BIOVOICES

CONNECTING BIO-BASED FORCES FOR A SUSTAINABLE WORLD

www.biovoices.eu

CONNECTING BIO-BASED FORCES FOR A SUSTAINABLE WORLD

CONTACT US
info@biovoices.eu

APRE
Agency for the Promotion
of European Research

FVA NEW MEDIA DESIGN

PEDAL CONSULTING

National Research
Council of Italy

CIVITTA

LOBA

NOVA id FCT
Associação para a Inovação
e Desenvolvimento da FCT

Q-PLAN INTERNATIONAL

MANAGEMENT CONSULTING

WAGENINGEN
UNIVERSITY & RESEARCH

Minerva

asebio

I·C·L·E·I
Local
Governments
for Sustainability

BIOVOICES

CONNECTING BIO-BASED FORCES FOR A SUSTAINABLE WORLD

DELIVERABLE 5.2

BIOVoices multistakeholder on-line social platform: v2.0

DELIVERABLE TYPE
Other

MONTH AND DATE OF DELIVERY
Month 34, October 2020

WORK PACKAGE
WP 5

LEADER
Consiglio Nazionale delle Ricerche

DISSEMINATION LEVEL
Public

AUTHORS
Fernando Ferri, Patrizia Grifoni, Noemi Biancone, Chiara Bicchielli

Programme	Contract Number	Duration	Start
H2020	774331	36 Months	January 2018

PEER REVIEWS

NAME	ORGANISATION
FERNANDO FERRI	CNR

REVISION HISTORY

VERSION	DATE	REVIEWER	MODIFICATIONS
V1	01/10/2020	FERNANDO FERRI	TEXT REVIEW

INDEX OF CONTENTS

INDEX OF FIGURES

1. INTRODUCTION

This document provides a description of the Deliverable "D5.2 BIOVoices multistakeholder on line social platform: V2.0", which is the configured on-line BIOVoices social platform (version V2) representing the technical infrastructure for managing participatory tools, co-production of contents, knowledge and co-creation, initiatives launching, creative spaces creation, etc., supporting on-line communities (starting from e-communities already existing in the bio-based sector, and applicable in other application domains) in their work and common work.

This deliverable evolves the deliverable "D5.1 - BIOVoices multistakeholder on line social platform: V1.0" released at month 6, that provided a description of the first version of the platform.

One important role of the BIOVOCES Social platform consists in facilitating some users' social activities, both as a consumer and as a provider of online information, services and knowledge, such as:

- users as provides can:
    - organize and manage Discussion group, Events, BIOVOICES Mobilization and Mutual Learning workshops, (enabling management of calendars for discussion groups, managing the registration to the MMLs and Events, enabling discussions, co-producing knowledge that remains openly accessible, enabling pro-active participation to any on-line activity in the platform using e-mails, chat messages as explained in the next points). Some discussion spaces can also be managed within restricted groups or used as private working space, enabling to manage intermediate steps of knowledge building processes.
    - Share information on biobased products, documents organized in online libraries, videos, and News,
    - contribute in an online discussion, sharing information, videos, chat messages, documents, streaming, etc. (role provider), through a registered account and login.
- users (role consumer) can consult information present in the platform without the need to register/login.

This platform is supportive and complementary with respect to all the other methods that can be used for engaging people in the BIOVOICES community and for discussing and sharing contents and co-build knowledge.

The platform enables to directly access the contents from Discussion group, Events, BIOVOICES Mobilization and Mutual Learning workshops, digital libraries or to access information about the projects on Bioeconomy linking to the Cordis database. Moreover, it is possible to retrieve any content searching a term in the whole platform, or by a semantic search (as an ontology has been defined, improving the first version of the ontology defined in the deliverable "D5.3 Population of the BIOVoices multistakeholder on line platform with contents Report (first version)".

The BIOVoices multistakeholder on line social platform: V2.0 is available online at:

https://www.biovoices-platform.eu

The user manual of the current version (V2) of the platform, is in the appendix and it is available at:

https://www.biovoices-platform.eu/registeredarea/discussiongroups/viewDiscussiongroup/534

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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

| 6

The functionalities already included in the first version of the BIOVoices multistakeholder on line social platform have been improved in this second version, while, some other have been added as explained in the conclusion.

2. THE BIOVOICES PLATFORM

2.1. ACCESS, REGISTRATION AND LOGIN

Already at the beginning of the BIOVOICES project activities it was decided to share openly as much information as possible on the BIOVoices multi-stakeholder on line social platform. All people can access any information that other people decided to share publicly. However, the platform also enables to manage restricted or private virtual spaces.

Any kind of information in the platform is immediately visible once connected. Indeed, when the user gets connected at:

<center>https://www.biovoices.eu/</center>

Then, you have to "Enter the BIOVOICES platform" (see Figure1)
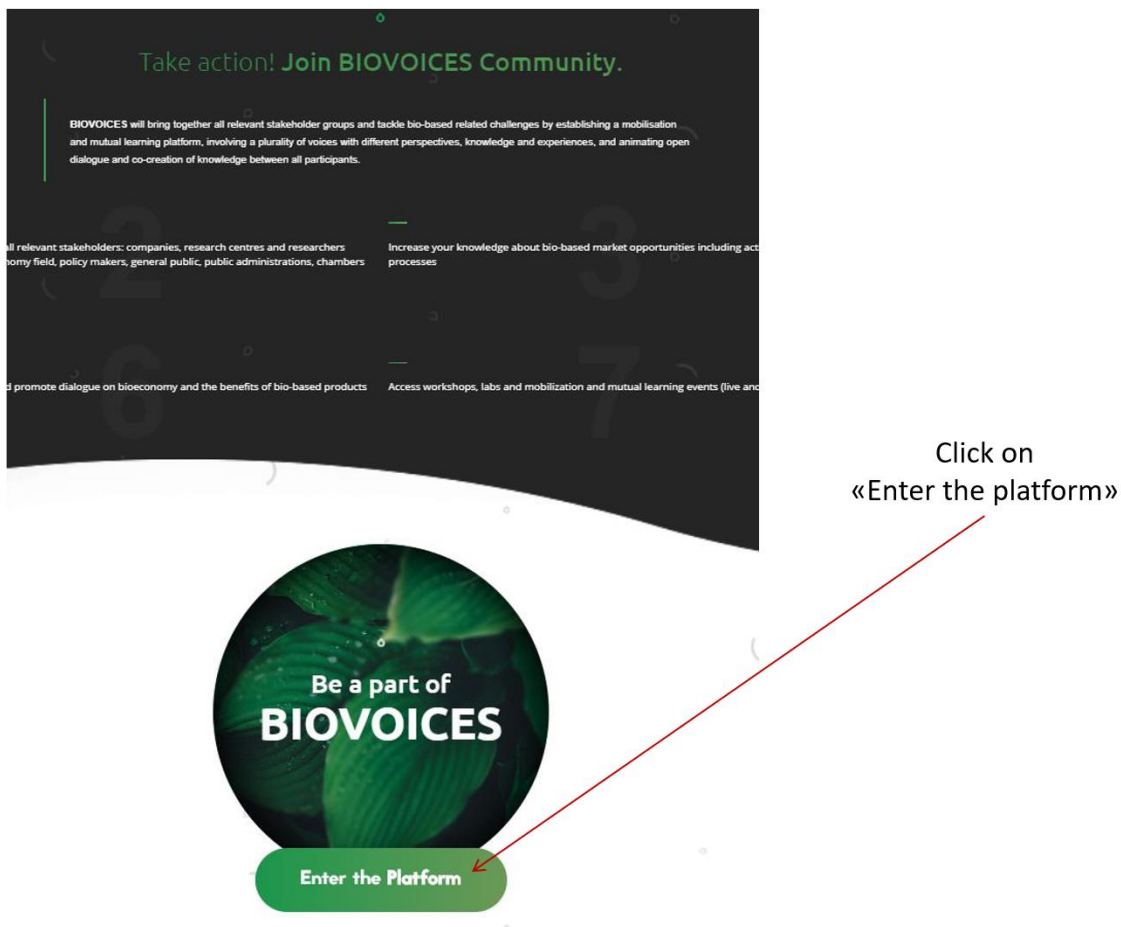

Click on
«Enter the platform»

Figure 1: Access the platform from the BIOVOICES Website homepage

You can directly connect yourself to:

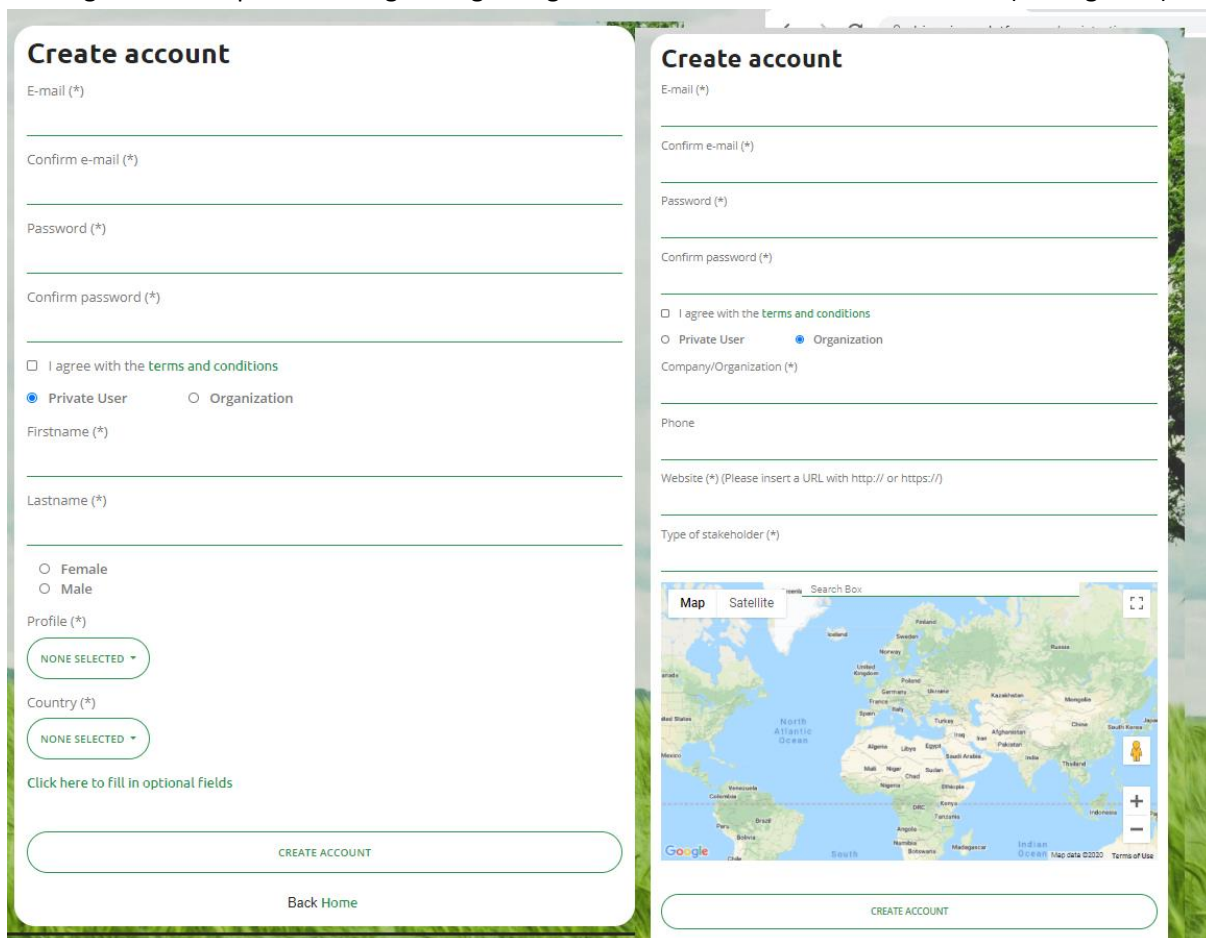https://www.biovoices-platform.eu

The BIOVOICES platform enables to visualise data, documents, events, videos, labs (without the users are logged in). Figure 3 (in Section 2.2) shows what the user visualises when accesses the platform.

Users can play both the role of consumers and providers of resources (services, information and knowledge):

- users can consult information present in the platform (role consumer) without the need to register/login
- users can contribute in an online discussion, sharing information, videos, chat messages, documents, streaming, etc. (role provider), through a registered account and login.

There are two types of registrations: 1) the registration as an organization and 2) the registration as a private user (see Figure 2).

The registration requires reading and agreeing the terms and conditions for the use (see Figure 2).

Figure 2: Registration to the BIOVOICES platform

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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

|8

The registration to the platform can be done also when a user is going to register herself or himself for attending an event or a BIOVOICES Mobilisation and Mutual Learning workshop.

2.2 SHARING AND VISUALISING INFORMATION AND SERVICES

Once you connected with the platform (https://www.biovoices-platform.eu), a holistic view of available information is given see Figure 3).
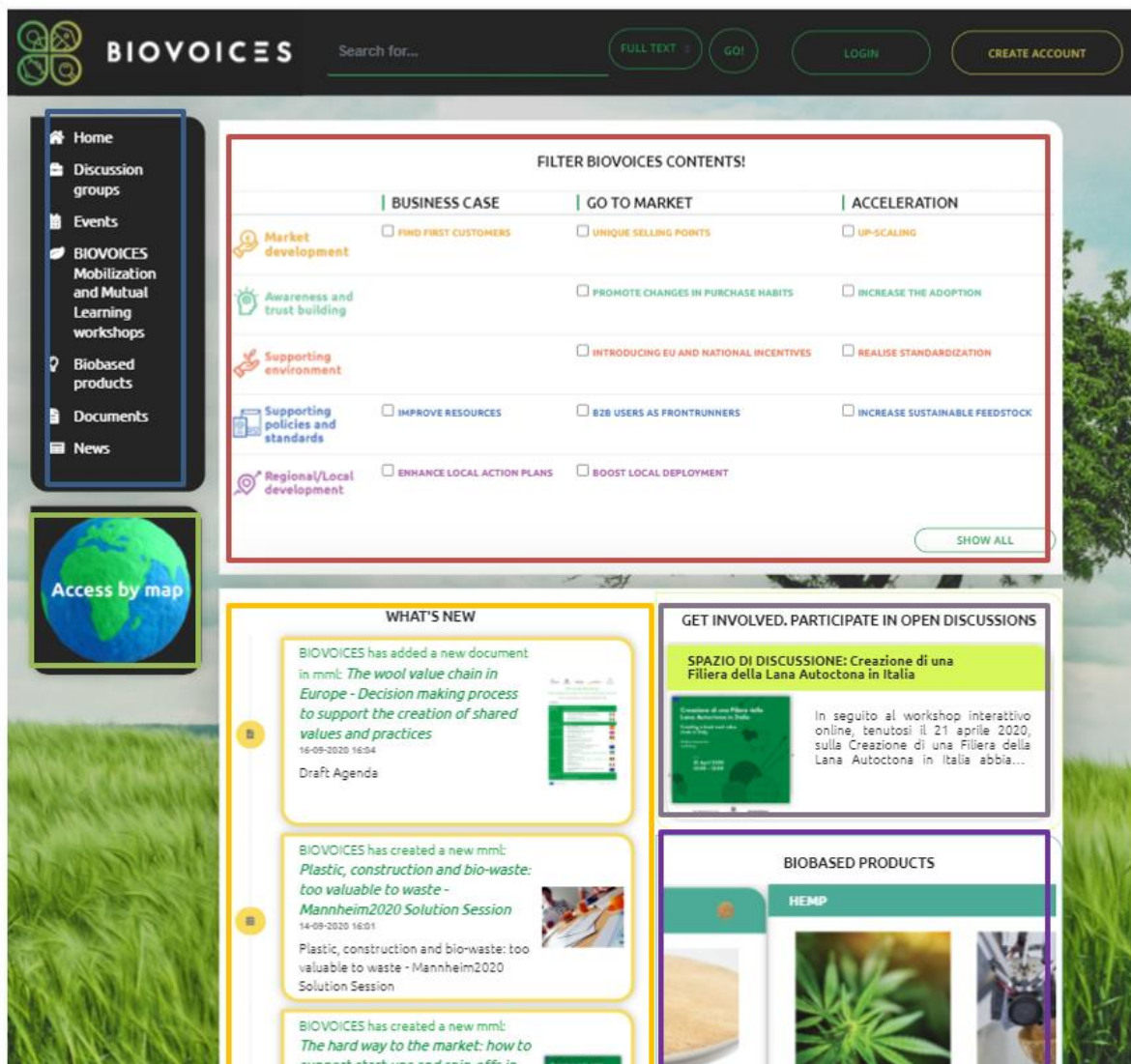

Figure 3: Top of the BIOVOICES platform homepage

In Figure 3 you see six areas:
- The **"Menù"** area (see the blue rectangle) shows the main sections composing the platform i.e. Discussion group, Events, BIOVOICES Mobilization and Mutual Learning workshops,

Biobased products, Documents and News. These sections will be presented in the next section of this document. In particular we underline that we have distinguished the BIOVOICES Mobilisation and Mutual Learning Workshops from the other Events (external with respect to the project).

- The **"Access by map"** area (into the green rectangle) allows users to reach a tool to visualize platform resources on a map.
- The **"Filter biovoices content"** area allow users to filter platform content on the basis of BIOVOICES matrix.
- The **"What's new"** area (see the yellow rectangle) shows the history of interactions and new contents provided (e.g. a new event or MML, information related this event, such as for example presentations done, video shared, streaming done during an event, a new discussion group, documents, videos and discussions carried out using chats, etc.). Indeed, users easily visualize the last emerging activities in the area "What's new" and its history (e.g. a new Mobilisation and Mutual Learning workshop organised in BIOVOICES (MML), any Event external to the BIOVOICES project, information related the MML or the Event, such as for example presentations done, video shared, streaming done during the event, a new Discussion group, with the documents, videos and discussions carried out, and other information resources. Users can access the different resource from this area.
- The **"Get involved participate in open discussions"** area contains a preview of last public Discussion groups (see the grey rectangle).
- The **"Biobased products"** area provides a showcase of info about biobased products (see the purple rectangle). They can be products from companies' outcome from studies.

Users can access in detail to a specific resource (Event, Mobilisation and Mutual Learning Workshop, Product info, etc.) clicking on each resource of the homepage.
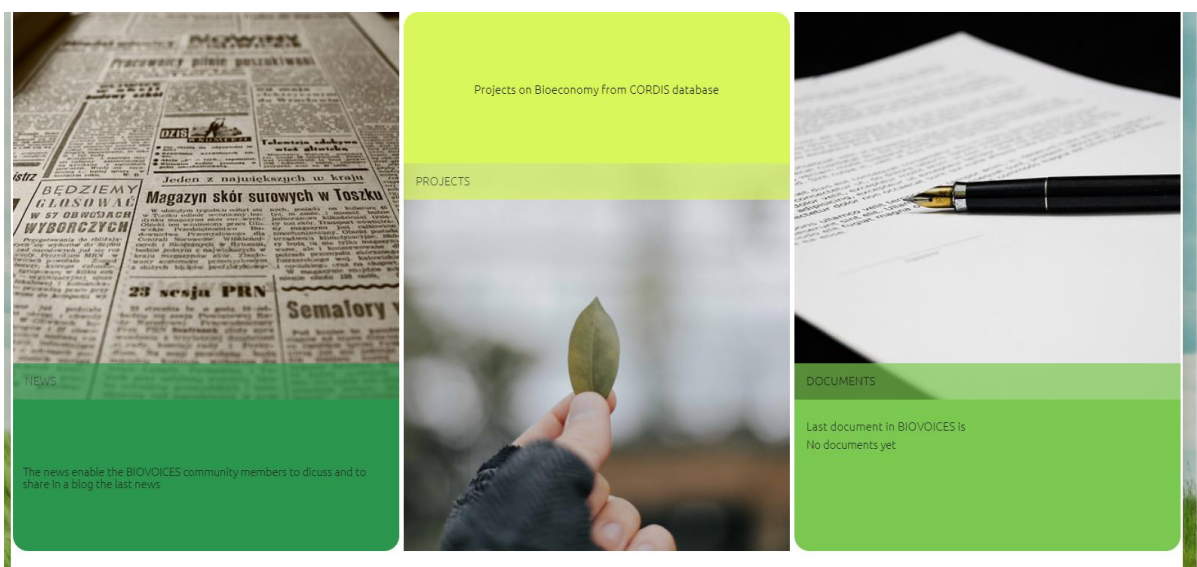

Figure 4: Bottom area of the BIOVOICES platform homepage

In the bottom area of the homepage (see Figure 4) there are three rectangles which rotates and allow

users to access:

- the news clicking on the dark green rectangle "News". This rectangle rotates; one side shows the last created content, while the other side shows a description of this section.
- the news clicking on the green rectangle "Documents". This rectangle rotates; one side shows the last created content, while the other side shows a description of this section.
- the projects on the bioeconomy in the Cordis database.

2.3   DISCUSSION GROUP

If a user is interested to organise a discussion on a specific topic that is not planned as an event, but it is a group of people that discusses on a topic for a period of time in an asynchronous as well as in a synchronous way using chats, exchanging working documents, planning meetings and activities, then the platform provides the "Discussion Group".
A discussion Group can be managed according three different levels of privacy, i.e. Public, Closed and Private.
Also in this case each people can only see the discussion that happened (consumer) or, can contribute in the discussion (provider)

TYPE OF ACCESS	REGISTERED USER	ANONYMOUS USER
PUBLIC	FULL ACCESS.	FULL ACCESS.
CLOSED	-PARTIAL ACCESS. -FULL ACCESS WITH JOIN REQUEST.	PARTIAL ACCESS.
PRIVATE	- ACCESS ONLY WITH DISCUSSION GROUP ADMINISTRATOR INVITATION.	NO ACCESS.

Figure 5: Privacy levels for the Discussion Groups

Users before logging in themselves:

- can directly access to Public Discussion Group (or partially to Closed discussion group which need a join request to see the full content) from the "What's new" area, directly clicking on the Discussion Group Title (see the red circle or the red rectangle in Figure 6), or on the document or the video contained in a Discussion Group.
- can access clicking on the title of Public discussion group of interest in the "GET INVOLVED. PARTICIPATE IN OPEN DISCUSSION" area (see the blue rectangle).
- can access to Discussion Group clicking on "Discussion Group" on the left black menu

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan
International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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

|11
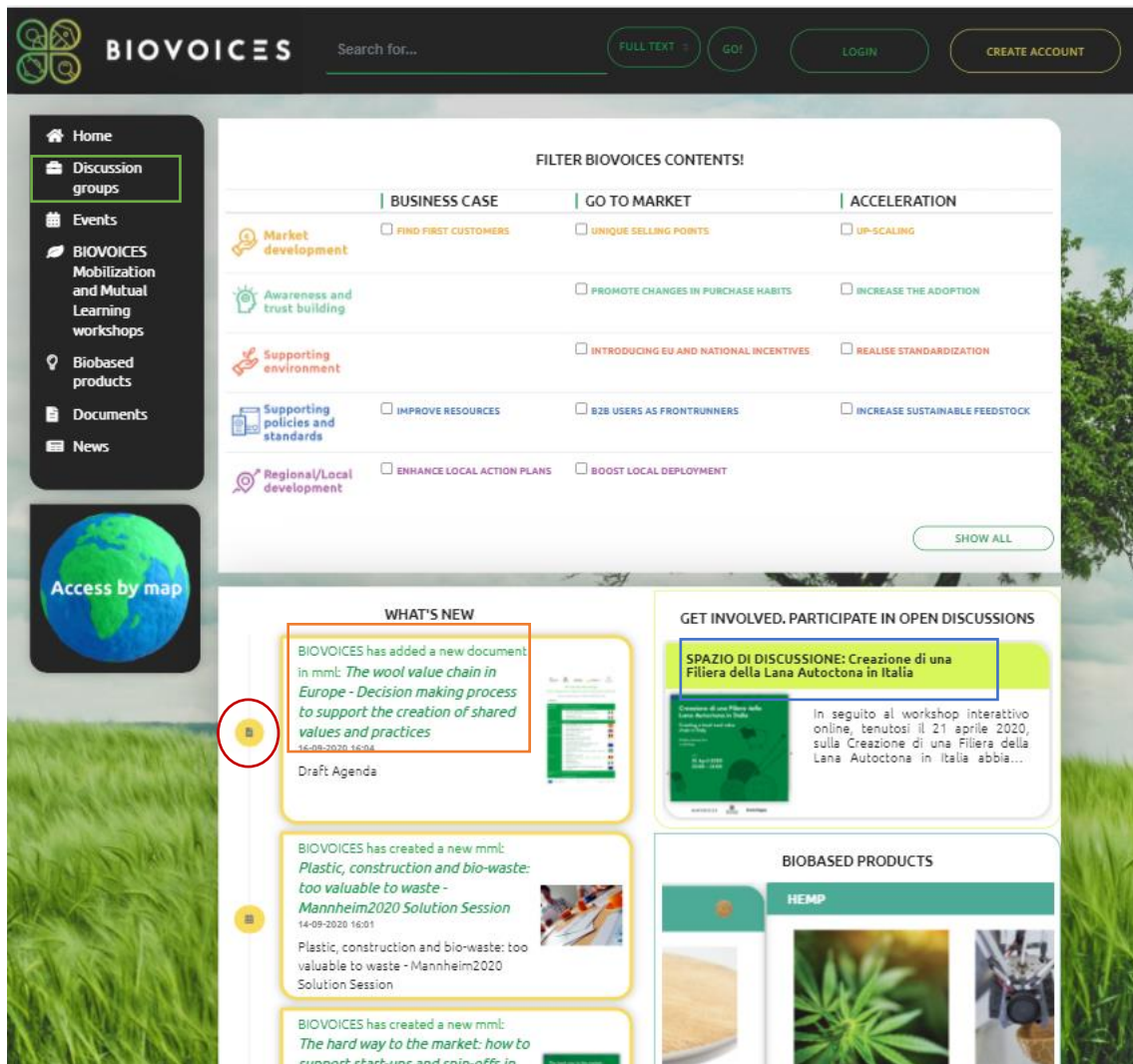
Figure 6: Accessing the Discussion Groups

Moreover, clicking on a specific Discussion Group, users visualise (without logging in):

- information related to the Discussion Group itself (i.e. the title, the administrator of the Lab, the description, posts of the chat, videos and can download files if this Discussion Group is public,
- a subset of information related to the Discussion Group itself (i.e. the title, the administrator of the Lab, the description if this Lab is Closed (see Figure 7). In this case users, based on their interest can ask for joining themselves to the Discussion Group.

If the Discussion Group is private only users invited by the administrator can visualise its content after they are logged in.

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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

| 12

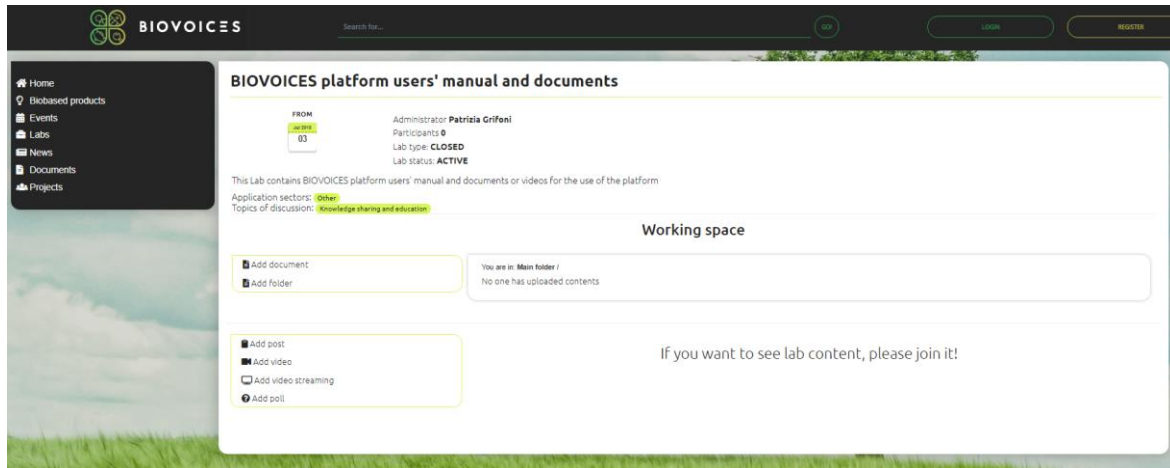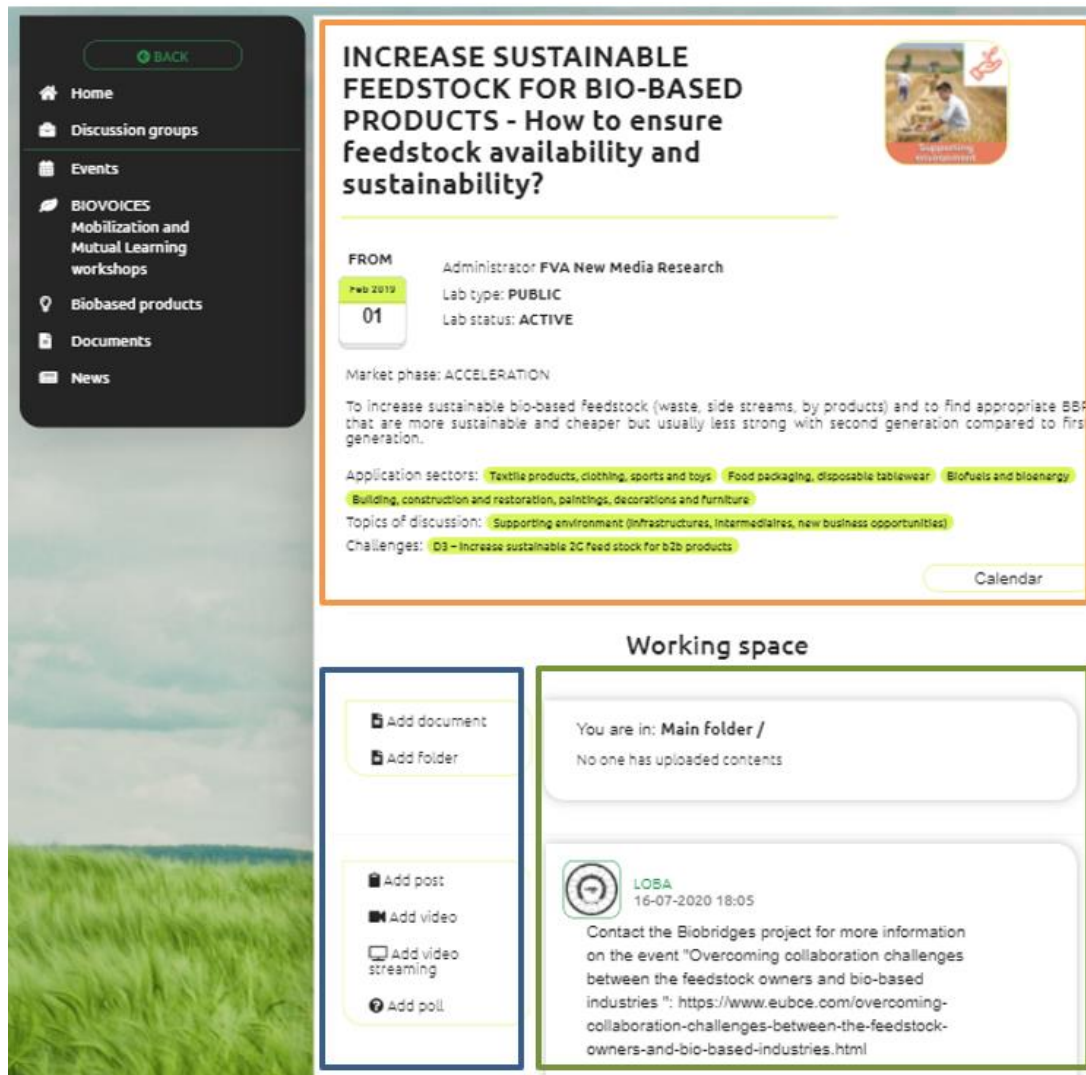*Figure 7: Accessing Discussion Groups*

Figure 8: Activities in a Discussion Group

Once a user accesses a Discussion Group, if she or he is in the role of Consumer then she or he accesses information provided by others visualising (see the orange rectangle area in Figure 8):

- The title of the discussion group,
- The date,
- The administrator on the platform (Who shared on the platform),
- The description of the discussion group,
- A note space containing general information,
- The application sectors,
- The topics of discussion,
- The challenges.
- The calendar link,

if the user is in the role of Provider, the Discussion group makes available a working space where it is possible to start and carry out a discussion using chats, posts, videos and pools as working tools, to organise streaming. It is also possible to organise a common space with folders, where documents can be shared. There is a calendar for planning the discussion group activities In Figure 8 you see the menu in the blue area and the green area for the chat messages, for Documents and folder space, videos, or video streaming preview and Pools.
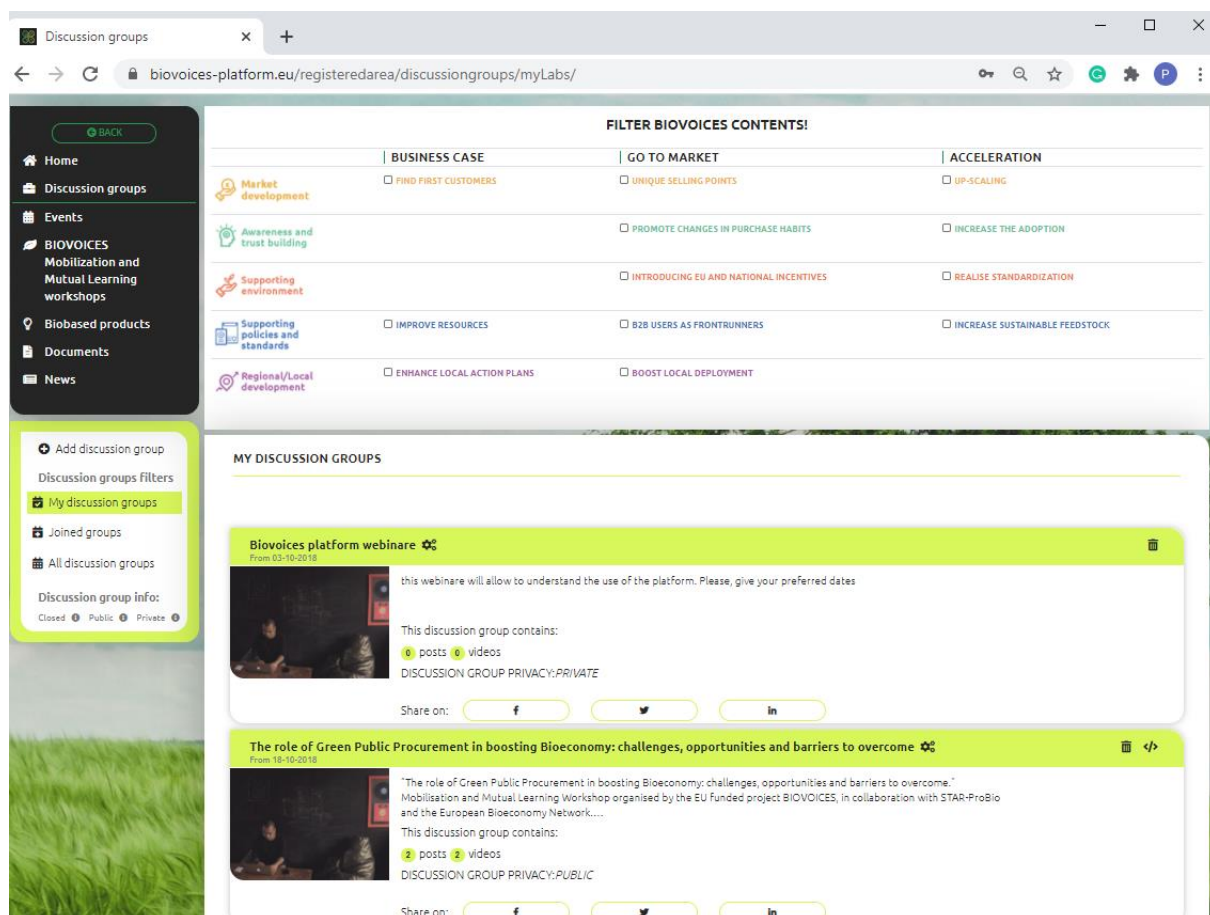

Figure 9: Visualization of the list of discussion groups (in this case you see one My discussion groups)

Each user can visualise only some information of a closed Discussion Group without logging in or without discussion group join). In particular, information that it is possible to visualise the title, the administrator of the discussion group, the description without logging in themselves. If they are interested to participate in the Group, users (after their login), can ask for joining themselves to the Discussion group, and then she or he can also access posts, documents, etc.

The list of Discussion groups can be filtered (see Figure 9) enabling users to select the list that the user created (My discussion groups), or the list created by others and the list the user is interested in (and then joined that discussion groups).

2.4 EVENTS AND BIOVOICES MOBILISATION MUTUAL LEARNING WORKSHOPS

After the first release of the platform (V1) it was decided to distinguish the workshops, webinars, conferences and any kind of event organised by the BIOVOICES project with respect to the Mobilisation and Mutual Learning Workshops (MML) organised within the project in order to strengthen the visibility of the project initiatives. From the functional point of view the platform provides the same facilities for the "Events" and the "BIOVOICES Mobilisation and Mutual Learning Workshop".

A user can directly access one specific Event/BIOVOICES Mobilization and Mutual Learning workshops from the "What's new" area, directly clicking on the Event/BIOVOICES MML workshops title, or on the document or the video contained in an Event/BIOVOICES MML workshops.

Alternatively, each user can access to event/BIOVOICES MML list clicking on the Event/BIOVOICES Mobilization and Mutual Learning workshops links on the left sidebar.

The list of all the Events/MMLs with their titles, description, date and time, location is visualised (see Figure 10). The list of events/MMLs can be filtered enabling users to select the list of the events/MML that the user created (My events), or the list of events/MMLs created by others or the list of events/MML the user is interested in (the list of joined events).

Starting from the list, selecting the title bar (Yellow bar in Figure 10) of the event or MML she or he can access and visualise the Event or MML that she or he is interested in (see Figure 11)

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan
International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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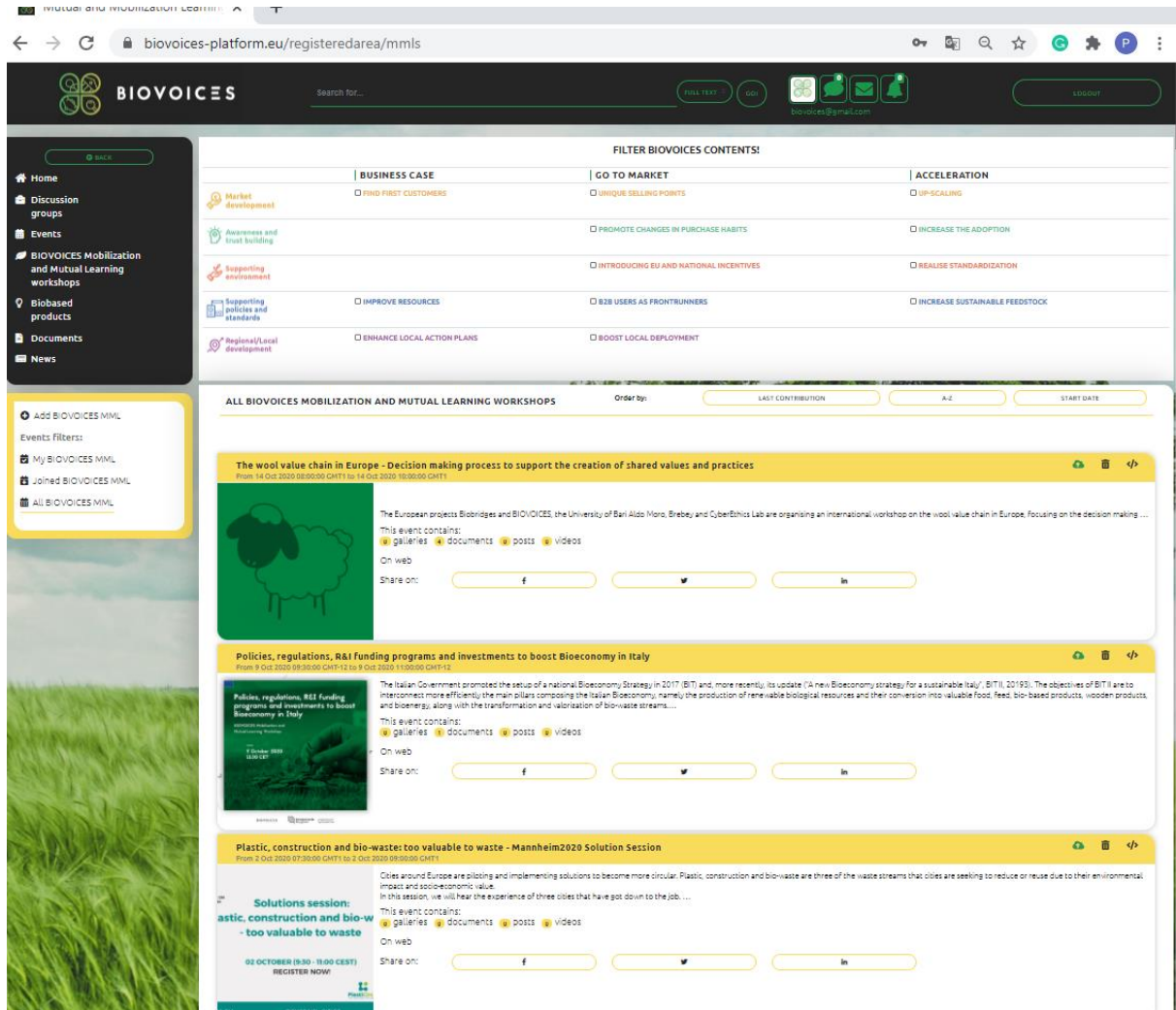research and innovation programme under grant agreement No 774331

15

Figure 10: List of MMLs

Each user can visualise the activities planned and carried out in the event/MML itself such as chat messages, documents and galleries of pictures exchanged, videos shared, or can visualise the event in streaming and access polls.

Users can also play an active role as a provided. In this case it is necessary that the user logins herself or himself, and then she or he can contribute posting a message in an active discussion can upload files and galleries of pictures, can add a video or sharing the event in a video streaming, or add a poll.

When preparing a new event or MML the platform can support the organisers who can share the agenda, • Send the invitation to attend the event or the MML by messages to the members of the community or by e-mail also to people not already included in the community, • Managing the registration for attendees at the event/MML, • Sharing the Informed consent from people who will attend the event and collecting their agreement • Upload any information material before the event will start.

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

This Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774331
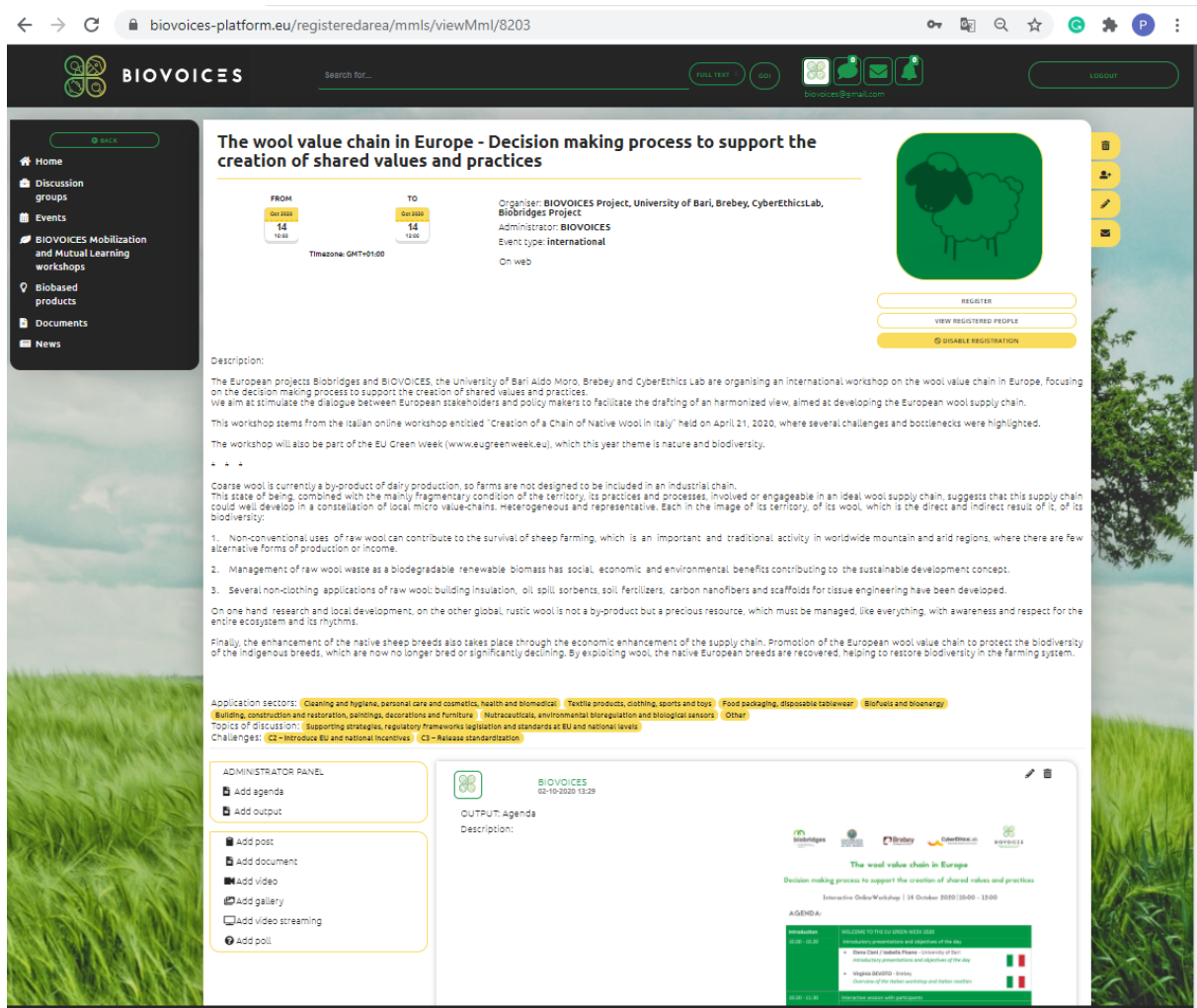
| 16

Figure 11: Accessing and visualising an MML

Any BIOVOICES community member can: Be notified about the event or MM, can read the agenda and any other document preparatory for the event or MML, can get registered as participant in the event or MML, can provide documents, links to videos or other website (when required by the organisers). The BIOVOICES administrator can enable sharing of selected Events and MMLs on the BIOVOICES website (HTTPS://wwww.biovoices.eu.

2.5 BIOBASED PRODUCTS

The homepage of the platform contains a specific area (as shown in the purple rectangle of Figure 3) where are contained information about biobased products. Therefore, each user
- can directly access to Biobased Product from the "What's new" area, clicking on the Biobased Product title (if this product was added recently).
- can access clicking on the title of Biobased Product in the area (the purple rectangle of Figure 3).
- can access to a list of Biobased Product clicking on the Biobased Product link on the left sidebar

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

This Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774331
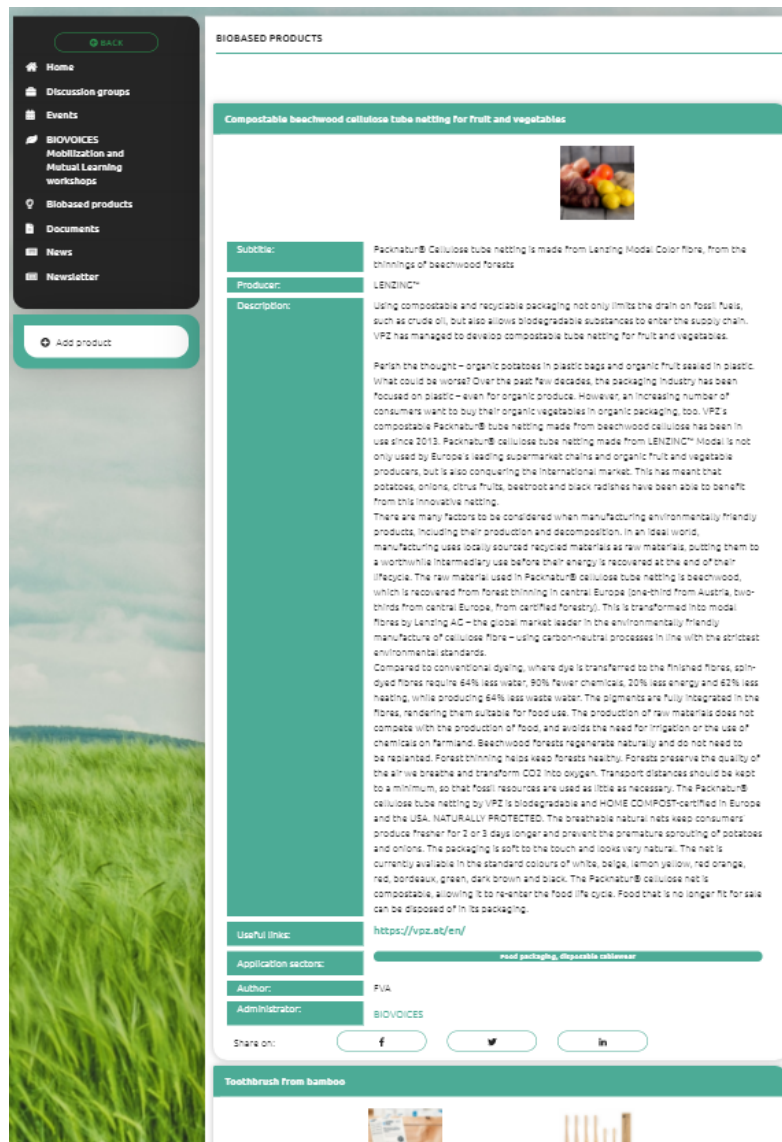
| 17

Figure 12: List of products biobased

When a user accesses the list of products biobased, for each product are available the following information: Title of the product, Subtitle, Images, Producer, Description, Useful links, Application sectors, Author, Administrator in the platform (Who shared its information on the platform)

All users, when logged in, can add information related a new product clicking on the «Add product» on the left side menu (see Figure 12).

The BIOVOICES administrator can enable sharing of selected Events and MMLs on the BIOVOICES website (HTTPS://wwww.biovoices.eu.

2.6 DOCUMENTS

One of the functionalities added in the platform with respect to the version V1 of the platform is the management of "Collections of Documents". Each registered user of the Platform can organise

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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

|18

documents related to Bioeconomy in "Collections of documents".
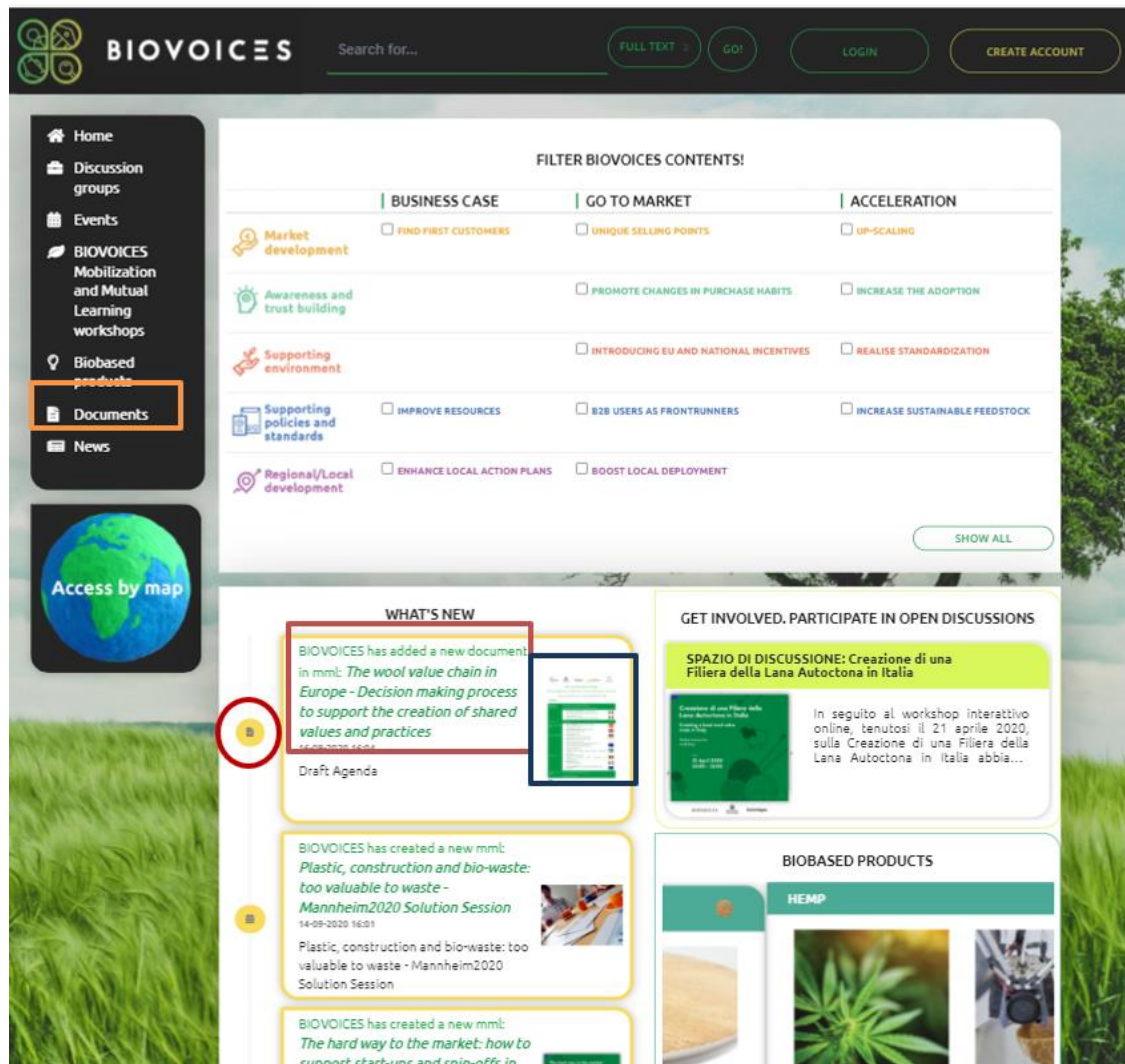

Figure 13: Accessing Documents collections

All documents publicly shared have to be sharable openly. Each collection contains a set of documents similar per topics.

The users who create and manages the collection can decide what is the topic and can decide if she or he is the only user that will manage that collection or if other users can contribute in a specific collection, sharing also their documents.

Each user can access the Document Collections list clicking on the "Documents" link on the left sidebar (orange rectangle in Figure 13).

Users can directly access to the Collection that contains the Document from the "What's new" area (if recently updated) (red rectangle or red circle in Figure 13), directly clicking on the Collection title or can directly access the document from the Document icon (Blue rectangle in Figure 13).

Each user can access the Document Collections list clicking on the Documents link on the left sidebar (see the orange rectangle of Figure 13). The list of Collection is then visualized (Figure 14); It is possible

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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

| 19

to filter the collections' list selecting one among the following options:

- My collections: collections created by user himself/herself (needs login in the platform)
- Joined collections: collections created by other users and joined by user himself/herself (needs login in the platform)
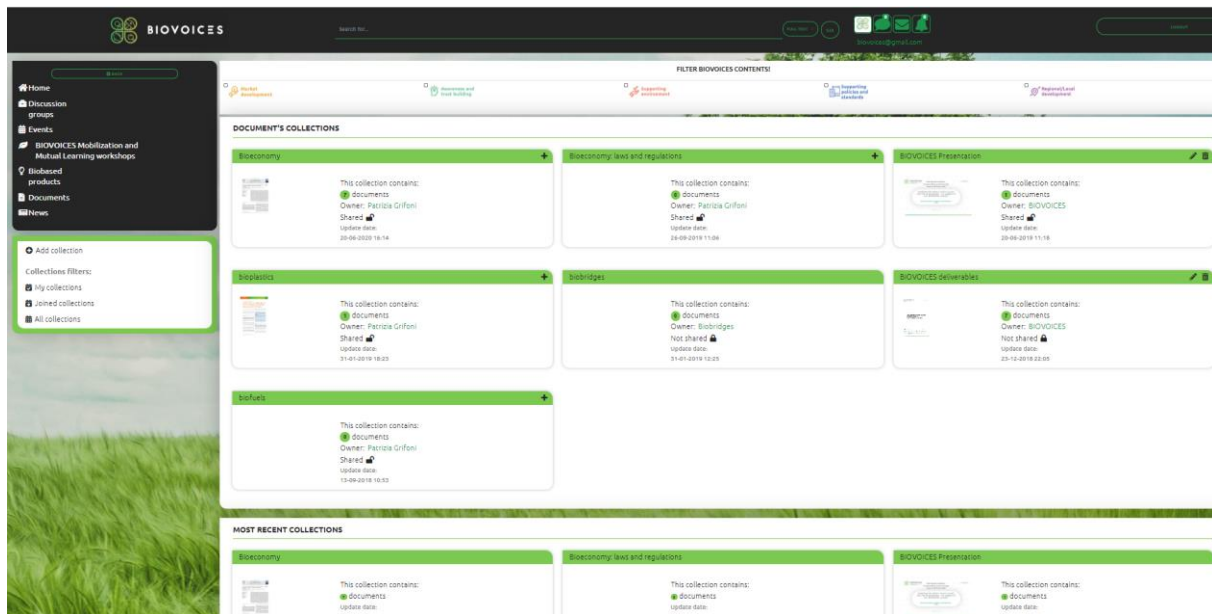- All collections

Figure 14: Visualisation of the list of collections

Information visualized and associated to each collection in the list are:: Title (on the green bar), Owner (who created the collection), Update date, Number of documents included in the collection, Privacy level (that identifies if documents included in the collection are added only by its owner or, if the documents can be included in the collection by each user).

Selecting the collection of interest selecting the title on the green bar we can access the list of documents included in that collection. When visualizing the list of documents, the page for each document contains: • the title of the document, •an image preview, • the document type, • an abstract, • a description, • the year of publication, • the owner, • the type of owner, • the author/s, • Keywords, • the application sectors, • the topics.
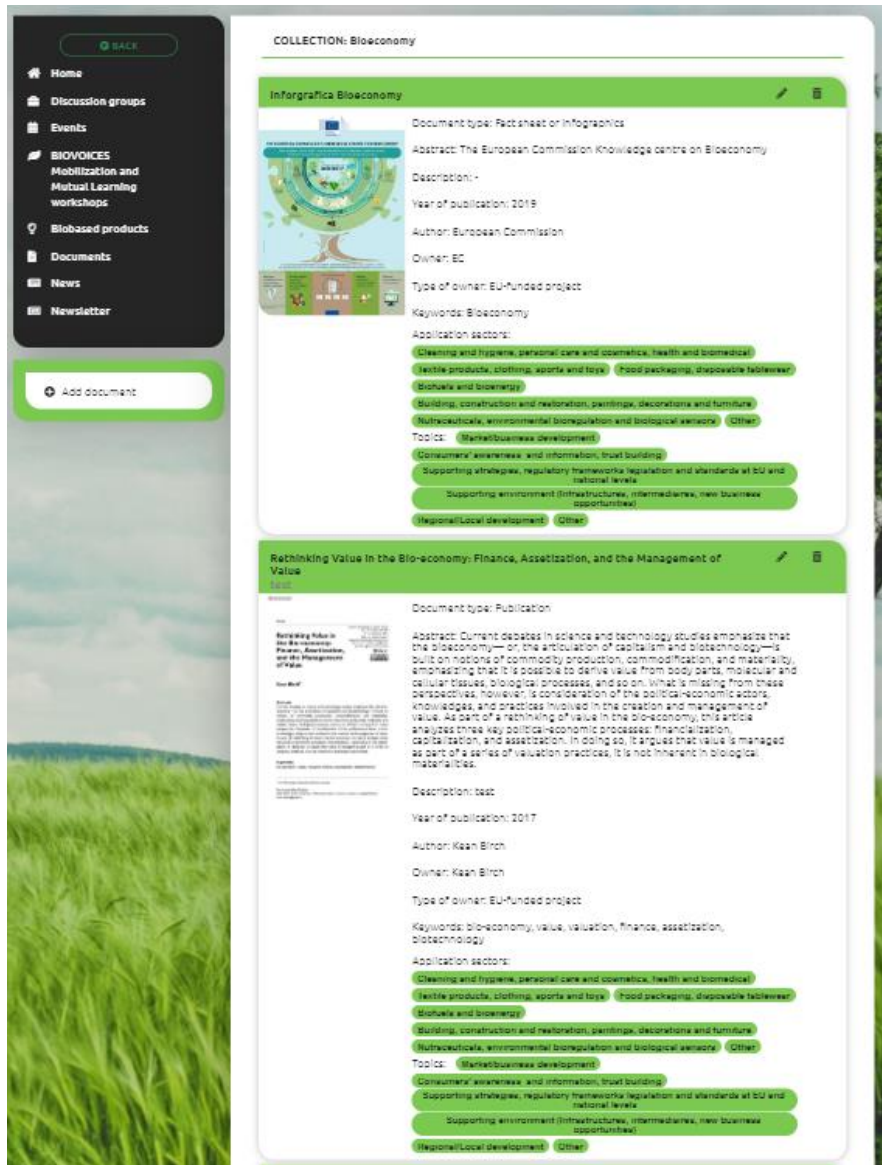
PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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

|20

Figure 15: Visualisation of the list of documents in a collection

The left green menu (Figure 15), enables users to add a document in the collection. Clicking on the image preview or on the tile (green bar) the user accesses the document of interest.

2.7   ACCCESS INFORMATION BY FILTERING

During the activities carried out in BIOVOICES and based on the literature it was decided to identify the challenges more relevant for the project and to be addressed and discussed (see deliverable "D3.3 - Mapping bio-based products (applications) based on stakeholders' interests"). Twelve challenges have been identified, which corresponds to the twelve options in the filter matrix in the "Filter BIOVOICES contents" area on the top of the webpage.

PARTNERS
APRE | FVA | PEDAL Consulting | National Research Council of Italy | CIVITTA | LOBA | Nova ID FCT | Q-Plan International | Frontier Management Consulting | Wageningen University & Research | Minerva | Asebio | ICLEI

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

| 21

As already explained in the deliverable "D3.3 - Mapping bio-based products (applications) based on stakeholders' interests" the twelve challenges are organised in five clusters that are: A - Market development; B -Awareness and trust building; C - Supporting strategies, regulatory frameworks legislation and standards; D - Supporting environment (Infrastructures, intermediaries, new business opportunities); E - Regional/Local development.

Each cluster includes two or three challenges dependent on the phase of development of the innovation (Business case, Go to market, Acceleration).

Users can filter the content of the platform selecting one option in the matrix of 12 challenges identified within BIOVOICES challenges and the clicking on show all button.

The output of the filter depends on section in which the user is. For example, if a user is in the homepage the output will be a filtering of all the resources (i.e. events, Biovoices MML, discussion groups, documents and news). Otherwise if a user is in the events list page the output will be a filtering of the events.

Figure 16: Filtering information

For the documents and news sections, the filter is only based on the five clusters (which classify contents).

2.8   FULL-TEXT SEARCH AND SEMANTIC SEARCH

Each content in the platform can be retrieved searching a word or a sentence in all the information and documents uploaded in the platform. Each user, registered or not, can put a word or a sentence in the Search bar (see Figure 17) and search as full text. This search returns all different resources stored in the platform which contain a string matching the word or the sentence specified by the user. If a user is interested in searching for a concept instead of a specific word, it is possible to do a "semantic" search instead of a full text. This kind of search works on finding conceptual similarity between the keyword provided and the resources stored in the platform. Indeed, when a new resource is added in the platform it is tagged by a process that uses concepts collected in a custom ontology.
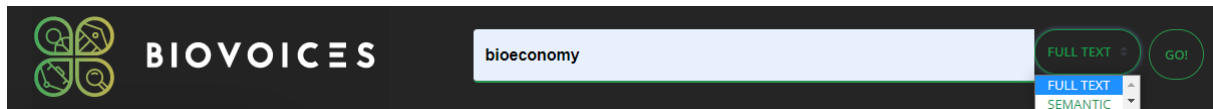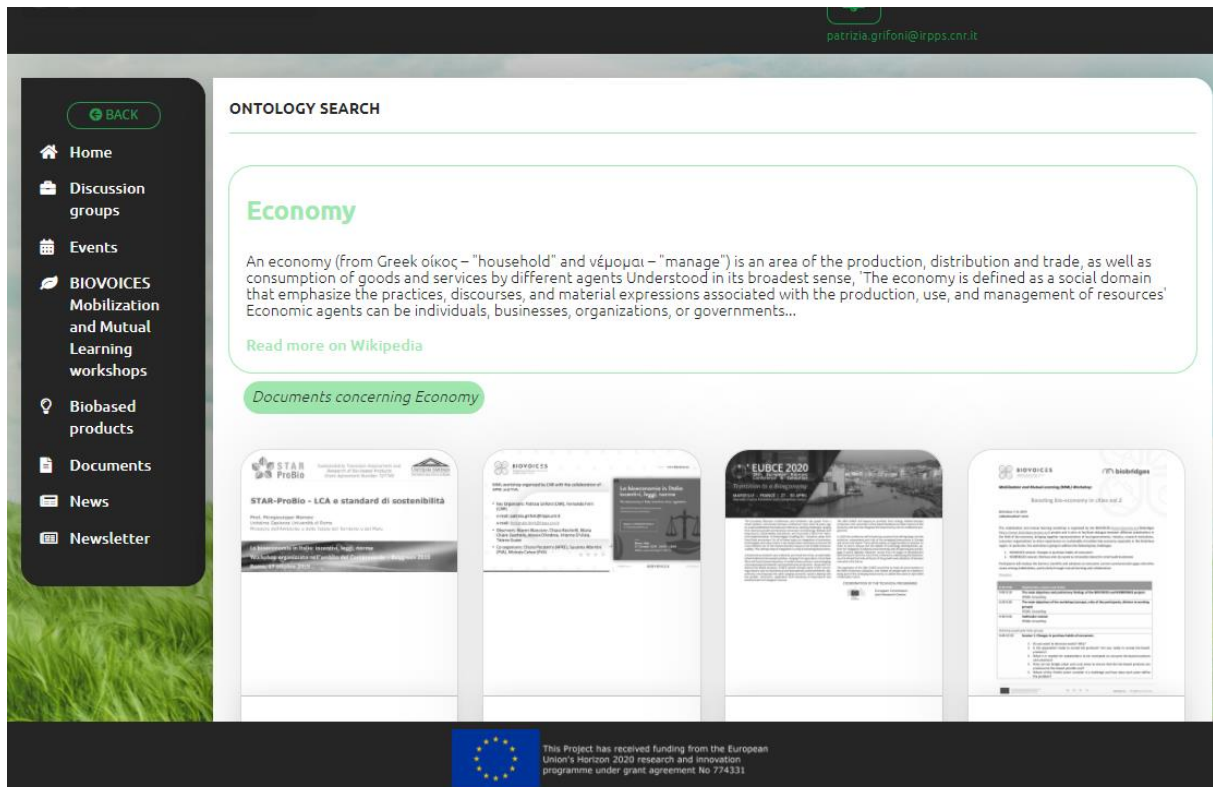
Figure 17: Full text and Semantic search

Figure 18: Output from the Semantic search

As an example of semantic search, let us suppose we are searching for "Economy".

2.9 NEWS

Most relevant and emerging information and events about BIOVOICES or other projects or bioeconomy are given in the section "News".

Each News is described by: • Title, •Subtitle, •Image, •Date, •Description, •Categories, which identify the Application sector/s the news refers to, •Topics (that are the five clusters of identified to classify the challenges), •Link to another webpage that is the primary source of the news, •News preview.

Each user can: 1) directly access to News from the "What's new" area, directly clicking on the News title, access to News clicking on the News links on the left sidebar or 2) clicking on the News links on the left sidebar and accessing the list of news (see Figure 19).
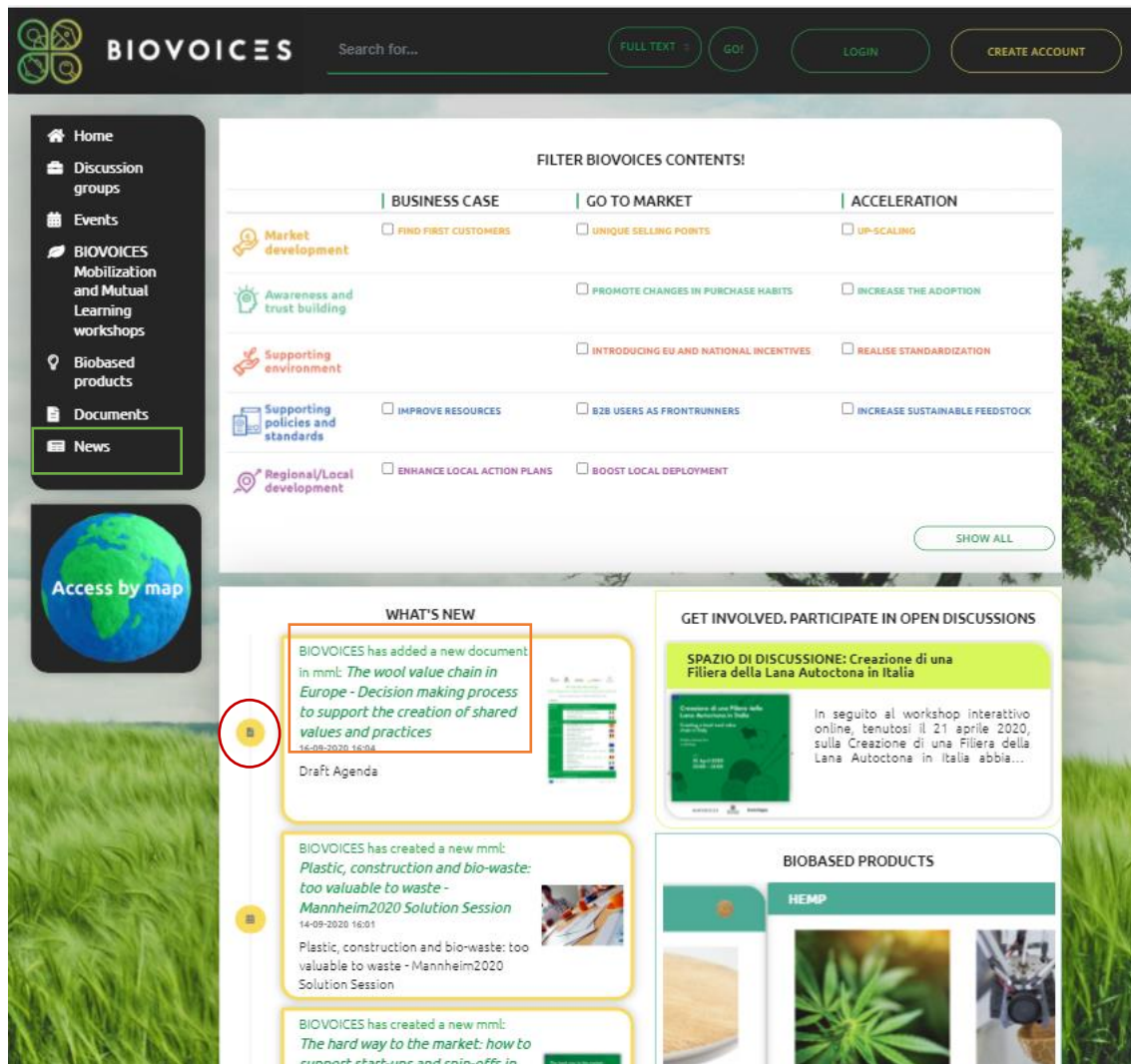

Figure 19: Accessing News

Figure 20 shows the list of news. Users can add other news when logged in.

The BIOVOICES administrator can enable sharing of selected news on the BIOVOICES website (HTTPS://wwww.biovoices.eu.
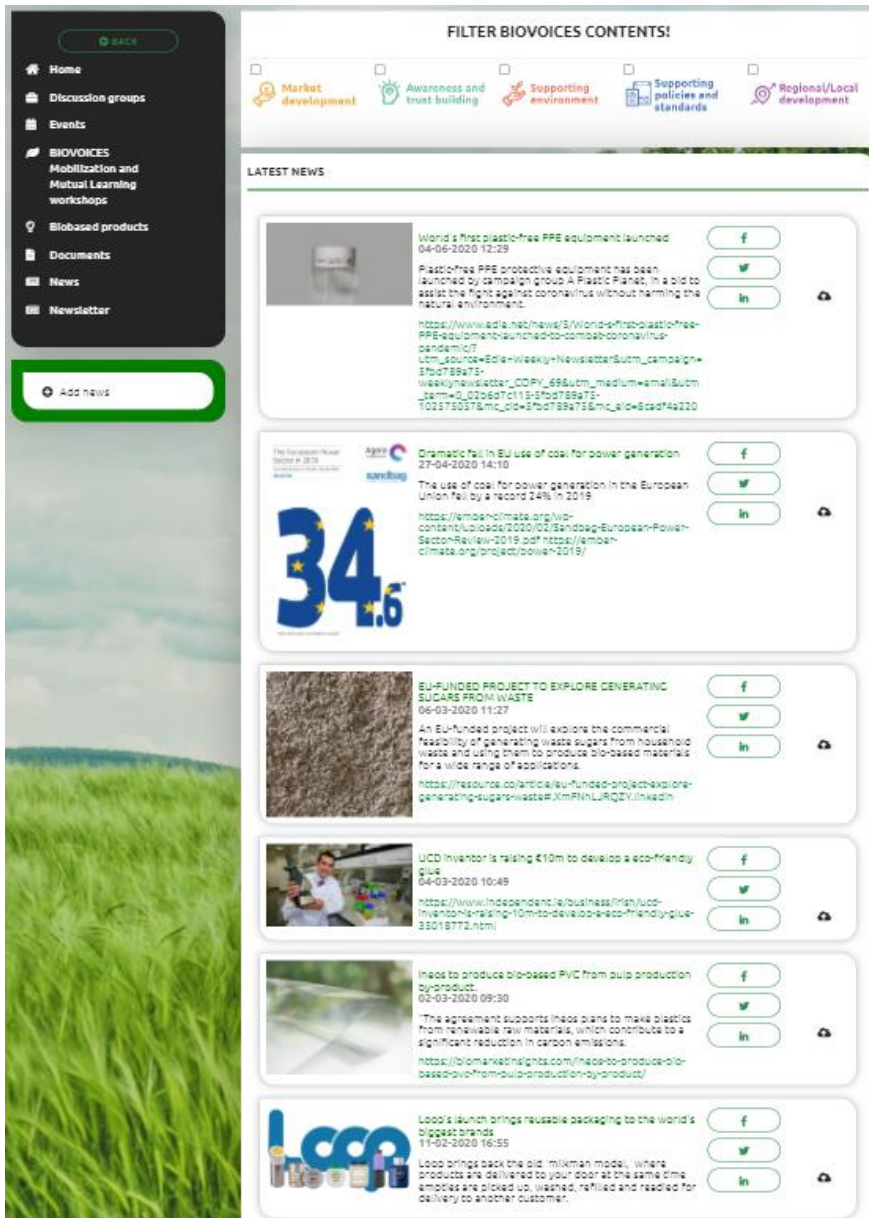
Figure 20: List of News and Adding news

3. CONCLUSION

As already explained this deliverable is the description of the status of the configuration and management of the BIOVOICES multistakeholder social platform at month 33. Version V2, taking into account of suggestions coming from users, renamed some services (For example Labs have been renamed Discussion Groups) and the Mobilisation and Mutual Learning Workshops from BIOVOICES have been distinguished with respect to the other Events.

We improved these functionalities, for example enabling the organisers to manage the organisation phase. Indeed, an organiser can manage invites, registrations of attendees. A calendar facilitates planning of the different activities.

All the other functionalities have been added, starting from the Biobased products info, the management f collections of documents, the possibility to access information by filtering and accessing

The platform will be maintained by CNR five years after the end of the project (as already established in the Grant Agreement).

4.   BIBLIOGRAPHY AND SITOGRAPHY

D3.3 - Mapping bio-based products (applications) based on stakeholders' interests

D5.1 - BIOVoices multistakeholder on line social platform: V1.0

D5.3 Population of the
BIOVoices multistakeholder on line platform with contents Report (first version

https://www.biovoices.eu

https://www.biovoices-platform-eu

https://cordis.europa.eu/

APRE, Agency for the Promotion of European Research

www.apre.it

Italy

FVA New Media Research

hwww.fvaweb.eu

Italy

PEDAL Consulting, s.r.o.

www.pedal-consulting.eu

Slovakia

National Research Council of Italy

www.cnr.it

Italy

Civitta Eesti AS

www.loba.pt

Portugal

LOBA

www.civitta.com

Estonia

NOVA ID FCT

ww.novaid.fct.unl.pt

Portugal

Q-PLAN International

www.qplan-intl.com

Greece

Frontier Management Consulting

www.frontierconsulting.ro

Romania

Wageningen Research

www.wur.nl

The Netherlands

Minerva Communications UK Ltd

www.minervacomms.net

United Kingdom

ASEBIO, Asociación Española de Bioempresas

www.asebio.com

Spain

ICLEI Europe

www.iclei-europe.org

Germany