconomy principles, centred on 'bio-based waste' and based on feedback from multi-stakeholder participatory processes.
2. I acknowledge that the objectives of the project are very interesting to me. I further believe that my experience and professional expertise addressed by the project can significantly contribute to its objectives.
3. I intend to be involved in the Advisory Board voluntary.
4. I have read the description of the operational framework of the Advisory Board (the overview) as well as the expected contribution of its members and I express my willingness to contribute and complement to the project work, acting as the Advisory Board member.
5. The results of the Advisory Board activities will be the exclusive property of the BIO CIRCULAR CITIES consortium. However, the Advisory Board members will be considered as co-authors and their names will be included in the public deliverables and publications that will be developed throughout the project lifetime based on the results of the Advisory Board activities.

This letter of interest is not legally binding and simply demonstrates my intention to support the BIO CIRCULAR CITIES project:

- On the interaction between "circular economy" and "bioeconomy" as well as combine different policy regulations such as: taxation, waste management, innovation, industry, agriculture and trade.
- To consider not only supply-side (feedstock generation) but also demand-side (market of bio-based products) policy measures to achieve effective actions.
- To coordinate the multi-level governance efforts/actions and include measures at multiple levels from local waste management plans, through regional infrastructures and planning (e.g. biorefinery deployment) as well as national and EU long-term investments.
- To consider the expectations and the perceptions of the different actors involved in the bioeconomy value chain to have a holistic view of the bioeconomy in the specific context analysed. In order to support the development of such frameworks it is needed to generate information that encompass different aspects (environmental, economic, technical, socio-cultural, legal and political) and different perceptions about the state of the art and the evolution of bioeconomy and in particular the circular



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use of bio-based waste, the existing and upcoming barriers and opportunities.

CONSENT FORM

Without expectation of compensation or other remuneration, now or in the future, I hereby give my consent to FUNDACIO ENT, the coordinator of the BIOCIRCULARCITIES project, to use my name, image and/or any interview statements from me in its publications and media activities (including the Internet) for strictly research and dissemination purposes in the context of the EU H2020 BIOCIRCULARCITIES project. This consent includes, but is not limited to:

- (a) Permission to interview, film, photograph or otherwise make a video reproduction of me and/or record my voice;
- (b) Permission to use my name and short bio; and
- (c) Permission to use quotes from the workshop discussions or interview(s), the film, photograph(s) or reproduction(s) of me, and/or recording of my voice, in part or in whole, in its publications, other print media and electronic media (including the Internet) and/or in mailings for educational and awareness purposes.

This consent is given and does not require prior approval by me.



Barna Kovacs PhD
Counsellor
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Letter of Agreement to participate in the BIOCIRCULARCITIES Advisory Board

01.04.2022

I, Nora Szarka, hereby declare my intention to become a member of the "Advisory Board" formed under the project BIOCIRCULARCITIES, which is funded by the European Commission under the HORIZON 2020 Framework Programme.

1. I understand that the project aims at supporting the development of innovative and comprehensive regulatory frameworks and roadmaps aligned with circular bioeconomy principles, centred on 'bio-based waste' and based on feedback from multi-stakeholder participatory processes.

2. I acknowledge that the objectives of the project are very interesting to me. I further believe that my experience and professional expertise addressed by the project can significantly contribute to its objectives.

3. I intend to be involved in the Advisory Board voluntary.

4. I have read the description of the operational framework of the Advisory Board (the overview) as well as the expected contribution of its members and I express my willingness to contribute and complement to the project work, acting as the Advisory Board member.

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- To consider the expectations and the perceptions of the different actors involved in the bioeconomy value chain to have a holistic view of the bioeconomy in the specific context analysed. In order to support the development of such frameworks it is needed to generate information that encompass different aspects (environmental, economic, technical, socio-cultural, legal and political) and different perceptions about the state of the art and the evolution of bioeconomy and in particular the circular use of bio-based waste, the existing and upcoming barriers and opportunities.

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This consent is given and does not require prior approval by me.

Nora Szarka

Environmental Engineer, Working Group Leader

DBFZ - Deutsches Biomasseforschungszentrum gGmbH

E: nora.szarka@dbfz.de T: +493412434489





Letter of Agreement to participate in the BIOCIRCULARCITIES Advisory Board

03/03/2022

I, **FRANCESC GIRÓ I FONTANALS**, hereby declare my intention to become a member of the "Advisory Board" formed under the project BIOCIRCULARCITIES, which is funded by the European Commission under the HORIZON 2020 Framework Programme.

1. I understand that the project aims at supporting the development of innovative and comprehensive regulatory frameworks and roadmaps aligned with circular bioeconomy principles, centred on 'bio-based waste' and based on feedback from multi-stakeholder participatory processes.

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This consent is given and does not require prior approval by me.

NAME: **FRANCESC GIRÓ I FONTANALS**

Profession **Agricultural Engineer**

Institution **Waste Agency of Catalonia**

E-mail fgiro@gencat.cat and phone number **+34 93 638 685 204**

Signature

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(AUT)

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per Francesc Giró
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Data: 2022.03.03
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ANNEX 3 – 1: 1 Interview Questions

1:1 Meeting with AB members

Questions for D1.8 Recommendation of AB for replication

General:

1. Based on your experience as an Advisory Board member of the BCC project, what are the key factors that you think are critical for replicating the project's results in new EU-funded projects with a similar focus?

Life cycle thinking - LCT

2. What are some of the main challenges that policy makers and BBI stakeholders may face when trying to replicate the alternative circular bioeconomy solutions developed in the BCC project in other regions or territories, and how can these challenges be addressed?
3. In your opinion, what are the key elements needed to successfully replicate the current sustainability assessments vs alternative scenarios according to the LCT approach in the BCC project in other countries?

Web-tool:

4. How can the web-based tool for designing biowaste management strategies be tailored to the needs and priorities of other regions or countries?
5. What are your thoughts on the potential for the web-based tool to be further developed or continued beyond the BCC project, and how can it be sustained, exploited, and maintained in the long-term?

Policy Recommendations:

6. What challenges do you foresee in replicating the policy recommendations for circular bioeconomy value chains in other regions or countries? How can the policy recommendations be tailored to the unique needs and priorities of different regions or countries?
7. How can the report on drivers and barriers be used to inform policy and decision-making at the local and national level in other regions or countries? How can the report be further exploited by other projects, or other regions/countries?

Knowledge and capacity-building:

8. How can the BCC project outcomes be effectively disseminated and communicated to other policy makers and industry stakeholders to encourage the adoption of circular bioeconomy practices more broadly?
9. How can new EU-funded projects ensure that they are building on the existing knowledge and expertise in the circular bioeconomy space, and avoid duplicating efforts that have already been made by previous projects similar to BCC?
10. What advice would you give to new EU-funded projects seeking to engage with policy makers and industry stakeholders in the circular bioeconomy space, based on your experience as an Advisory Board member of the BCC project?



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