



**BIOVOICES**

CONNECTING BIO-BASED FORCES  
FOR A SUSTAINABLE WORLD

[www.biovoices.eu](http://www.biovoices.eu)



# CONNECTING BIO-BASED FORCES FOR A SUSTAINABLE WORLD



This Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774331

CONTACT US  
[info@biovoices.eu](mailto:info@biovoices.eu)



CIVITTA

LOBA®





## DELIVERABLE 5.5

---

# Animation of the multi-stakeholders Platform Report: first version

### DELIVERABLE TYPE

Report

### WORK PACKAGE

WP 5

### DISSEMINATION LEVEL

Public

### MONTH AND DATE OF DELIVERY

December 2019

### LEADER

FVA New Media Research

### AUTHORS

Susanna Albertini, Louis Ferrini,  
Michela Cohen

---

**Programme**  
H2020

**Contract Number**  
774331

**Duration**  
36 Months

**Start**  
January 2018

## TABLE OF CONTENTS

1	Introduction .....	6
1.1	The BIOVOICES Multistakeholders' platform .....	6
2	BIOVOICES Social Platform .....	10
2.1	The BIOVOICES challenges.....	10
2.2	Mobilisation and Mutual Learning Workshops dedicated spaces.....	10
2.3	Thematic Discussion Groups.....	12
3	Promotion of multistakeholders engagement through Mobilisation and Mutual Learning (MML) workshops 13	
3.1	Biovoices MMLs to address the challenges for bioeconomy.....	13
3.1.1	Interaction with the MMLs participants .....	14
3.2	Hackathons for the design of bio-based products better responding to consumers' needs .....	16
4	Supporting National, Regional and Local authorities and stakeholders in the deployment of the bioeconomy strategy.....	19
4.1	Organisation of Regional events “Bioeconomy as opportunity for regional development valorising local resources” .....	19
4.2	Supporting less mature countries in the development of their Bioeconomy Strategy .....	20
4.3	Facilitating the National, Regional and Local stakeholders in the creation of an innovation ecosystem for the bioeconomy, rooted locally .....	21
4.4	Supporting Regions in the design of innovative bioeconomy educational paths .....	23
5	Promote interaction among EU funded projects, networks and initiatives .....	25
5.1	Organisation of the first Mobilisation and Mutual Learning workshop among Bioeconomy related CSAs 25	
5.2	Creation of the European Bioeconomy Network .....	26
5.2.1	The EuBioNet Mission .....	27
5.2.2	The EuBioNet partners.....	27
5.2.3	The EuBioNet Outcomes .....	28
5.2.4	Acknowledgments.....	29
5.3	Support to the organization of the to the second Mobilisation and Mutual Learning Workshop among CSAs 30	
6	BIOVOICES Social Media .....	33
6.1	Raise awareness, inform and promote open dialogue and active engagement through the Bio- products WALLS .....	34
6.2	Stimulate the debate on Bio-based products in the Social Media .....	36
7	Multistakeholders engagement and animation in the context of events .....	38
7.1	Bio-ART gallery.....	38
7.2	The Bioeconomy Village:Exhibition of bio-based products .....	42
7.3	Games and ICT tools to raise awareness and stimulate discussion.....	46
7.4	Open WALLS to gather data and public perception .....	48

7.5	Talk-Showcase of Bio-based products .....	49
7.6	Participation to Conferences and Workshops .....	50
8	Lesson Learnt.....	53
9	Recommendations.....	54
10	Conclusions .....	54

## INDEX FOR FIGURES

Figure 1	The BIOVOICES Multistakeholders' platform structure.....	6
Figure 2	The BIOVOICES 12 Challenges .....	10
Figure 3	The BIOVOICES Mobilisation and Mutual Learning workshops dedicated spaces in the social platform .....	11
Figure 4	The BIOVOICES Discussion groups dedicated spaces in the social platform.....	12
Figure 5	Example of real-time interaction with 150 participants using Mentimeter in Italian.....	15
Figure 6	Example of real-time interaction with using Mentimeter in Romanian.....	15
Figure 7	The First MML among EU-funded CSAs in Bioeconomy.....	26
Figure 8	The EuBioNet partners .....	27
Figure 9	Overview of the workshops and the participating projects .....	32
Figure 10	The Instagram BIOVOICES channel providing information about bio-based product, their sustainability and asking questions to the users.....	34
Figure 11	Post promoting research results .....	35
Figure 12	BIOVOICES Facebook survey to stimulate the discussion about plastic and bioplastic .....	35
Figure 13	Example of quiz to raise awareness, test the knowledge and inform.....	35
Figure 14	Example of animated question calling users to share what they think .....	36
Figure 15	Example of tweet triggering the discussion around topics addressed by the BIOVOICES activities.	37
Figure 16	Example of tweet launching discussion around topics addressed by the BIOVOICES activities .....	37
Figure 17	The Bio-ART gallery.....	39
Figure 18	Showcase of Bio-based products in everyday's life applications (Bioeconomy Village) .....	43
Figure 19	Talk-Showcase of Bio-based products @ Maker Faire 2019 .....	50
Figure 20	BIOVOICES at the session "Societal challenges – What consumers need to move towards bio-based products?" @EUBioScene 19, Helsinki .....	52

## CONTRIBUTORS

NAME	ORGANIZATION
Robert Miskuf	PEDAL CONSULTING
Liina Vaher	CIVITTA
Beatriz Palomo Belbel	ASEBIO
All partners	All

## PEER REVIEWS

NAME	ORGANIZATION
Chiara Pocaterra	APRE
Greet Overbeek	WR

## REVISION HISTORY

VERSION	DATE	REVIEWER	MODIFICATIONS
1.1	19/12/2019	Susanna Albertini	Draft version
1.2	16/12/2019	Michela Cohen	First version
1.3	22/12/2019	Louis Ferrini	Second version
1.4	27/12/2019	All	Third version integrating partner's final comments
2.0	31/12/2019	Susanna Albertini	Final version

# 1 Introduction

The main objective of task 5.3: Animation of the Multi Stakeholders Platform is to design and develop strategies and tools to:

1. Inform, raise awareness and educate the stakeholders about bioeconomy
2. Promote active engagement, open dialogue, interaction and collaboration among the different stakeholders to address the current challenges for the Bio-based market uptake
3. Facilitate the co-creation of actionable knowledge for the different stakeholders

This document explains how the Multi Stakeholders Platform was designed and animated to achieve the aforementioned objectives.

This document provides also some lessons learnt and useful insights to the partners to fine-tune the activities to be implemented in the last year of the project.

## 1.1 The BIOVOICES Multistakeholders' platform

The BIOVOICES multistakeholders platform integrates several tools, activities and strategies to engage the different stakeholders and promote their collaboration.

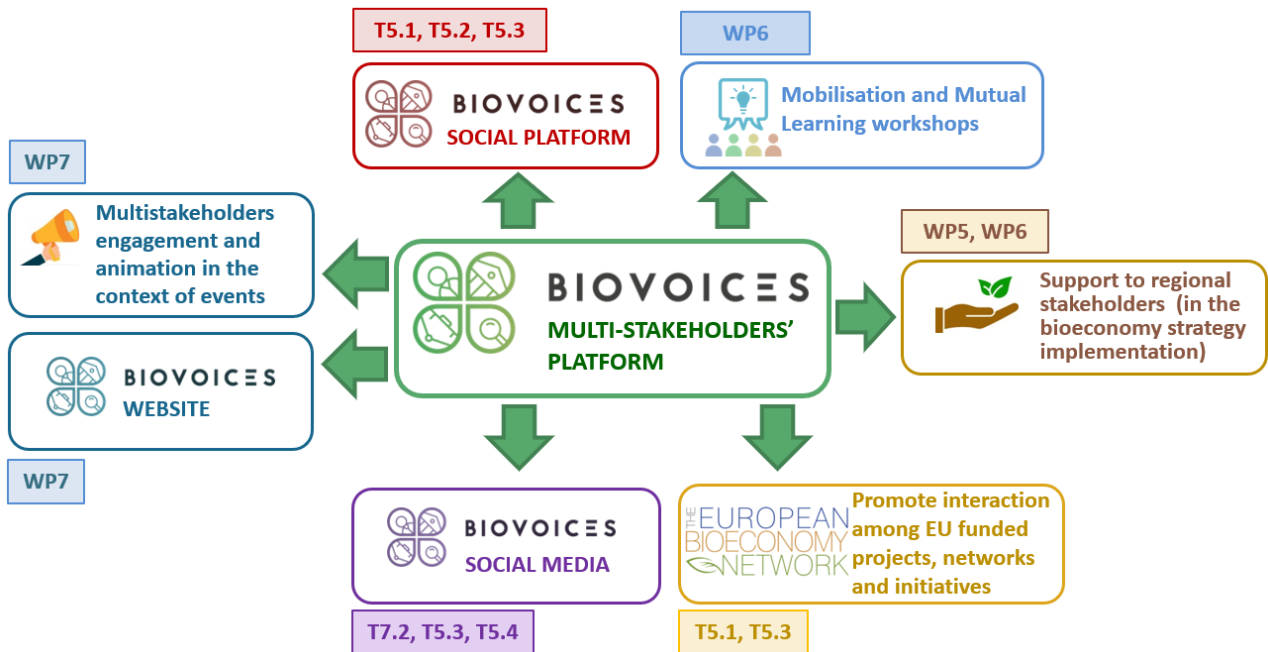


Figure 1 The BIOVOICES Multistakeholders' platform structure

The BIOVOICES *platform* shouldn't be considered as an ICT platform, but rather an integrated suite of different pathways to reach and engage the Quadruple Helix stakeholders, to generate meaningful and actionable knowledge for them, contributing to the creation of an innovation ecosystem for the bioeconomy and the Bio-based products market uptake.

The following table explains the **BIOVOICES Strategy** for Multistakeholders Engagement: for each pathway (What) the table describes the purpose (What for), the target stakeholders and strategy adopted by BIOVOICES (How).

What (BIOVOICES pathway)	What for	Target stakeholders	How
<p>The BIOVOICES social platform  <a href="https://www.biovoices-platform.eu">https://www.biovoices-platform.eu</a></p> <p><i>This activity is described in Chapter 2</i></p>	<ul style="list-style-type: none"> <li>Promote active engagement, open dialogue, interaction and collaboration</li> <li>Facilitate the co-creation of actionable knowledge for the different stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Quadruple Helix Stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Support and promote the live Mobilisation and Mutual Learning workshops, providing online dedicated spaces to each MML</li> <li>Stimulate the debate by providing thematic discussion spaces around the 12 Bioeconomy Challenges</li> </ul>
<p>Mobilisation and Mutual Learning (MML) workshops</p> <p><i>This activity is described in Chapter 3</i></p>	<ul style="list-style-type: none"> <li>Promote active engagement, open dialogue, interaction and collaboration</li> <li>Facilitate the co-creation of actionable knowledge for the different stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Quadruple Helix Stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Organizing 70 MMLs to address the challenges for bioeconomy at local/regional, national and International level</li> <li>Facilitate the interaction with the MMLs participants using ICT tools</li> <li>Organizing Hackathons for the design of bio-based products better responding to consumers' needs</li> </ul>
<p>Support the National, Regional and Local stakeholders</p> <p><i>This activity is described in Chapter 4</i></p>	<ul style="list-style-type: none"> <li>Promote Local/Regional active engagement, open dialogue, interaction and collaboration</li> <li>Facilitate the co-creation of actionable knowledge for the different stakeholders at Local/Regional level</li> </ul>	<ul style="list-style-type: none"> <li>National, regional and local stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Support the National, Regional and Local stakeholders in the deployment of the bioeconomy strategy (as stated in the European Bioeconomy Strategy).</li> <li>Organisation of Regional events "Bioeconomy as opportunity for regional development valorising local resources"</li> <li>Supporting less mature countries in the development of their Bioeconomy Strategy</li> </ul>



			<ul style="list-style-type: none"> <li>• Supporting Regions in the design of innovative bioeconomy educational paths</li> <li>• Facilitating the National, Regional and Local stakeholders in the creation of an innovation ecosystem for the bioeconomy, rooted locally</li> </ul>
<p>Promote interaction among EU funded projects, networks and initiatives</p> <p><i>This activity is described in Chapter 5</i></p>	<ul style="list-style-type: none"> <li>• Promote active engagement, open dialogue, interaction and collaboration</li> <li>• Facilitate the co-creation of actionable knowledge for the different stakeholders</li> <li>• Maximize impact of EC funded projects</li> <li>• Respond to the actions stated in the European Bioeconomy Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• CSAs projects</li> <li>• Projects, networks and initiatives promoting bioeconomy</li> </ul>	<ul style="list-style-type: none"> <li>• Organisation of the first Mobilisation and Mutual Learning workshop among CSAs (2018)</li> <li>• Creation of the European Bioeconomy Network (EuBioNet – www.eubionet.eu)</li> <li>• Support to the organization of the second Mobilisation and Mutual Learning Workshop among CSAs (2019)</li> </ul>
<p>The BIOVOICES social media</p> <p><i>This activity is described in Chapter 6</i></p>	<ul style="list-style-type: none"> <li>• Inform, raise awareness and educate</li> <li>• Promote active engagement, open dialogue, interaction and collaboration</li> </ul>	<ul style="list-style-type: none"> <li>• Large public</li> <li>• Quadruple Helix Stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Raise awareness, inform and promote open dialogue and active engagement through the Bio-products WALLS (Facebook, Instagram)</li> <li>• Stimulate the debate on Bio-based products in the Social Media (Twitter, LinkedIn)</li> </ul>
<p>The BIOVOICES website <a href="https://www.biovoices.eu/">https://www.biovoices.eu/</a></p> <p><i>The website is described in D7.2</i></p>	<ul style="list-style-type: none"> <li>• Inform, raise awareness and educate the stakeholders</li> <li>• redirect to the platform's activities</li> </ul>	<ul style="list-style-type: none"> <li>• Large public</li> <li>• Quadruple Helix Stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Website providing a single entry point to the project's activities <a href="https://www.biovoices.eu/">https://www.biovoices.eu/</a></li> </ul>
<p>Multistakeholders engagement and animation in the context of events</p> <p><i>This activity is described in</i></p>	<ul style="list-style-type: none"> <li>• Inform, raise awareness and educate</li> <li>• Promote active engagement, open dialogue, interaction and collaboration</li> </ul>	<ul style="list-style-type: none"> <li>• Large public</li> <li>• Quadruple Helix Stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Attract interest, raise awareness, inspire and stimulate the curiosity and discussion through: <ul style="list-style-type: none"> <li>• The Bio-ART gallery</li> <li>• Touch &amp; Feel the Bio-based economy</li> </ul> </li> </ul>





<i>Chapter 7</i>			<p>at the Bioeconomy Village: Exhibition of bio-based products</p> <ul style="list-style-type: none"> <li>• Games and ICT tools to raise awareness and stimulate discussion</li> <li>• Talk-Showcase of Bio-based products</li> <li>• Participation to Conferences and Workshops</li> </ul>
------------------	--	--	---

The multistakeholders platform pathways are described in more detail in the following chapters.

## 2 BIOVOICES Social Platform

The BIOVOICES social platform acts as catalyser to attract bio-based communities and actors, enlarging the stakeholder’s community involved in the WP3, WP4, WP6 and WP7. The social platform stimulates and facilitates the multistakeholders discussion around the 12 challenges identified in WP3.

*NOTE: This section describes very briefly only the social platforms tools used to stimulate and facilitate the discussion among stakeholders. All the details about the BIOVOICES social Platform are available in D5.1, D5.2, D5.3. D5.4 and will report the final structure of the social media platform.*

<https://www.biovoices-platform.eu>

### 2.1 The BIOVOICES challenges

In WP3, the BIOVOICES partners developed and validated with the experts, the 12 challenges used by the projects as reference for the pressing questions to be addressed during the project’s activities.

These 12 challenges are also used as navigation logic for the BIOVOICES social platform.

	BUSINESS CASE	GO TO MARKET	ACCELERATION
Market development	FIND FIRST CUSTOMERS	UNIQUE SELLING POINTS	UP-SCALING
Awareness and trust building		PROMOTE CHANGES IN PURCHASE HABITS	INCREASE THE ADOPTION
Supporting policies and standards		INTRODUCING EU & NATIONAL INCENTIVES	REALISE STANDARDIZATION
Supporting environment	IMPROVE RESOURCES	B2B USERS AS FRONTRUNNERS	INCREASE SUSTAINABLE FEEDSTOCK
Regional/Local development	ENHANCE LOCAL ACTION PLANS	BOOST LOCAL DEPLOYMENT	

Figure 2 The BIOVOICES 12 Challenges

### 2.2 Mobilisation and Mutual Learning Workshops dedicated spaces

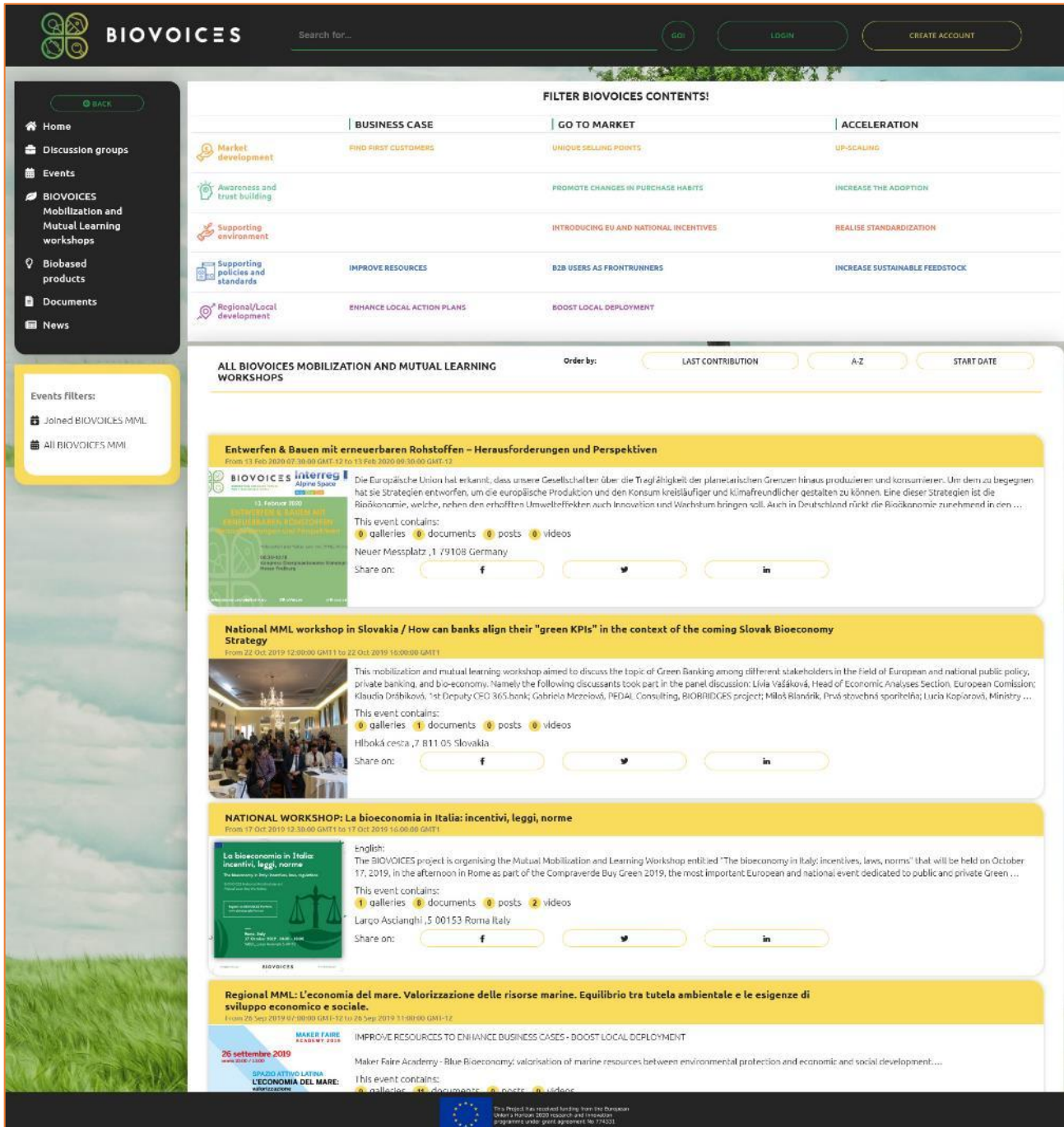
This area allows the users to access all the information about the MMLs organized by BIOVOICES, navigating by challenges.

Each MML has a dedicated space, where the interested stakeholders can access:

- BEFORE THE MML: the concept, the agenda, the additional material, the registration form.

- AFTER THE EVENT: The key outcomes, the report, the pictures and the presentations.

In addition, to trigger the stakeholders interest to express their opinion and discuss with other stakeholders, a social facility, structured as a forum, is available in each MML page.



The screenshot displays the BIOVOICES web interface. On the left is a navigation menu with options like Home, Discussion groups, Events, and BIOVOICES Mobilization and Mutual Learning workshops. The main content area is titled 'FILTER BIOVOICES CONTENTS!' and features a grid of categories such as 'Market development', 'Awareness and trust building', and 'Supporting environment'. Below this is a section for 'ALL BIOVOICES MOBILIZATION AND MUTUAL LEARNING WORKSHOPS' with filters for 'Order by' (Last Contribution, A-Z, Start Date). The workshop list includes:

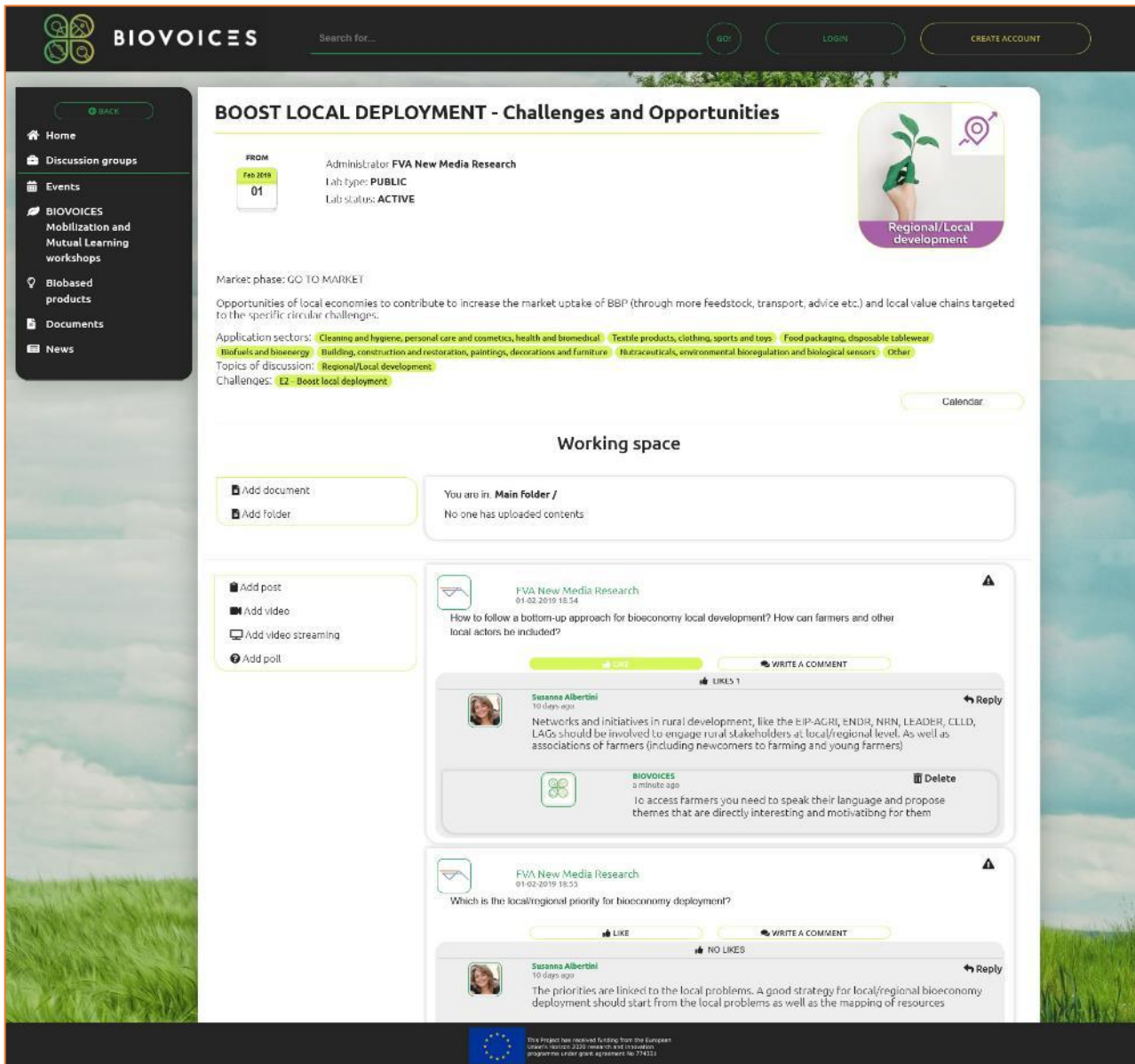
- Entwerfen & Bauen mit erneuerbaren Rohstoffen – Herausforderungen und Perspektiven** (Feb 2020): Focuses on circular economy and climate-friendly production.
- National MML workshop in Slovakia / How can banks align their "green KPIs" in the context of the coming Slovak Bioeconomy Strategy** (Oct 2019): Discusses green banking and public policy.
- NATIONAL WORKSHOP: La bioeconomia in Italia: incentivi, leggi, norme** (Oct 2019): Organized by the BIOVOICES project, focusing on incentives, laws, and norms in Italy.
- Regional MML: L'economia del mare. Valorizzazione delle risorse marine. Equilibrio tra tutela ambientale e le esigenze di sviluppo economico e sociale.** (Sep 2019): Focuses on marine resource valorization and environmental protection.

Figure 3 The BIOVOICES Mobilisation and Mutual Learning workshops dedicated spaces in the social platform

## 2.3 Thematic Discussion Groups

This section promotes the discussion and debate around the 12 BIOVOICES Challenges, by providing discussion spaces, structured as a forum. The partners are continuously adding questions to trigger the participation and interest.

*NOTE: Although in the DOA this feature is called “lab”, the consortium decided to call them “Discussion Groups”, to facilitate the understanding and enhance the sense of belonging.*



The screenshot displays the BIOVOICES social platform interface. At the top, there is a navigation bar with the BIOVOICES logo, a search bar, and buttons for 'GO', 'LOGIN', and 'CREATE ACCOUNT'. A left sidebar contains a menu with options: Home, Discussion groups, Events, BIOVOICES, Mobilization and Mutual Learning workshops, Biobased products, Documents, and News. The main content area is titled 'BOOST LOCAL DEPLOYMENT - Challenges and Opportunities'. It shows the group administrator as 'FVA New Media Research', with a 'PUBLIC' lab type and 'ACTIVE' status. A 'Regional/Local development' tag is visible. The market phase is 'GO TO MARKET'. The text describes opportunities for local economies to increase market uptake of BBP. Application sectors include cleaning and hygiene, personal care, health, and biomedical; textile products; food packaging; biofuels and bioenergy; building, construction, and restoration; and pharmaceuticals. Topics of discussion are 'Regional/Local development'. Challenges include 'Boost local deployment'. Below this is a 'Working space' section with options to add documents, folders, posts, videos, video streaming, and polls. Two discussion posts are shown: one asking about a bottom-up approach for bioeconomy local development, and another asking about local/regional priorities for bioeconomy deployment. Each post includes a user profile, the question, and a 'Reply' button. The bottom of the page features a European Union logo and text indicating funding from the Horizon 2020 research and innovation programme.

Figure 4 The BIOVOICES Discussion groups dedicated spaces in the social platform

## 3 Promotion of multistakeholders engagement through Mobilisation and Mutual Learning (MML) workshops

### 3.1 Biovoices MMLs to address the challenges for bioeconomy

Forty-two MML events were organized between January 2018 and November 2019 by the BIOVOICES project. The table below provides a quantitative overview of these events.

*NOTE: This section describes very briefly the Mobilisation and Mutual Learning activities. Detailed information is available in the Deliverable D6.1 Preliminary Report on European, National and Regional MML events*

Scale/country	Organizing partner	Total
<b>Regional (Local)</b>		<b>25</b>
Spain	ASEBIO	3
Romania	FRONTIER	2
Italy	FVA	3
Italy	APRE	1
Germany	ICLEI	1
United Kingdom	Minerva	5
Slovakia	Pedal	3
Greece	Q-Plan	1
Netherlands	WR	2
Belgium	WR	2
Estonia	Civitta	2
<b>National</b>		<b>17</b>
Romania	FRONTIER	1
Italy	FVA	2
Italy	APRE	2
Germany	ICLEI	1
Portugal	LOBA	3
Slovakia	Pedal	2
Greece	Q-Plan	1
Netherlands	WR	3
Estonia	Civitta	1
Italy	CNR	1
<b>European</b>		<b>3</b>
Belgium	ICLEI, APRE, FVA, Q-PLAN, PEDAL, LOBA	2
France	Pedal, APRE, Q-PLAN, FVA, CE, LOBA	1
<b>Grand total</b>		<b>5</b>



In order to reach the specific objectives, BIOVOICES is based on the following existing approaches that has been merged and taken into account in all the activities in order to work through an innovative methodology.

- **Quadruple Helix Model:** Where policy makers, business, research and civil society work together to co-create the future and drive structural changes far beyond the scope of what any organisation or person could do alone. This model encompasses also user-oriented innovation models to take full advantage of ideas' cross-fertilisation leading to experimentation and prototyping in real world setting. This model is based on the principles of integrated collaboration, co-created shared value, cultivated innovation ecosystems, unleashed exponential technologies, and extraordinarily rapid adoption.
- **Mobilisation and Mutual Learning Approach:** It ensures the engagement of all relevant actors and aims to tackle research and innovation related challenges by creating partnerships with a variety of perspectives, knowledge and experience. These activities aim to promote the mobilization and collaboration among stakeholders representing different interests. The activities are not organised as a top-down process but require a mutual commitment from all those involved in them. The MML therefore develops forms of dialogue and cooperation between several actors at different stages of the bio-based products value chain.
- **Participatory Design:** Participatory design is an approach where all stakeholders are involved in the design process. Traditional design projects typically include the paying client and professionals within similar and related industries; in participatory design, members of the wider community — from the users who are directly affected by the design, to the local business owners who may be peripheral to it — are also recognised as legitimate stakeholders with the ability to impact the project.
- **Multi-actor Approach:** The multi-actor approach aims at more demand-driven innovation through the genuine and sufficient involvement of various actors (end-users, associations, enterprises, etc.) all along the project: from the participation in the planning of work, their execution up until the dissemination of results. This should generate innovative solutions that are more likely to be applied thanks to cross-fertilisation of ideas between actors, co-creation and generation of co-ownership for eventual results. A multi-actor project proposal needs to demonstrate how the project proposal's objectives and planning are targeted to needs / problems and opportunities of end-users, and its complementarily with existing research and best practices.

### 3.1.1 Interaction with the MMLs participants

To stimulate the multi stakeholder proactive interactions during MML events, in the majority of MMLs, dedicated interactive sessions, using an online software called Mentimeter, has been setup and used by the partners.

This tool has proven itself as a powerful solution to engage in the discussion all the participants, including the ones typically shy or less active. The facilitators can also re-inject in the discussion the most interesting topics emerging from the ICT tool to stimulate the debate.

It can be easily adapted to the local context and specific challenge addressed in the MML sessions, by displaying questions to trigger the discussion, in the local language.



Figure 5 Example of real-time interaction with 150 participants using Mentimeter in Italian



Figure 6 Example of real-time interaction with using Mentimeter in Romanian

## 3.2 Hackathons for the design of bio-based products better responding to consumers' needs

The concept of biohackathons carry the purpose to empower the efforts of researchers, entrepreneurs, feedstock providers and investors for innovation in biobased product design and market uptake.

### Methodology

In the frame of biohackathon, the teams (4-6 persons) who consolidate all needed competences for biobased product idea conceptualization and development work with their innovative ideas in multidisciplinary environment. Teams are working full day in close interaction with the industrial as well as business mentors with the aim to reach innovative marketable solution (product or service) addressing customers' needs and concerns.

### Engaging investors

After idea conceptualization, teams are pitching their product ideas and concepts together with their initial business plan to the panel of potential investors and supporters. Investors evaluate the attractiveness but also the feasibility of the idea and usually sort out the ideas with the certain potential. Best ideas are rewarded by sponsors and sometimes guided to the next step in realization or towards financing.

### Inclusion of citizens

The methodology used in biohackathons bases on design thinking: the citizens as beneficiaries are engaged through the first testing of product concept and placed on the center of the product design. The validation of product concepts and features involving the citizens is part of the product idea development process.

### Educational value

In design thinking and idea development the teams are developing the skills needed to enter into the business:

- how to collect the information about the sector and its opportunities,
- how to define the problem to be solved,



- how to communicate the value offer to the customers,
- how to include stakeholders,
- how to adapt the product concept to the citizen expectation.

This methodology has been implemented in an MML during Bioinnovation Days in Tartu, Estonia

<b>Case Study</b>	Biohackathon during Bioinnovation Days in Tartu, Estonia
<b>Context</b>	International teams participated in Biohackathon to force the ideas using design thinking as method for citizen involvement.
<b>BIOVOICES activity</b>	Organisation of Mobilisation and Mutual learning events involving regional quadruple helix stakeholders
<b>Projects involved</b>	
<b>Companies involved</b>	<p>Tartu Biotechnology Park, Civitta Estonia SA, University of Tartu, Startup Lab</p> 
<b>Impact</b>	<p>The framework given and followed by the teams included aspects of valuing the local feedstock, measuring the environmental impact, think about the full product value chain and its components in relation to resources and its efficiency.</p> <p>The growth of knowledge in biobased economy, innovations in the sector and the impact of their own business idea to the bioeconomy and environment reached 70+ participants to the hackathon.</p> <p>Event website: <a href="https://bid.voog.com/en">https://bid.voog.com/en</a></p>




## 4 Supporting National, Regional and Local authorities and stakeholders in the deployment of the bioeconomy strategy

BIOVOICES (and the European Bioeconomy Network) are supporting the National, Regional and Local authorities and stakeholders in the deployment of the bioeconomy strategy, by several activities aiming at facilitate the Mobilisation and Mutual learning among local stakeholders.

### 4.1 Organisation of Regional events “Bioeconomy as opportunity for regional development valorising local resources”

The 2018 update of the European Bioeconomy Strategy calls for “activities promoting the development of local bioeconomies valuing local resources and adapted to local needs”. In this context, BIOVOICES is supporting Regional and Local authorities, through the organisation of a series of MMLs rooted in the local conditions and resources.

<b>Organisation of Mobilisation and Mutual learning events involving regional quadruple helix stakeholders to support the regional stakeholders in the implementation of the regional Bioeconomy Strategies and action plans.</b>	
<b>Context</b>	Lazio Region, Piedmont region, Apulia Region, Friuli Venezia Giulia Region – Italy, Andalusia, Spain
<b>Projects involved</b>	BIOVOICES, Biobridges, Power4Bio, BLOOM
<b>Stakeholders involved</b>	Regional authorities, ARGECO; Bioenergy; Università degli Studi di Bari Aldo Moro; FVA New Media Research; Regione Puglia; Università di Foggia; MS5; Cluster SPRING; CNR; South Hemp Tecno; Agrindustria; Gal montagne biellesi; Fulgar; Blumine Srl; Marevivo Onlus; Tecnotex; Università di Torino; 2i3T_University of Turin Business Incubator; Pointex; CiaoTech; Finpiemonte; CentroCOT; Intesa San Paolo; RiceHouse; Regione Lazio; Lazio Innova; Legambiente Terracina; Federpesca; Mermazing; ENEA; SEADS, Sea Defence Solutions; Decomar, Expoliva

<b>Impact</b>	Awareness raising, stakeholders' engagement, new collaborations, memorandum of understanding signed (between University-region-Industry in Apulia)
	
	
	


## 4.2 Supporting less mature countries in the development of their Bioeconomy Strategy

Most EU-15 Member States have developed or are developing dedicated national bioeconomy strategies, while the new Member States lag behind, despite their huge



biomass potential<sup>1</sup>. The European Bioeconomy Strategy calls for actions supporting the new Member States, in particular the Eastern countries in the development of their Bioeconomy Strategies.

BIOVOICES is contributing to this action by organizing local MMLs:

<b>Provide access to the relevant actionable knowledge (lessons learnt, challenges, serious games, educational videos, reports and factsheets) to local stakeholders</b>	
<b>Context</b>	Slovak Ministry of Agriculture and Rural Development entrusted Slovak Bioeconomy Cluster with drafting the National Bioeconomy Strategy
<b>Projects involved</b>	BIOVOICES, European Bioeconomy Network, Biobridges
<b>Companies involved</b>	PEDAL Consulting
<b>Impact</b>	It is expected that Slovak government will adopt the National Bioeconomy Strategy before February 2020
	

### 4.3 Facilitating the National, Regional and Local stakeholders in the creation of an innovation ecosystem for the bioeconomy, rooted locally

**Connecting the “Green banking” dialogue with the concept of bioeconomy in Eastern Countries**

<sup>1</sup> Salamon, P., Joint Research Centre Technical Report, (2017), doi: 10.2760/363389; <https://biconsortium.eu/sites/biconsortium.eu/files/downloads/Country-Report-Poland.pdf>

<p><b>Context</b></p>	<p>Taking into consideration the reviewers recommendations, about involving Finance as additional stakeholder, BIOVOICES partner PEDAL organized mobilization and mutual learning workshop aimed to discuss the topic of Green Banking among different Eastern Countries stakeholders in the field of European and national public policy, private banking, and bio-economy. The third annual fin.techsummit created an opportunity for open discussions about the future of financial services that are heavily impacted by new technologies and digitalization. In scope of the Summit, the Side event on Green banking, looking for answers, among others to the following question: <b>"How can green banking support the implementation of the upcoming Slovak Bioeconomy Strategy?"</b>, nicely fit into the "C2 challenge" identified in the BIOVOICES project.</p> <p>Namely the following discussants took part in the panel discussion: Lívia Vašáková, Head of Economic Analyses Section, European Commission; Klaudia Drábiková, 1<sup>st</sup> Deputy CEO 365.bank; Gabriela Mezeiová, PEDAL Consulting, BIOBRIDGES project; Miloš Blanárik, Prvá stavebná sporiteľňa; Lucia Kopiarová, Ministry of Finance of the Slovak Republic, Expert on Sustainable finance; Daniel Ács, Internationalisation Responsible, Slovak Bioeconomy Cluster.</p>
<p><b>Projects involved</b></p>	<p>BIOVOICES, European Bioeconomy Network, and BIOBRIDGES</p>
<p><b>Companies involved</b></p>	<p>Among over 50 participants, there were dozens of potential investors as well as representatives from the National Bank of Slovakia as well as the Ministry of Finance of Slovakia.</p>
<p><b>Impact</b></p>	<p>The main impact consists in the fact that the subject of "Green banking" was tackled also through the perspective of bioeconomy which may in the medium-to-long term bring new investments into the bio-based sector.</p>



## 4.4 Supporting Regions in the design of innovative bioeconomy educational paths

The European Bioeconomy Strategy promotes the design and deployment of new education paths: “The systemic and cross-cutting nature of new and emerging bioeconomy approaches and new value chains will need new education and skills. These must be adapted to different needs across bioeconomy sectors (e.g. at the interface of agrology, biorefining, ecology and other disciplines), to be capable of responding quickly and flexibly to the emerging and ever-growing needs of the bioeconomy.”

BIOVOICES contributes to this action by supporting the Regions in identifying the regional educational needs and deploy regional educational Hubs:

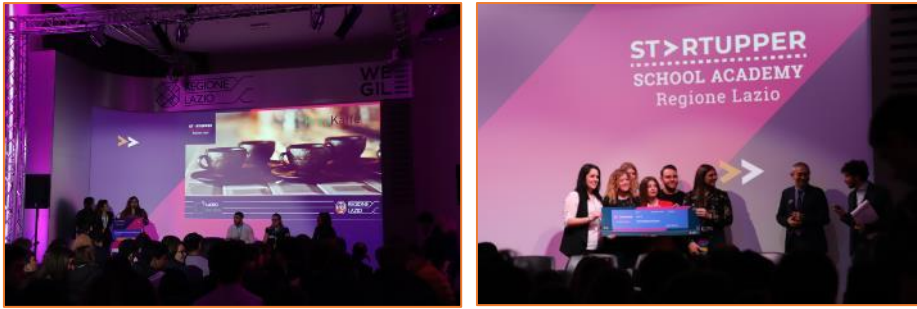
**Supporting the region in the creation of the regional HUB for Bioeconomy Education. Co-organisation of a Mobilisation and Mutual Learning workshop with Quadruple Helix Stakeholders to identify educational needs (formal education, value chain actors education, other actors capacity building on bioeconomy).**

<b>Context</b>	Friuli Venezia Giulia Region (Italy)
<b>Projects involved</b>	BIOVOICES, European Bioeconomy Network, STAR-ProBio, URBioFuture, Celebio, European Bioeconomy University
<b>Impact</b>	The event will take place in Udine, IT, 24 January 2020 and will involve all the regional stakeholders and will be the first stepping stone for the creation of the regional Hub for bioeconomy education.

**Creation of the “Bioeconomy Prize” dedicated to ideas and projects dealing with bioeconomy. Delivery of dedicated training to teachers and students about bioeconomy and bio-based products.**

<b>Context</b>	Lazio Region (IT) Startupper School Academy (developing entrepreneur skills for professional high school students)
<b>Additional activities</b>	Host of the winners in some of the most relevant events to showcase their ideas [Researcher’s Night (Roma), Maker Faire (Roma), Science is Wonderful (Brussels). Demo Kits and 1500 Eur to the winning school (Novamont)].
<b>Projects involved</b>	BIOVOICES, European Bioeconomy Network, Biobridges, LIFT



<b>Companies involved</b>	Novamont
<b>Impact</b>	500 Schools, 20.000 students, 10 fab labs The initiative will be replicated in 2020.
	





## 5 Promote interaction among EU funded projects, networks and initiatives

### 5.1 Organisation of the first Mobilisation and Mutual Learning workshop among Bioeconomy related CSAs

In the first months of BIOVOICES project, the collaboration with other projects was promoted, to increase the quality of outcomes and maximise the impact in bioeconomy and adoption of project's outputs by the stakeholders.

This approach was fully supported by the European Commission (RTD-Dir F, Bioeconomy), that hosted the Mobilisation and Mutual Learning Workshop, organised by BIOVOICES project on the **28 of March 2018**. The 27 participating projects<sup>2</sup>, mainly Coordination and Support Actions (CSAs), presented, shared and discussed the lessons learnt from their projects, identifying best and worst practices and expressed the willing to define a common action plan to align projects' activities. (The workshop outputs are available on the EuBioNet website<sup>3</sup>).

This workshop highlighted the need to have a structured entity facilitating the collaboration among projects (but also networks and initiatives supporting bioeconomy).

<sup>2</sup> BioLinX, ISAAC, BIOPOLIS, BIOWAYS, SuperBIO, ISABEL, BioHorizon, RoadToBio, DEMETER, BIOrescue, STAR4BBI, BioCannDo, BIOPEN, STAR-ProBio, SIM4NEXUS, BLOOM, BIOVoices, BIOSMART, BIOBRIDGES, T2gE - Transition to Green Economy, BioSTEP, CommBeBiz, EMBRACED, PLATFORM, OPEN-BIO, InnProBio, KBBPPS  
<sup>3</sup> <http://eubionet.eu/wp-content/uploads/2018/08/Outcomes-28.03.18-Mutual-learning-workshop.pdf>



*Figure 7 The First MML among EU-funded CSAs in Bioeconomy*

## 5.2 Creation of the European Bioeconomy Network

The European Bioeconomy Network (EuBioNet), was promoted by the BIOVOICES project to answer to the needs expressed by the projects during the first MML among them (see paragraph 5.1).

The EuBioNet is a proactive alliance of EU funded projects dealing with Bioeconomy promotion, communication and support. The main goal is to maximise the efforts, increasing the knowledge sharing, networking, mutual learning, coordination of joint activities and events.

The European Bioeconomy Network works in close collaboration with the European Commission and BBI JU, to ensure that the objectives identified by the Bioeconomy Strategy update will be properly communicated, addressed and implemented.

The European Bioeconomy Network projects benefit from the mutual promotion of outcomes, new partnerships, joint event planning and knowledge sharing.

Actually the European Bioeconomy Network activities are managed by partners APRE and FVA, as part of BIOVOICES activities. FVA is the main contact point.

### 5.2.1 The EuBioNet Mission

The mission of the European Bioeconomy Network is to:

- increase the awareness of sustainable circular bioeconomy in Europe
- stimulate the debate, knowledge sharing and mutual learning to address bioeconomy related challenges and opportunity
- identify impact-oriented strategies to boost the sustainable circular bioeconomy in Europe
- facilitate networking among stakeholders
- strength the role of the European Commission in supporting the sustainable circular bioeconomy uptake
- maximise the impact of the EC funded projects, promoting joint initiatives

### 5.2.2 The EuBioNet partners

the European Bioeconomy Network counts now 50 projects (+ 5 initiatives) formal partners.



Figure 8 The EuBioNet partners

The [www.eubionet.eu](http://www.eubionet.eu) website aggregates the knowledge generated during the projects and facilitates the design and implementation of common activities. There is a private area for the members to discuss ideas, upload events and contact the other partners.

### 5.2.3 The EuBioNet Outcomes

Thanks to the EuBioNet facilitation, a number of joint activities and events took place and are planned for the next months:

- Increased awareness of other project's focus and results
- Networking among partners (including participation to new calls together)
- Co-organisation of events (conferences, workshops, exhibitions, etc...)
- Involvement of other members as experts/speakers (Workshops, Advisory boards, conferences, webinars)
- Host exhibitors in events (Maker Faire, Researchers' Night, Bioeconomy Village, Bioeconomy corner at the Sustainable and circular Bioeconomy, the European way)
- Promotion of events and activities organised by other members
- Dissemination of other members' project's results

## 5.2.4 Acknowledgments

The European Commission recognized the importance of the European Bioeconomy Network, mentioning the network on page 84, 85 and 86 within the update of the Bioeconomy Strategy<sup>4</sup> as a key player for promoting and communicating bioeconomy.

As stated in the strategy:

*Action 2.3 “... will facilitate bioeconomy communication initiatives, such as awareness raising campaigns and debates, also at regional level in the context of its cohesion policy, by for example using the smart specialisation platform. This includes the deployment of a European Bioeconomy Network (Horizon 2020). Member States, regions and stakeholders are called on to support similar bioeconomy communication activities at national, regional and local level.”*

*“the projects belonging to the European Bioeconomy Network will define a joint consolidated action plan of communication activities to initiate or reinforce the existing synergies, and maximise the opportunities to, and the impact of, promoting the bioeconomy. The objective of this action is not only to share information and best practices but to engage all actors to promote all bioeconomy sectors and bio-based products through communication and engagement activities (events and tailored campaigns) at the national, regional and community level. It will build upon sectoral communication activities and will also involve engaging citizens through awareness-raising and education on sustainable production, consumption and lifestyles”.*

In the last two years, BIOVOICES and EuBioNet representatives have been invited in some of the most relevant conferences and workshops to present the European Bioeconomy Network and his role in the deployment of the European Bioeconomy Strategy.

---

4

[https://ec.europa.eu/research/bioeconomy/pdf/ec\\_bioeconomy\\_strategy\\_2018.pdf#view=fit&page=mode=none](https://ec.europa.eu/research/bioeconomy/pdf/ec_bioeconomy_strategy_2018.pdf#view=fit&page=mode=none)

## 5.3 Support to the organization of the to the second Mobilisation and Mutual Learning Workshop among CSAs

In the context of the BBI JU Stakeholder Forum 2019, during the project's day (**3rd of December 2019**), BIOVOICES and The European Bioeconomy Network supported the LIFT project in the organisation of 11 parallel sessions, involving the most relevant CSAs projects in a discussion addressing the following points:

- Highlight the good practices of past and ongoing Coordination and Support Actions (CSA) (FP7, H2020, BBI JU, Erasmus+ and Interreg) , valorising the projects' outcomes
- Identify what are the existing gaps and challenges still to be addressed in the topical categories identified
- Provide actionable recommendations for promoting an innovation ecosystem for Bio-based economy
- Provide Suggestions for new topics to be addressed in Horizon Europe
- Facilitate the networking, knowledge sharing and collaboration between the projects addressing similar topics

The topics addressed in the 11 workshops are:

- Awareness raising
- Bioeconomy Education
- Stakeholders engagement and co-creation
- Standardisation, LCA, labeling and regulatory hurdles
- Regional potential, bioeconomy strategies and action plans
- Uptake of RTD results
- Foresight, market studies and market roadmaps
- Industrial roadmaps
- Biomass availability, quality, supply and sustainability
- New value chains and business models
- Open innovation platforms and facilities

The workshops have been organized in:



- One plenary session addressing Awareness raising and Bioeconomy Education. The participants were involved through Mentimeter, using their cell phones.
- 3 parallel sessions in:
  - Policy Framework (addressing: Stakeholders engagement and co-creation; Standardisation, LCA, labeling and regulatory hurdles; Regional potential, bioeconomy strategies and action plans)
  - From Research to Market (addressing Uptake of RTD results; Foresight, market studies and market roadmaps; Industrial roadmaps)
  - Value chains and innovation ecosystem (addressing Biomass availability, quality, supply and sustainability; New value chains and business models; Open innovation platforms and facilities)

In total nearly **300 participants and 38 projects** contributed to the discussion. The outcomes will provide actionable insights for the European Commission, BBI JU and the Bioeconomy Stakeholders. The consolidate report will be distributed and intensively promoted in January 2020.

Cluster	Topical category	Projects
Communication and education	Awareness raising	BIOWAYS
		BioCannDo
		BIOVOICES
		BioSTEP
	Bioeconomy Education	BIOWAYS
		BioCannDo
		BLOOM
		UrBioFuture
		InnProBio
		ABBEE
Policy framework	Standardisation, LCA, labelling and regulatory hurdles	InnProBio
		STAR4BBI
		STAR-ProBio
		RoadToBio
	Regional potential and bioeconomy strategies and action plans	BERST
		BioStep
		POWER4BIO
		BE-RURAL
		CELEBIO
	Stakeholders engagement and co-creation	BIOEASTsUP
		BioSTEP
		BLOOM
		BIOVOICES
		Biobridges

		POWER4BIO
		BE-RURAL
<b>From research to market</b>	Uptake of RTD results	ProBio
		CommBeBiz
	Foresight, market studies and market roadmaps	BIO-TIC
		BISO
		Biomonitor
	Industrial roadmaps	BIO-TIC
		RoadToBio
BiOPEN		
<b>Value chains and innovation ecosystem</b>	Biomass availability, quality, supply and sustainability	S2BIOM
		STAR-ProBio
		BioReg
		ICT-BIOCHAIN
		ENABLING
	New value chains and business models	BioReg
		ICT-BIOCHAIN
		BiOPEN
		POWER4BIO
		BE-RURAL
	Open innovation platforms and facilities	RUBIZMO
		BiOPEN
		Pilots4U
		ERIFORE
		SmartPilots
		SuperBio
		BioBase4SME

Figure 9 Overview of the workshops and the participating projects



## 6 BIOVOICES Social Media

Social media has become an important tool to reach a large public and to facilitate the dialogue and mobilisation among the different target audiences.

As sustainability issues are becoming more prevalent and frequently acknowledged, social media are playing an important role in sharing environmental problems and suitable solutions, to which bio-based products can contribute.

BIOVOICES social media activity seeks to engage more stakeholders and citizens in the bio-based economy by informing them, raising awareness and educating. Beyond this, BIOVOICES uses the social media to promote active engagement, open dialogue, knowledge-sharing and collaboration between stakeholders.

In particular, the use of BIOVOICES Social Media channels have two main objectives:

- OBJ1: Amplify the impact of BIOVOICES events on different social media
- OBJ2: Address the large public with specific communication activities to raise awareness and sensitize the consumers toward a more sustainable culture

To achieve these objectives, BIOVOICES adopts the following strategy:

OBJ1: Amplify the impact of BIOVOICES activities on different social media by:

- Bridge existing bio-based online communities and social network pages with the BIOVOICES project
- Attract users in the BIOVOICES platform
- Promote the results of the BIOVOICES MML workshops
- Publish information about ongoing activities and live events the project is organising

OBJ2: Address the large public with specific communication activities to raise awareness and sensitize the consumers toward a more sustainable culture:

- Publish information about bio-based products to promote a more sustainable daily choice by the consumers
- Promote events for citizens where they can learn and discover many BBPs
- Through the interaction and networking with brand owners and stakeholders, BIOVOICES, provides a database of products/services and their characteristics

- Use a gamified approach for contents delivery (i.e. a daily quiz asking, for instance to guess the impact of a BB-product compared to a traditional one).

*NOTE: This section describes very briefly the social media activities promoting stakeholder's engagement and debate. Detailed information and data on the work done by BIOVOICES on social media are available in the Deliverable 5.8 Social Media innovative engagement and animation Report: first version.*

## 6.1 Raise awareness, inform and promote open dialogue and active engagement through the Bio-products WALLS

BIOVOICES Instagram and Facebook channel are mainly used to raise awareness, inform and promote open dialogue and active engagement among the different stakeholders, particularly targeting Consumers, Brands and Industries, starting from examples of Bio-based products.

Below are some examples of posts. In the description, some key questions are added, to call for action the users, especially about perceptions, controversial topics, etc...

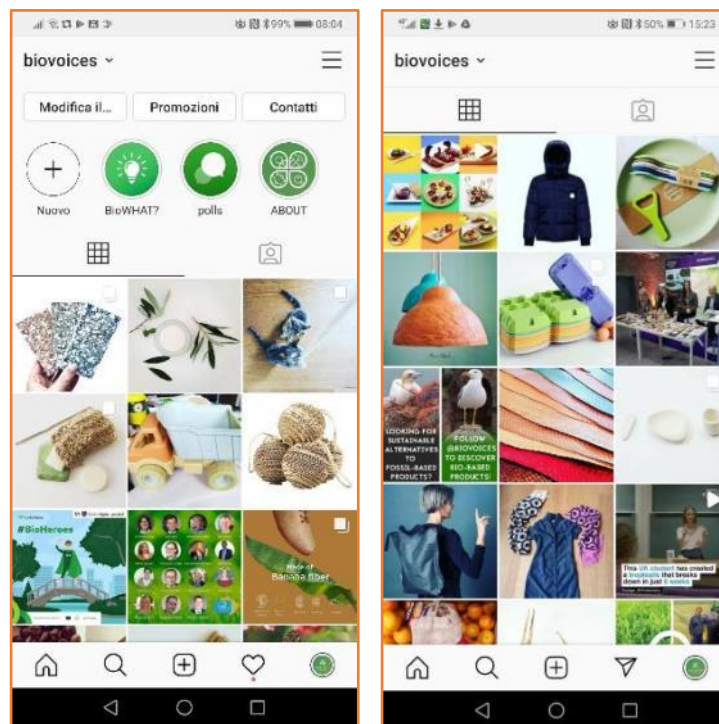


Figure 10 The Instagram BIOVOICES channel providing information about bio-based product, their sustainability and asking questions to the users.

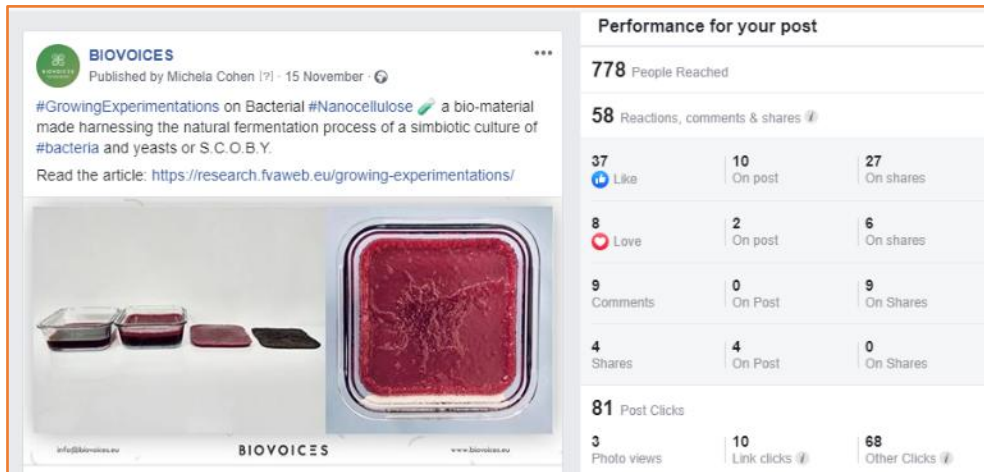


Figure 11 Post promoting research results

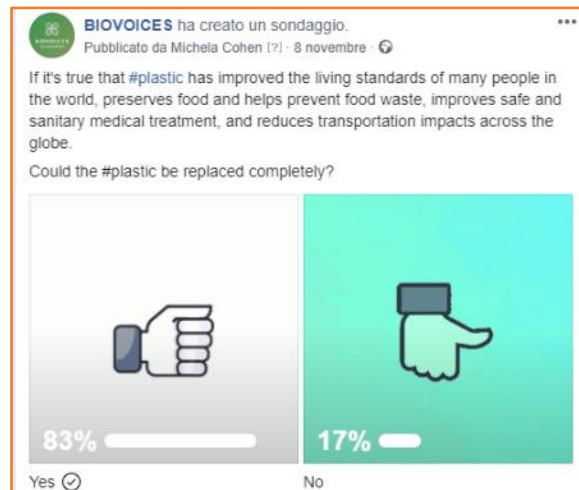


Figure 12 BIOVOICES Facebook survey to stimulate the discussion about plastic and bioplastic



Figure 13 Example of quiz to raise awareness, test the knowledge and inform

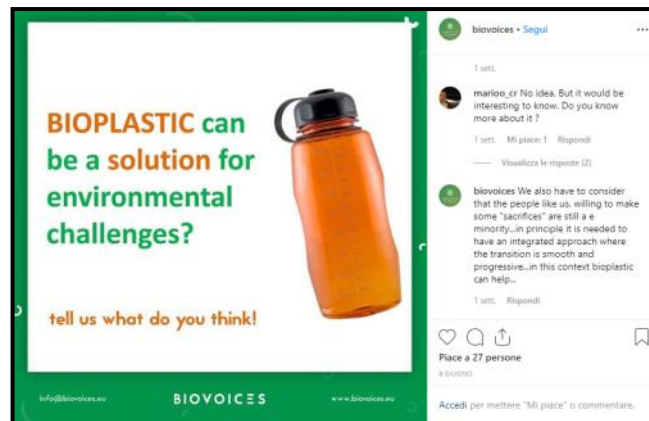


Figure 14 Example of animated question calling users to share what they think

## 6.2 Stimulate the debate on Bio-based products in the Social Media

BIOVOICES Twitter and LinkedIn channels, typically targeting a more professional public, are mainly used to stimulate the discussion about policies and social impacts, starting from posts dedicated to news, research results, outcomes of the MMLs, bio-products, topics of interest, etc...

In these social media channels, the outcomes of the BIOVOICES Mobilisation and Mutual learning workshops are transformed in highlights that are shared on the social media, with some key questions to further stimulate the debate.



Figure 15 Example of tweet triggering the discussion around topics addressed by the BIOVOICES activities



Figure 16 Example of tweet launching discussion around topics addressed by the BIOVOICES activities



## 7 Multistakeholders engagement and animation in the context of events

To stimulate multistakeholders engagement, BIOVOICES promoted a high number of activities, targeting mainly the large public, although the other stakeholders' categories has been reached as well.

To increase the impact of these activities, BIOVOICES collaborated with the organizers of events identified as relevant (e.g., European Researchers' Night, Maker Faire, etc.), as well as other projects, organizations and universities. The European Commission and BBI JU also requested the collaboration of BIOVOICES and the European Bioeconomy Network to organize side exhibitions of bio-based products in the context of the high level events in Bioeconomy (e.g. the event for the launch of the revised European Bioeconomy Strategy, the Bioeconomy Scene conference in Helsinki and the BBI JU Stakeholder Forum 2019)

*NOTE: The detailed description of these activities is included in D7.6 Second report on the dissemination and exploitation activities and results.*

### 7.1 Bio-ART gallery

The Bio-ART gallery demonstrated to be a powerful tool to attract interest, raise awareness, inspire and stimulate the curiosity and discussion.

The BioART gallery consists of 16 thematic compositions of maxi pictures with high visual impact that showcase and explain several sustainable circular bioeconomy application and products. Each thematic panel is composed by a central picture with the feedstock, surrounded by three related bio-based applications and an explanatory legend providing detailed information of the applications.



Figure 17 The Bio-ART gallery

The BioART gallery has been produced in several formats. The format and setup of the panels can be decided based on the space available in the exhibition venue.

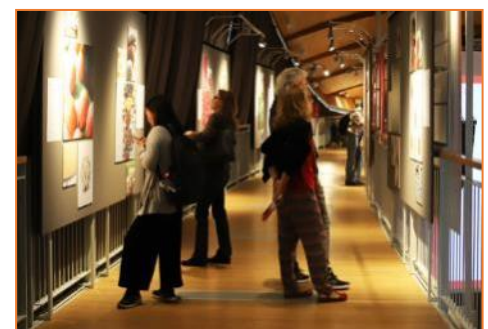
Typically, the Bio-ART gallery is complemented by an exposition of bio-based products (see next paragraph), to enable the visitors to touch & feel the products seen in the Bio-ART gallery. In these events some representatives of BIOVOICES provide explanation, trigger the discussion with questions and collect the participants' feedback, worries and ideas.

The BioART Gallery got large interest from the visitors in the context of the following events:

September 2018 and 2019: European Researchers' Night in Portugal and Italy



29-30 September 2018, Milano, Italy - Festival Futuro (organized by the most important consumer's association in Italy)





Maker Faire 2018 Rome, Italy – The biggest science and innovation Faire in Europe, attracting every year 130.000 participants



2019 (permanent exhibition) - Lipor in Portugal



24 May 2019, Rome, IT – Promotional event to the Italian Researchers' Night, organized by Giornalisti nell'erba



April 2019 - , Rome, IT - BBI JU Info day 2019, Rome, Italy







20 May 2019 - Startupper School academy awards



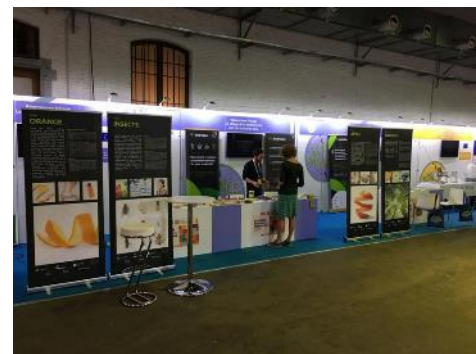
8-10 July 2019, Helsinki, Finland - High Level Conference European Bioeconomy Scene 2019



Portugal Insituto Politécnico de Viseu



25-26 September 2019 - Science is Wonderful, Brussels BE



1 – 2 October 2019 - Perth, Scotland - Scottish Resources/ Zero Waste Scotland conference (run by the Chartered Institute of Waste Management)



18-20 October 2019 – Maker Faire 2019 Rome, Italy – The biggest science and innovation Faire in Europe, attracting every year 130.000 participants



## 7.2 The Bioeconomy Village: Exhibition of bio-based products

The Bioeconomy Village concept was developed initially in the context of the BIOWAYS<sup>5</sup>, promoting the showcase of bio-based products in everyday's life applications, enabling the visitors to touch and feel the bioeconomy.

The exhibition is continuously enriched with new products and it is actually composed by nearly 250 different bio-based products. A smaller version (100 products) is also available and it is delivered to the partners that need it for an event.

The visitors are attracted and stimulated to express their opinions, concerns, preferences and suggestions.

<sup>5</sup> <http://www.bioways.eu/>



Figure 18 Showcase of Bio-based products in everyday's life applications (Bioeconomy Village)

The Bioeconomy Village promotes the collaboration with Brands, Bio-based industries and researchers, providing the samples and getting back the public feedback.

This exhibition received great interest from international events' organizers.

Following some examples of the Bioeconomy Village exhibition in different contexts:

Maker Faire 2018 Rome, Italy – The biggest science and innovation Faire in Europe, attracting every year 130.000 participants.

BIOVOICES involved more than 100 Industries, projects and Research centers to present their bio-based products and solutions at Maker Faire (2018 and 2019).





24 May 2018 – Rome - BIOECONOMY Village at Sapienza University in the context of the European Sustainable Development Week (ESDW)



22 October 2018 Brussels, Belgium - High Level Event “Sustainable & Circular Bioeconomy, The European Way



28-29 September 2018 – European Researchers’ Night Rome



24 May 2019, Rome, IT – Promotional event to the Italian Researchers’ Night, organized by Giornalisti nell’erba



19-22 Sep 2019 - Balcan Clean Energy Transition BCET 2019 International Conference and Fair”



25-26 September 2019 - Science is Wonderful, Brussels  
BE



27-28 September 2019 – European Researchers’ Night  
Rome



6th of December 2019 – Madrid, SP - COP25: IFEMA  
(Madrid Fair) where there were the principal  
conferences and the stands of Climate Change  
Conference



1-2 October 2019 - Tartu, Estonia Bioinnovation Days

4 December 2019 BBI JU Stakeholder Forum



## 7.3 Games and ICT tools to raise awareness and stimulate discussion

In the context of the BIOVOICES activities, different type of simulation and interactive games have been used to engage participants to raise awareness and stimulate discussions with the audiences during workshops and events.

The standalone games are mainly used to raise awareness on bioeconomy, while the interactive games (Mentimeter on-line application) are used for the interaction with the audiences mainly during the MML workshops or as a competition game during large events.

Following is a list of the games used within BIOVOICES activities:

Bio...What? and BioChallenge serious games to raise awareness on bioeconomy and the bio-based products on the large public.

The first targets children and teenagers while the second teenagers and adults. The games have been developed in collaboration with the EU funded projects BioSTEP and STAR-ProBio.

Bio Economy Strategy (BES) game is a game for bioeconomy experts to test the knowledge about the European Commission update of the bioeconomy strategy. The game has been developed in collaboration with the European Commission.

*Bio...What:* <http://www.fvaweb.eu/biowhat>

*Bio Challenge:* <http://www.fvaweb.eu/biochallenge>

*BES:* <https://www.fvaweb.eu/bes>





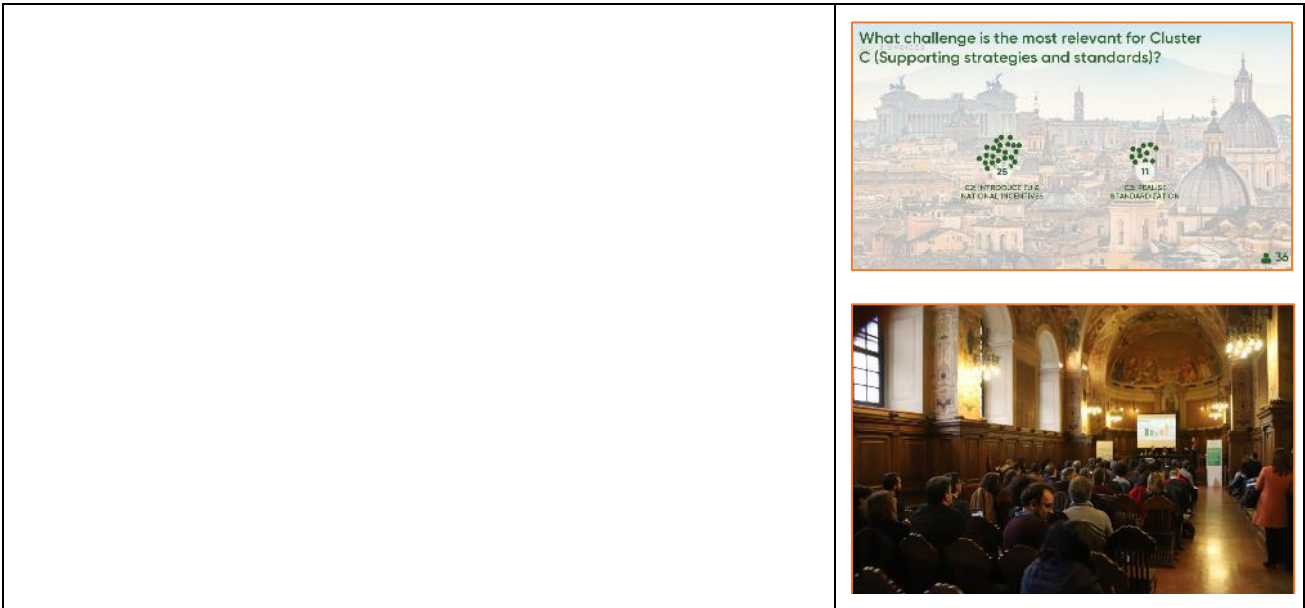


Mentimeter competition game on Bioeconomy used to engage the large public that compete on topics related to bioeconomy.



Mentimeter interactive application to stimulate discussion with the audiences during MML workshops.

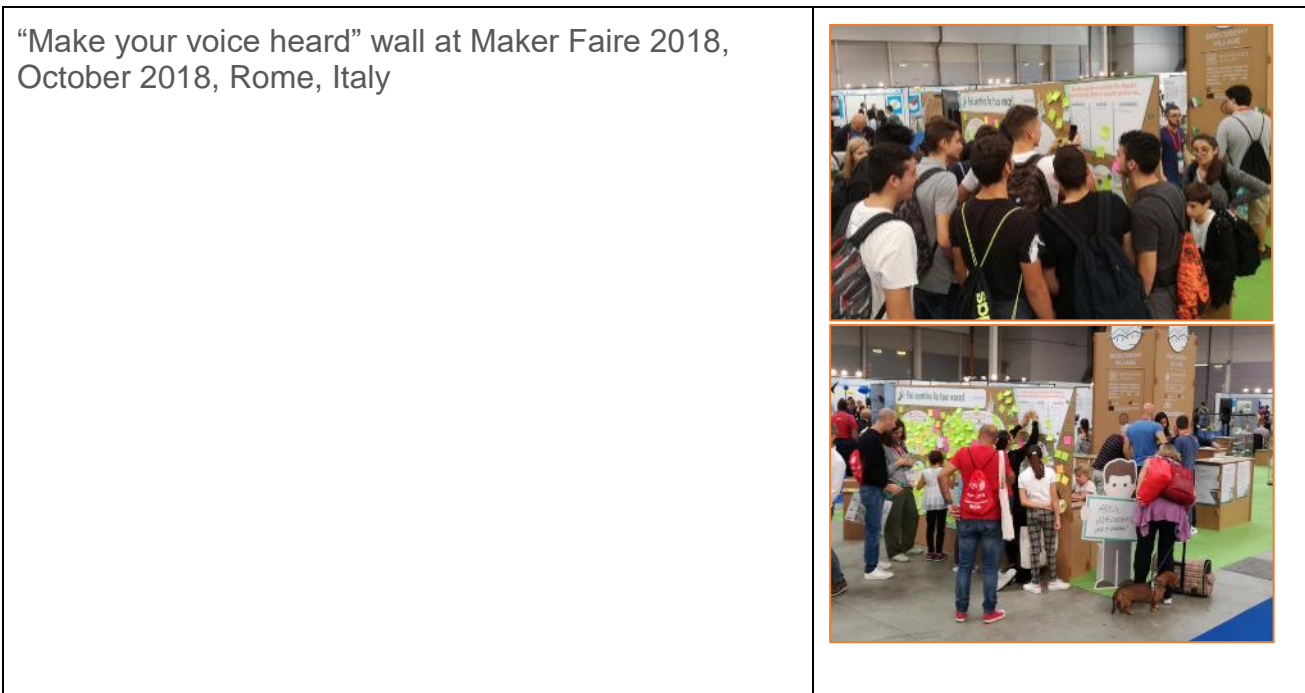




## 7.4 Open WALLS to gather data and public perception

To collect general public's opinions, concerns and ideas about Bio-based products, several additional ideas have been tested and implemented during large scale events.

This solution enables the collection of hundred of answers in few hours and can be used to ask specific questions and involve citizen's in the design of more acceptable bio-based solutions.



“Interactive purchase” at Maker Faire 2018, October 2018, Rome, Italy.  
This toll was used to collect consumer’s purchase intention for the different bio-based application fields.



The interactive walls have been used at IFIB 2018 (October 2018) to collect the most pressing challenges according to the stakeholders participating to the conference



## 7.5 Talk-Showcase of Bio-based products

This format has been successfully implemented in the context of Maker Faire Rome in 2018 and 2019. During the Talk-Showcase of Bio-based products, a testimonial is presenting a series of bio-based products, from different application field, explaining the feedstock, the production process, the benefits and the end of life.



Figure 19 Talk-Showcase of Bio-based products @ Maker Faire 2019

The real products are circulated among the participants during the session.

The talk is very interactive and the public contributes, expressing their opinions, concerns, asking questions and providing feedback.

## 7.6 Participation to Conferences and Workshops

BIOVOICES (and the European Bioeconomy Network) representatives have been invited in different events to present the project's results and lesson learnt. Following is a partial list of the participation to conferences and workshops:

- BBI JU Stakeholder Forum 2019, Brussels 4 December 2019, Panel speaker in the session “Sustainable society - Getting citizens ready for the post-petroleum era”
- European Workshop on Bioeconomy: session 4: Citizen engagement in bioeconomy strategies: understanding the barriers and accompanying the transition, Paris, 30 October 2019 “Shaping the bio-based economy involving citizens through a participatory approach”
- SCAR Bioeconomy Strategic Working Group (BSW), Paris, 28 October 2019 “The European Bioeconomy Network support in raising awareness and communication activities to member states”



- European Bioeconomy: Regions, Cities and Civil Society, Brussels 16 October 2019 “EUBIONET: The importance of raising awareness at local and regional level: the role of the European Bioeconomy Network”
- Workshop Promoting education organized by the DG R&I European Commission, 15 October 2019, Brussels, training and skills across the bioeconomy – presentation: “Supporting Regions in the design of innovative bioeconomy educational paths: The contribution of the European Bioeconomy Network”.
- European Bioeconomy Scene 2019, 8–10 July, Helsinki, Finland “Societal challenges – What consumers need to move towards bio-based products?”
- Capacity building targeting Tunisian Researchers “Circular Bioeconomy: Opportunities for rural development in North Africa” - 3 April 2019 Tunisi, Tunisia
- Bioeconomy Stakeholders Panel meeting, Brussels 29 November 2018 “The European Bioeconomy Network role in promoting bioeconomy in Europe”
- Ecomondo 2018 - How EU funded support actions contribute to the implementation roadmap of the European Bioeconomy Strategy? - 9 November 2018, Rimini, Italy
- GPP ACADEMY – Forum CompraVerde Buy Green “Bioeconomy and GPP: The role of public administrations in promoting an ecologically and socially sustainable economy, through the purchase of products from renewable sources.” – 18 October 2018, Rome, Italy
- IFIB 2018 International Forum on Industrial Biotechnology and Bioeconomy 27 – 28 September 2018, Turin, Italy
- BBI JU Italian infoday “How to communicate Bioeconomy in the context of BBI JU projects” - 18 Aprile 2018
- TED-Style speech “What is bioeconomy?” at Maker Faire - 13 October 2018, Rome, Italy
- BBI JU Stakeholder Forum “The value of Europe’s citizens – aligning economic and societal expectations and needs. - 7 December 2017, Brussels, Belgium
- Fatti di Plastica “Fate Circolare – Communication and Circular Bioeconomy” – Rome 5 June 2018, Rome, Italy

- IFIB 2017 “The public perception of biobased products – the BIOWAYS survey”, 5 October 2017, Rome, Italy



Figure 20 BIOVOICES at the session “Societal challenges – What consumers need to move towards bio-based products?” @EUBioScene 19, Helsinki



## 8 Lesson Learnt

Thanks to the experience and proactive attitude of BIOVOICES partners, the project implemented, in the first two years, a large number of ideas, activities, tools to raise awareness and engage stakeholders in a debate promoting the bio-based market uptake.

As a general consideration, from BIOVOICES experience, the best way to engage the stakeholders in the discussion is in the context of live activities (MMLs, events, etc.) or using channels that they are already using (social media, including the ones targeting professionals like Twitter and LinkedIn). It is not easy to engage stakeholders in contributing actively to new online platforms, even if they recognize the value.

The collaboration with existing initiatives, events, communities is very impactful (EU funded projects, Curioctopus, Researcher's Night, Sustainable Brands associations, Sustainable influencers, multipliers, etc.), enabling the outreach and involvement of thousands of people.

There is a strong and shared need of sharing knowledge and cooperate among EU funded CSAs (but also RIA and IA). The growth of the European Bioeconomy Network is a signal of this need. Nevertheless, the EuBioNet is an effort-consuming activity that cannot be implemented without the support of the EC, after the BIOVOICES project conclusion.

## 9 Recommendations

The following recommendations stems from the first 2 years of BIOVOICES activities.

- **Be creative!** Explore new forms of communication and edutainment: games, art gallery, social media, contest, etc.
- **Hands-on to educate!** Showcase Bio-based products to large public in events and school activities where the participants can touch and feel the Bioeconomy (Maker Faire, Researchers' Night, Festival Futuro, ecc.)
- **Collaborate!** Create proactive collaboration with other EC funded projects to share knowledge and promote joint activities (i.e educational games with BioSTEP and STAR ProBio, joint events, the European Bioeconomy Network)
- **Multiple voices!** Facilitate multi stakeholders dialogue, knowledge exchange and engagement to define and address challenges
- **Testimonials!** Involve researchers, start-ups, industries, science promoters, projects and associations as testimonials
- **Multipliers!** Target and involve multipliers: Informed/sensitive consumers, students, teachers.

## 10 Conclusions

BIOVOICES will build on the first two years of engagement activities to keep on promoting the multistakeholders dialogue and debate for the creation of an innovation ecosystem for the bio-based economy.

The partners are carefully analysing the most successful activities to fine-tune the project's strategy, increasing the overall impact of the BIOVOICES project.

The second version of this deliverable, due on M36 will include an advanced analysis of the most successful strategies, activities and tools to

1. Inform, raise awareness and educate the stakeholders
2. Promote active engagement, open dialogue, interaction and collaboration among the different stakeholders
3. Facilitate the co-creation of actionable knowledge for the different stakeholders

The recommendations will be included in D6.3 BIOVOICES Action Plan and stakeholders-oriented policy briefs.