



Results from the co-creation exercise









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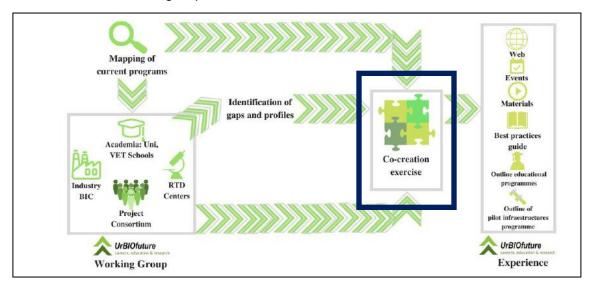


1. Introduction

The UrBIOfuture project's main goal is to bring Europe to the forefront of the bio-based sector by:

- 1) identifying education needs and gaps in Europe's bio-based sector,
- 2) pointing to career opportunities in research,
- 3) involving all stakeholders in a co-creation process that will deliver the "UrBIOfuture experience" as a pivotal tool for attracting talent and providing professional orientation.

The "UrBIOfuture experience" is conceived as a journey, a progress or passage that will allow the European industry to move forward and to reach the level of excellence that new bioproducts and processes demand in such competitive sector. In order to achieve such goal, a group of materials and events will be produced. It is expected that such an output will allow the European society to advance, decreasing skills mismatch, attracting new talent and unlocking its potential.



The co-creation exercise in the UrBIOfuture project concept

One of the main values of the UrBIOfute project is its multifaceted consortium, with pedagogy and bio-based economy experts from academia, research and technology centers and industrial clusters; and its actively engaged Working Group which bring together 21 European experts from high school, VET, university, industry and public administration (most of the entities belonging to the WG and IEG can be looked up in the UrBIOfuture Deliverable 4.1. Results from the dynamic workshop fostering dialogue organization).

After a first multiactor event organize by the UrBIOfuture project in June in Brussels, the UrBIOfuture Dynamic Workshop (see the event results here), all the project stakeholders have been directly targeted again in this preliminary step to the "UrBIOfuture Experience" design phase to boost and support the interaction among them allowing the alignment between academia educational offer and industry real needs and support dialogue and co-creation of the UrBIOfuture experience, so this can be a result of a true partnership between academia and industry.





As it will be further explained afterward, the co-creation exercise, held in Seville the 17th of October 2019, was conceived as a two-step work, focused on gathering ideas and best practices examples for the design of tailor-made materials and events of the "UrBIOfuture Experience" according to its five different target audiences (high schools, VET and university students, unemployed people and professionals):

- 1 st step: the launch of an online consultation about ideas and suggestions for the design of the "UrBIOfuture experience", to have first-hand information of what the stakeholders would have as basis for promoting careers in the bio-based sector;
- 2 nd step: a co-creation workshop involving the CM and WG with a first part devoted to the analysis and evaluation of the ideas gathered from the online consultation, and a second part where these ideas were blended with the attendee's ones, ranked and selected following an expressly developed methodology created by CTA and based on the "Empathy Map" method.

The outputs obtained from this workshop will be the starting point for the work to be developed in T4.4.- "UrBIOfuture Experience" final design.

2. The "UrBIOfuture Experience" Questionnaire

As the first step of the co-creation exercise, a short and simple online consultation was designed and launched by CTA among the CM, the WG, as well as third parties directly involved with the five "UrBIOfuture Experience" target audiences (high schools, VET and university students, unemployed people and professionals) that could give valuable inputs and ideas based on their previous own experiences and knowledge. Those third parties were also identified as potential key stakeholders for the organization of the "UrBIOfuture Experience" promotional events due to their influence on the target audiences and their call effect when participating in and disseminating an event. The design of the questionnaire was carefully thought through in order to achieve a balance between the minimum needed information and the effort its compilation could demand from the stakeholders, to promote their active participation.

To further facilitate the participation of as many stakeholders as possible, the questionnaire was translated into other languages as Spanish. In the questionnaire, respondents were asked to suggest ideas for materials and events, as well as explain related best practices, identifying:

- The target audience
- The type of material
- The idea description
- · Idea related success cases, if existing
- Personal information for contact purposes

In total, the questionnaire was sent to 87 parties and people, from which 37 answered giving 42 ideas. All the information gathered in the participants answers was carefully analysed and structured in the "Main results of the UrBIOfuture experience survey" document. This document has been considered the starting point for the co-creation exercise held in Seville, thus it was sent to all the attendees prior to the event asking them to have a look at it in advance, and presented during the first part of the event.





3. The "UrBIOfuture Experience" co-creation exercise

3.1 Date, venue and attendants of the Co-creation Workshop



As part of the multiactor co-creation process and the "UrBIOfuture experience" delivery, and after the UrBIOfuture Dynamic Workshop held in Brussels in June 2019, all the project stakeholders (CM and WG) were convened for the "UrBIOfuture Experience" cocreation exercise, held in CTA's headquarters in Seville the 17th of October. The date was set after an online enquiry for choosing the most suitable data for the project consortium and working group members to attend.

The event agenda was designed to allow a 1-day trip to Seville if possible, and to fulfill with the main purposes of this task as established in the proposal:

- 1) To present the "UrBIOfuture Experience": characteristics and main purpose
- 2) To present the results obtained from the "UrBIOfuture Experience" Questionnaire included in the "Main results of the UrBIOfuture experience survey" document;
- 3) To gather some new ideas from the attendants through the implementation of a cocreation working session following an expressly developed methodology created by CTA and based on the "Empathy Map" method;
- 4) To identify the most interesting ideas to be implemented in the "UrBIOfuture Experience" by performing a selection and ranking procedure.

The invitation to attend the meeting was sent to all the project partners, as well as the WG members and some additional guest that were also involved in the UrBIOfuture Dynamic Workshop, such as a representative from the DG GROWTH of the European Commission who is working in the area related with "Promoting education, training and skills across bioeconomy", a specific action of the EU Bioeconomy Strategy, whose main





objective is to address the skills gaps and mismatches and promote the development of curricula and training that address the needs of the bioeconomy in the long term.

All of them were asked to identify a potential substitute of their institution, in case of unavailability to attend the workshop, to have the maximum parties represented at the event.

The event was finally attended by 26 representatives of 17 European institutions:

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Type of entity	No of entities	No of people
University	2	4
VET	2	2
High School	2	2
RTO	6	7
Industry/clusters	5	11
TOTAL	17	26

3.2. Main content of the event



As indicated in the event agenda, the "UrBIOfuture Experience" co-creation exercise was structured in three sessions:

- a) A first introductory session in which the attendants were informed about:
 - 1. The UrBIOfuture project goals and expected impacts;
 - 2. The "UrBIOfuture Experience" main aim and characteristics;
 - 3. The results obtained from the "UrBIOfuture Experience" Questionnaire included in the "Main results of the UrBIOfuture experience survey" document, and used as the basis for the ideation exercise to be carried out in the parallel working planned in the 2nd session of the event;





- 4. The description of the co-creation roundtables methodology, the format to be implemented in the 2nd session of the event: an expressly developed methodology created by CTA and based on the "Empathy Map" method.
- Followed by the co-creation roundtables session, designed for support knowledge exchange and ideas generation to design outreach tailored-made materials and activities on the bioeconomy to the five project target audiences (high schools, VET and university students, unemployed people and professionals) through the "UrBIOfuture Experience";
- c) And a final general presentation of the "Co-creation Roundtables" main outputs and an open debate among the attendants.

A lunch break was organized between the first and the second session, in order to foster the networking and ideas exchange among the attendants.

As a preparatory work, the following documents were sent to all the attendants some days in advance, in order to focus the discussions in the most productive and successful way:

- the "Main results of the UrBIOfuture experience survey" document.
- The "UrBIOfuture Empathy Map" topics.

3.2.1. The "UrBIOfuture Experience" co-creation roundtables sessions

As previously mentioned, the co-creation exercise aimed at arising ideas for the most suitable design of the "UrBIOfuture Experience" according to the different target audiences of the project: high schools, VET and university students, unemployed people and professionals.

As it was for the "UrBIOfuture Experience" Questionnaire, the co-creation exercise was focused in the key elements to perform materials and events that would successfully attract new talent towards the bio-based economy unlocking its potential, thus in which message and how them would need to be communicate to the different target audiences to maximize their impact.

For that purpose, all the event attendees were pre-distributed in 3 parallel co-creation roundtables, moderated by CTA staff with the collaboration of SIE (the consortium partner in charge of the communication and dissemination activities and closely related with the "UrBIOfuture Experience" design), and focused in the different target audiences:

- Roundtable 1 High Schools Students
- Roundtable 2 VET and University Students
- Roundtable 3 Unemployed People and Professionals

Generally speaking, the consortium partners were assigned to the roundtable related to the workshop their entity has to organize in its region during the last trimester of the project, while the WG members were distributed accordingly to their entity's more related target audience.

For this event, CTA expressly developed an ideation methodology for the event based on the "Empathy Map" method.





Salio-based Industries

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes. It is a useful tool to helps teams better understand their users. Empathy mapping is a simple workshop activity that can be done with stakeholders, marketing and sales, product development, or creative teams to build empathy for end users. For teams involved in the design and engineering of products, services, or experiences, an empathy mapping session is a great exercise for groups to "get inside the heads" of users.

Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

When included in early project stages, the exercise helps teams enter the user's world and approach things from his or her point of view before creating solutions—whether it's ideas for content, a webpage design, app prototype, or new service offering. The benefits include:

- Better understanding of the user
- Distilled information in one visual reference
- Callouts of key insights from research
- Fast and inexpensive
- Easily customizable based on available information and goals
- Common understanding among teams

Based on this marketing tool, CTA created an adapted version for the co-creation roundtables, according to the topics needed for the "UrBIOfuture Experience" materials and events design: the "UrBIOfuture Empathy Map".

	WHAT IS IN IT FOR ME What does this audience this and fee What really matters to 2?	77	
2) SPHERE OF INFLUENCE What does this audience series Whe does this audience research with?	3) FORMATS How is the audience informed? What shird of formula does this audience use?	SPEAKERS/INFLUENCERS Who does this audence billow or latent to?	5) LINES OF COMMUNICATION What free of communication does this audience use?
STAKEHOLDERS FOR EVENTS What key playmer or entities could at that the audience attention during events?	7) ACTIVITIES What activities or tools should the enert's include to interest this audience?	8) EVENTS What kind of event would appeal to this audience?	COMMUNICATION MATERIALS Was lived of materials may interest this authorio? What lived of formats and message information?

The "UrBIOfuture Empathy Map" included the following topics, building an ideation process pathway:

- 1st reflective block, focused on the target audience in a broader way:
 - What is in it for me: What does this audience think and feel? What really matters to it?





- Sphere of influence: What does this audience see? Who does this audience interact with?
- Formats: How is this audience informed? What kind of formats interest this audience?
- o Speaker/influencers: Who does this audience follow or listen to?
- Lines of Communication: What lines of communication does this audience use?
- 2nd operational block, focused on the target audience in relation with the "UrBIOfuture Experience" materials and events:
 - o Events: What kind of event would appeal to this audience?
 - Activities: What activities or tools should the event include to interest this audience?
 - Materials: What kind of material may interest this audience? What kind of formats and messages/information?
 - Stakeholders for events: What key players or entities could attract this audience attention during events?

All the roundtable attendees were asked to write down in post-its their ideas in an orderly way following the topics of the "UrBIOfuture Empathy Map" pathway. A printed template of the canvas was used as a backing document for organizing and packing the post-its.

After the ideation phase through the "UrBIOfuture Empathy Map", all the roundtable attendees were asked to vote for the best idea of each topic according to their opinion. As a result, all the ideas per topic and per audience were ranked.

Operationally, the co-creation roundtables were organized as following:

- 1) Brief introduction (10'):
 - a. Reinforce the main aim of this exercise in the UrBIOfuture project context
 - b. Quick roll call of the roundatble participants and their institutios done by the moderators
 - c. "Empathy map" approach reminder
- 2) Ideation phase (50')
 - a. 1st reflective block
 - b. 2nd operational block
- 3) Voting phase (15'). Each participant would vote the best idea (1) for him/her of each topic.

The four golden rules of ideation were explained in the presentation of the co-creation roundtables methodology during the first event session, and kept in mind by the moderators during the roundtables exercise:

- 1) There are not bad ideas
- 2) Capture everything
- 3) Go for hybrid brainstorming
- 4) Quantity over quality





3.2 Main conclusions of the "UrBIOfuture Experience" co-creation roundtables session







The main outputs of the co-creation roundtables are described below, explaining the ideas gathered in each topic and the ranking obtained after the voting phase: highlighted in yellow the most voted idea (or ideas in case of a votes draw), and in blue those ideas with less number of votes.

ROUNTABLE 1 – HIGH SCHOOLS STUDENTS



What is in it for me?

The roundtable attendants exposed the concern about the level of awareness of High School (HS) students regarding what bio-based economy means, nor how it could help solve/stop climate change or global warming. However, some proposed slogans and leitmotivs that HS students might relate to bio-based economy, like global warm, ecology, bioplastic. Furthermore, some HS concerns were exposed like "finding a vocation", "earning a lot of money" and "I care in "bio" things". The most voted idea was a leitmotiv to encourage HS students: "Save the world".





- Leitmotiv to encourage HS students: "Save the world"
- ➤ I care in "bio" things
- > Finding a vocation
- > Earning a lot of money
- > Slogan: global warm
- Slogan: ecology
- "bio-plastic"
- They do not connect global warming or climate change with bioeconomy
- Does bioeconomy solve/stop climate change?
- > Is it just recycling and biowaste?
- I don't know that biology can help to the "save the planet"
- ➤ I need to change the world. Is this a way?
- Biology is done in a classroom why and how is it useful for society?
- Biology is impacted by pollution and environmental changes.
- > I do not know what it is.
- ➢ Bio-Economy is how to recycle wastes?
- Bioeconomy what's that?
- lt's something I never listened before... I'm not interested in biology... boring
- Bioeconomy what is it?

Sphere of influence

The roundtable attendants exposed that HS students mostly interact with social media (YouTube, Instagram, smartphones, apps), it was the most voted idea. Also, HS listen to parents, family, teachers, friends and trainers as speakers in their lives. Finally, other sources of information suggested were music and youth centres.

- Social Media (YT, IG, smartphones, apps)
- > Informal groups, youth centres
- Games, PC games
- Parents + family
- Music
- Teachers
- ➤ Hobby-friends (sport, etc.) + trainers
- > Peers (other students), friends

Formats

The way HS students like to receive information is social media, again it is the most voted option, with some clarifications regarding its content, like story-telling videos and trending challenges seen on social media like 30 days challenge doing something bio-related (zero wasting, eco-friendly diets, etc.). On the other hand, subject materials, projects and hands-on activities like "Do It Yourself" trending activity were suggested as good ways to engage HS students, since they prefer to work and think with their hands. Finally, other





ideas were: posters with codification (way of expression) they could relate, focused games (like games bio-based economy related), information that goes in gadgets with logos (like pens or pencils with bio-based economy logos) and posters hanged in institution halls with key messages regarding bio-based economy.

- Social media (YT, IG, POSTERS WITH OR CODE?), videos/photos, Story-telling video, Social media challenges 30 days.
- Subject materials
- Projects
- Hands-on/DIY activities
- Focused games
- Influencers
- Gadgets with logo (pens or pencils with bioeconomy logos)
- Posters showed in institution halls

Speakers / influencers

In this topic the roundtable voted had a tie and two ideas were voted with the same number of votes, besides, other ideas were also voted but with a smaller number of votes. In this context, people school-related (chemistry teachers, science teachers and other students) were suggested as most important ones to influence HS students, as well as students which has been studying at same school and succeed in bio-based economy and influencers on Instagram. In addition, other voted ideas were that good teachers and their bio-based economy messages influence also HS students. In the same line, the table thought that people who do things to "save the planet", friends and older kids might influence HS students.

On the other hand, they suggested other interesting ideas like researchers normally do not reach HS attention, therefore, they might need help to communicate bio-based economy ideas. To improve researcher's communication skill the table suggested to watch trending videos to communicate likewise.

Furthermore, an iconic person was suggested, Greta Thunberg, known as an activist against harmful actions for the world. Also, a good way to reach HS students might be through star shows like Big Bang Theory, if they'll discuss bio-based economy issues, the message spreads quickly.

Finally, social media were also suggested in the form of YouTube Video Bloggers (Vloggers). They are leaders or stars for HS students and having them (or other people) spread ideas like "organic fabric for fashion" and "organic-based cosmetics" could really influence them.





- Teachers (chemistry, science), other students, students which has been studying at same school and succeed in bioeconomy.
- Influencers on Instagram
- Good teachers/messages from teachers should be bioeconomy friendly even from those who don't teach science.
- People who do things to "save the planet", peer friends, older kids.
- > To help researchers communicate, make them see videos of communication
- Greta Thunberg
- Big bang theory shows types to make awareness
- YT/Vloggers
- Bloggers world leaders' stars
- People who spread ideas like "organic fabric for fashion", "organic-based cosmetics"

Lines of communication

With regards the ways HS students communicate, again, the most voted option was Social media, the channels were: Instagram, Snapchat, WhatsApp and YouTube. Also, other interesting options were voted: memes (images, photos and drawings that transmit ideas or reflect situations with the aim of being funny) to attract HS students' attention, since it is the content that invades HS social media. Therefore, its use in slides or presentations were also suggested. Social media advertisements regarding bio-based economy issues and solutions were also voted as an interesting idea to reach HS students.

Finally, Wikipedia, comments in social media, mobile phones games and influencers were suggested as other HS student's lines of communication. Specifically, the TV was suggested as a line of communication no longer used by this audience.

- Social media/IG/snapchat/WhatsApp/YT
- Memes to attract people attention + memes in slides
- Advertisements on YT channels.
- Wikipedia
- ➤ Not TV
- > (social media) commenting
- Mobile phones games
- Influencers

Stakeholders for events

To reach easily a HS audience, the table suggested to have science communicators like Laszlo Robert Zsirosn a science communication expert (https://www.linkedin.com/in/laszlo-robert-zsiros-5a440250/?originalSubdomain=hu).

The importance to know how to transmit research conclusions in a clear and easy-tounderstand way were suggested during all the roundtable timeline. With the same number of votes, having the researcher speaking in the HS mother tongue language is highly important.





Bringing students to research centres and industries were suggested as a feasible event idea to involve stakeholders with students, since some HS teachers shared their discomfort with previous experiences. The trouble that implies coordinating a firm o research centre with an educational institution is so high that in most cases teachers are not inclined to invite them to schools. Finally, they propose to invite celebrities to the event, although this option was not voted by anyone.

- ✓ Science communicators, like Zsiros Laszlo Robert, szertar.com
- Researches that know how to talk with students and in their mother tongue.
- ✓ To bring students to researcher centres + industries
- ✓ STARS

Activities

The idea receiving most of the votes was to have events where students can make posters related to bio-based economy ideas themselves, and after that, organise contests to make them explain those ideas, and compete for the best one. Also, other activities that involve games, challenges and/or competitions related to bio-based economy topics were heavily appreciated for being hands-on activities. At the same time, two participants suggested some activity examples they knew. CNR had the experience of letting the HS students design several kinds of tool-kit (new handson activities, plastic models or video, and boardgames) useful for science dissemination in an event targeted to HS or lower middle schools. Particularly, an example of table game developed within the Raw-Matter Ambassadors at school project (RM@School-EIT Raw Material) was a revised version of Risiko board game (Risiko is the Italian name of the Risk boardgame), titled RAWsiko, which involve raw materials in the game dynamic.

On the other hand, another example suggested were the "FAST-LAB activities. The FAST-LAB is a tool-kit useful to involve the general public during an event. Practically the Science Ambassor involves the general public in short hands-on activities (of about 10-15 minutes). A very successful approach is to prepare young people to become Young Ambassadors. This approach requires two phases: a) a training phase in which the Ambassador (generally the researcher or teacher) teaches a group of students to use the FAST-LAB toolkit and b) the application phase in which the students are involved in an event as Young Ambassadors, that is, they are asked to use the FAST-LAB toolkit to disseminate science actively, i.e. involving the participating public. This approach is twice useful because is based on an active learning of the Young Ambassador and a peer-to-peer dissemination (a student from high school is stimulated to learn from a peer).

Finally, other interesting ideas were proposed. First, having in the same room inquisitive HS students posing questions to experts, and letting them dialogue with the industry about bio-based economy processes. Second, having activities at the events where HS teachers are involved instead of HS students. Lastly, activities coordinated involving educational science centres were suggested.

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teachers are involved, instead of HS students. Lastly, activities coordinated involving educational science centres were suggested.

- Organise contests with posters.
- ✓ Games related to bioeconomy /challenges/competitions
- "Riskgame" funded in raw materials -> let them design the game, doing experiments
- ✓ Students posing questions, experts answering them
- ✓ Hands on demonstration: fast-lab practical activities (involving the society) students make the audience do the lab activity
- ✓ Activity with teachers instead of students
- √ Educational science centres

Events

The most voted option was to do events for HS students at schools. Furthermore, at the events must be small workshops or practical activities as explained before. AKG explained that a type of event might be a <u>Dragon's Den</u> type oriented to students and bioindustry. This is a reality show where entrepreneurs pitch their business ideas to a panel of venture capitalists in the hope of securing investment finance from them. So, the event idea is to have students explaining ideas for the bio-based industry in front of the industry, in a speech type way, where the industry give feedback and consider their ideas. Another voted idea was the need to encourage discussion with HS students in conferences and later, at the end of the event, take feedback from them to know how precisely the concepts were learned.

An interesting event location were suggested, neighbourhoods, obviously those with HS institutions, and make there, outdoor or in its civic centre the event. That will assure the involve of the HS student sphere of influence, therefore, the magnitude of the message transmitted.

Finally, other suggestions were to make posters at the event, yet involving the HS students in its fulfilment. Having the need to reach until high school principals, to indoctrinate them in the importance of bio-based economy to invest more in its teaching. Another idea was having skype meetings with a researcher (again, with good communication skills) since they are easier, cheaper and shorter than school visits. Involving teacher training at the event also were suggested in this topic alongside the activity one.

- ✓ Do the events at schools.
- ✓ Small workshops/Practical activity like workshops
- ✓ Bioindustry shark tank dragon's den: students must come out with an idea for the bio-based industry involving the industry in the activity.
- Encourage discussion and take feedback from the student after the explanations and conferences.
- ✓ Letting the students being part of making posters to transfer ideas.
- ✓ Raise awareness of educational institution directors of the importance of bioeconomy to invest more.





- ✓ To connect via skype with the researcher, shorter and easier than visits.
- ✓ Teacher training
- √ Neighbourhood challenge (involve his/her sphere of influence)

Communication materials

With regards communication materials, the table were very recurrent to the audio-visual materials to reach HS students, at the same time, the use of paper-based communication materials was only recommended when the kids work on it, like in poster making contests. Otherwise, only online related materials should be used. Nevertheless,

The table voted for letting the students be part of the communication materials, i.e. involve a HS student in a video, let them make their own posters to disseminate bio-based economy information and most originally, let them make an app. Currently there are smart software that let people build their own apps, like App Lap, AppInventor or Thunkable. The table suggested to let the student create apps oriented to train other in bio-based economy. A reflexion should be made here, this suggestion being as original as it is, could also be by the UrBIOfuture's partners to disseminate our results.

A way of making a video to reach HS students was suggested: making a compilation of short videos starting with an environmental or a bio-based social problem and later showing a solution from the bio-based industry.

- ✓ Be part of it for students/let the student make an app/video about the bioeconomy/they do their own posters to disseminate bioeconomy
- ✓ Apps to make decisions
- ✓ Short videos starting with an environmental or social problem and solution from bio-based industries/videos shorts
- ✓ Record the students after the event and let them explain the camera what they have learn
- ✓ Posters

ROUNTABLE 2 – VET AND UNIVERSITY STUDENTS

Although at the beginning it was though that VET and university students could have considerable differences in the "Empathy Map" topics, at the end almost all of the ideas suggested were applicable for both audiences. However, if and idea was identified specifically for one of the two audiences, it was indicated in the post-it and it can be checked in the final canvas picture.







What is in it for me?

The roundtable attendants proposed ideas mainly focused in two key messages able to attract the attention of the university and VET students and orientate their careers towards the bio-based economy field:

- 1) the opportunity to have an action on the climate change and climate crisis
- 2) the job opportunities related to this sector development

Both were the most voted ideas, with the career development opportunities, somehow related to the professional development in this sector.

Climate change/ Climate crisis / "Help your planet"
 Finding a job/ Job Success
 Career development
 It's well paid
 Opportunity for creating your own business (start-up)
 It's fun

Sphere of influence

Four mayor groups of influence were identified by the participants for the university and VET students:

1) their peers (friends, mates and colleagues),





- 2) professionals and company owners in general, and from the bio-based economy in particular:
- 3) Their families
- 4) Teachers and trainers

The first two groups were identified as the ones at with the audience sees and interact with, due to their age and their proximity to the adhesion to the labour market.

Colleagues/Students/Friends
 Professionals/Company owners
 Family
 Teachers/Trainers

Formats

The way university and VET students prefer to receive information is through social media, although it was agreed that this idea is more related with a communication channel, and the format would be "online". Aligned with this main concept, other related format ideas arose as the use of short messages, news or online tutorials.

On the other hand, other formats were identified, as companies' invitations, business visits or conferences

Social media (online)
 Short messages
 Business visits/Companies invitations
 News
 Conferences
 Online tutorials

Speakers / influencers

The most influencing speakers for these audiences were the representatives of companies and industries (employees of a bio-based industry, for example), according to the most voted idea, especially if the audience perceive them as a real success case (a former student for example). ENAIP Veneto shared a previous experience they had with the participation of a former student working for Ferrari invited by them to give a speech to their VET students that was very inspirational for them.

Other ideas of potential influences for these audiences were famous persons as youtubers and (green) influencers, sport champions or the young Greta Thunberg, globally known as an activist against harmful actions for the world.

Other influencers of these audiences identified were the teachers and "UrBIOfuture Ambassadors", conceived as VET or university students explaining their mates the interest and opportunities of the bio-based economy.





- Employees from bio-based industries
- Famous persons/Influencers
- Real success cases
- Teachers
- UrBIOfuture Ambassadors

Lines of communication

Aligned with the formats ideas previously commented, social media (mainly Facebook, Instagram and Twitter) are the main channels used by the VET and university students to consume information.

Other communication lines ideas suggested during the ideation phase were exhibitions and fairs (mainly job/career fairs), internet, newspapers, TV and brochures.

- Social media
- > Fairs and exhibitions
- > Internet
- Newspapers
- > TV
- Brochures

Stakeholders for events

Regarding the potential stakeholders to be involved in the "UrBIOfuture Experience" to maximize its impact in the roundtable audiences, the ideas and ranking was aligned with the audiences' speakers and influencers: professionals (intending companies' employees and researchers was the most voted idea. Concepts as success story provider and former student coincides with the idea of inviting a professional that can be seen as a real case at the student's hand, so they can be inspired by this person experience and willing to address their career in a similar way.

Other ideas from the participants were: to invite speakers related with sustainability (as NGOs), the public sector as potential employer or a famous speaker.

- Professionals (company or researcher)
- Success story provider
- > Famous speaker
- Sustainability related entity (NGO)
- Public sector as potential employer
- Former students

Activities

Once more, for the events activities, those related with the companies pitching were the most voted. The inclusion of competition activities among the students (such as videos explaining what the bio-based economy is) were also well considered due to the motivation it could cause. Other ideas were the networking activities in a casual environment (with some food and drinks), site visits, the design of games and guizzes,





the inclusion of information about specific bio-based products examples or the use of sexy and fancy titles for the activities that would attract the audiences.

Companies pitching
 Video competition
 Food/Drinks networking
 Specific bio-products examples
 Gaming/Quiz
 Site visits
 Sexy and fancy titles

Events

The most interesting format for the events according to the voting results were the open days that will bring the opportunity to visit bio-based industry facilities, research pilot facilities, etc. Site visits and study visits were also well considered, as well as job fairs or "job dating" with bio-based industries. Other ideas aroused in this topic were workshops, social event, open calls, hackathons, seminars and practical shows.

Open days
 Site/Study visits
 Job fairs/ "Job dating "with bio-based industries
 Workshops (with industrial partners)
 Social event
 Practical show (case study)
 Open calls
 Hackathon

Communication materials

Agreeing with the main idea of the use of online and audiovisual concepts as the most attractive ones for these audiences, the most voted ideas for the communication materials of the "UrBIOfuture Experience" for these audiences were the videos based on images, pictures and cartoons, videos with real cases testimonials and a "bioeconomy challenge (following other successful publicity campaign such as the "Ice Bucket Challenge").

Other ideas about communication materials were the Pecha Kucha pitching¹, an online quiz about bio-based economy and other interesting contents in the UrBIOfuture website and the use of an attractive UrBIOfuture leitmotiv and key messages.

>	Pictures video
>	Cartoon video
>	Bio-based economy challenge
>	Testimonial Videos
>	Pecha Kucha pitching

¹ https://rapidbi.com/pecha-kucha-or-the-20x20-presentation-technique/







- Online quiz in UrBIOfuture web
- > UrBIOfuture Web contents
- Key messages
- UrBIOfuture leitmotiv

ROUNTABLE 3 - UNEMPLOYED PEOPLE AND PROFESSIONALS



Roundtable 3 had to deal with a bit more complexity than the two previous ones because potential profiles of its target audience could be more diverse. Unemployed people major interest is "to seek a job", a big challenge difficult to address with a clear component of urgency, while professionals' interest "to know more about a bio-based opportunities for job improvement" it is easier to satisfy. On the other hand, education level and age of these two types of audiences could also be different:

- Unemployed young people with VET or university education
- Unemployed old people with VET or university education
- Young professionals with VET or university education
- Older professionals with VET or university education

Regarding "lessons learnt" from roundtable 2, almost all of the ideas collected could be useful to engage both audiences: young people with VET or University education level. However, regarding older vs young unemployed and professionals needed a different approach. The roundtable participants "doubled" their empathy exercise by trying to wear





both hats "feeling as a young person" and afterwards "feeling like an older person". This complexity was reminded all along the roundtable so trying to do not forget about the specific needs to cover in order to engage both audiences in the UrBIOfuture experience. However, when voting, each roundtable participant had to wear the shoes of one type of profile. It was agreed to prioritize the most vulnerable audience consider older unemployed people or alternatively ideas that could be attractive for both young/old unemployed people and professionals, when possible. In any case, it was commented hat when getting into the materials and event design ideas developed in all roundtables should be taking into account to guarantee the highest audience attendance possible. A major message emerge at the end of the roundtable co-creation exercise which is that UrBIOfuture Experience, as this name suggests, should focus its promotional events mostly dedicated to provide all kind of direct and tangible experiences in order to maximize impact on the audiences about the opportunities that rises the bio-based economy sector.

What is in it for me?

Proposed ideas where organised in 3 groups, being group 1 ideas specially relevant for unemployed people, group 2 those ideas of mayor interest for professionals and group 3 ideas considered "source of inspiration" -useful to take into account for both groups 1 and 2 - as they were highlighting the importance to address their emotional needs. Most voted ideas where those addressing the audience major interests, jobs (unemployed) and job improvement (professionals). However, ideas voted in group 3 where consider good candidates to cross-fertilise the What is in for me? approach of both audience profiles to engage (unemployed and professionals).

- Jobs (unemployed): What is the opportunity for me? Where are jobs? What they do pay? A job with future and security that provides better quality of life
- Improvement (professionals): A sector in full formation and transformation. Will be an opportunity for me, for career development? Will be a sector growth to move in?
- Source of Inspiration Something new, Resolve lack of motivation of unemployed, Be inspired about BBE is the future!, . Important to see a clear route to get into BBE, New career paths, Identify New Knowledge involved, Opportunity, Professional Growth
- On-line education?
- More meetings
- New training

Sphere of influence

Roundtable participants consider that both, older unemployed and professional shared similar sphere of influence consisting on competent and successful professionals. Young unemployed and professionals also did, being social media the most mentioned.





- Other professionals
- Competent professionals,
- Successful people
- Social networks
- Social media
- > Their particular social media bubble
- Advertise bio-based products
- Life career coaches
- Similar minded
- Family & friends

Formats

It was suggested by the roundtable participants, the way people get in touch with information about jobs or professional opportunities seems to be very different depending on the age. So, while older people do it mostly by meeting people face-to-face in professional event (conferences, technical congresses, etc...) young people tent to access multimedia contents and social media.

- Face-to-face meetings
- Meeting peer groups (attending conferences, congresses, etc...)
- Written information
- Multimedia contents
- Millennials Audiovisual while older people write/faceto-face
- Social media

Speakers / influencers

In this case no differences were detected between all the kind of audiences to engage, the most influencing speakers for all young/older/unemployed/professionals were successful professional people that actually do their dreamt job, like representatives of companies and industries or employees of a bio-based industry.

- Successful professional people who do their dreamt job
- > TV series
- Celebrities
- Product influencers

Lines of communication

Most effective lines of communication identified by the roundtable participants for all kind of education levels regarding unemployed and professionals were Linkedin and other options regarding personal contact by networking in technical congresses, by email or using emproyment fairs. Other possibilities supported also by the participants were the word of mouth, networking attending masters, sectorial events or business schools or getting involve in employers networks of employment portals.





- LinkedIn
- Networking in technical congresses
- Emails with personal content
- Employment fairs
- Word of mouth
- Business schools, Masters, Sectorial events
- Employers networks
- Employment portals
- Whatsapp groups
- Voluntary work
- Work for free to get experience

Stakeholders for events All the roundtable participants agreed in suggesting as the most effective stakeholders to be involved in the "UrBIOfuture Experience" were companies and industry. For two reasons, they are potential employers and also, their employers can be a source of personal experience about how to get a job in the bio-based sector. They were considered key to maximize events impact in engaging target audiences (unemployed or professionals or any age or level of education).

- Companies
- Industry, employers for networking
- Key players parties present
- Sector, organizations
- > Famous person
- Professionals
- > TV-media

Activities

For the events activities, roundtable participants suggested impacting experiences like apprentice or Hack-a-Thon to prove knowledge and get in contact with employes, and also networking opportunities to meet potential employers (industry) talk and seek employment.

- Experiences: Price of a job like the apprentice!!, Hacka-Thon to prove knowledge and get in contact with employees
- Networking: opportunities to meet and talk, seek employment, leave with something tangible (good use of time)
- Pecha Kucha pitching
- Activities running in parallel to chose

Events

Once again, roundtable participants highlighted the importance of including in UrBIOfuture experience promotional events high impact experiences, like a marketplace of bio-based products or of bio-based ideas that could rise along a design thinking exercise. In line with providing all kind of impacting experiences to the audience the event should try to be a low CO2 finger-print event and/or have its venue in an industrial location.





- Experiences: marketplace of bio-based products, of ideas, design thinking
- ➤ It must be a low CO2 finger-print event
- Event in industrial location. Open company Day
- Environment & Unemployment & bio-based economy Day
- Link it to an international event day
- Lots of people in action and NOT 1 person standing at front
- Include evaluation of the event
- Organise contests & awards

Communication materials

The roundtable participants consider that again the communication materials should also be a source of bio-based economy experience in order to rise highest audience engagement and satisfaction. So, suggested very innovative ones like communicate biobased economy using bio-based products or gaming related to bio-based sector value chain building (an example was shown from VITO) or use biomimetics (good examples taken from nature like a bees honey comb) to explain what is bio-based economy. Use of cartoon videos or testimonial videos (bio-based smes success cases for example) or to define a bio-based economy challenge and correspondant contest/awards). Other ideas about communication materials were the Pecha Kucha pitching, an online quiz about bio-based economy and other interesting contents in the UrBIOfuture website and the use of an attractive UrBIOfuture leitmotiv and key messages.

- Something tangible like bio-based products
- Gaming
- Use biomimetics to show what is circular bio-based economy (eg. bees honey comb)
- Cartoon video
- Bio-based economy challenge (Organise contests & awards
- Testimonial Videos
- Audiovisual materials
- USB of materials to take away
- Incorporate QR codes to reach specific contents or audiovisual materials
- Augmented reality
- Multimedia content





3.3 Other ideas discussed during the event



Some general ideas discussed throughout the The "UrBIOfuture Experience" co-creation exercise were:

- 1) How are the trainers for the different audiences? How the UrBIOfuture project plans to reach them?
 - Maybe in the case of high school, VET and university students it's clearer and easier, but not that much in the case of unemployed people and professionals that are a very heterogeneous skilled and aged audiences. It seemed clear than in these cases the engagement of the public employment agencies as a first step "UrBIOfuture Experience" promotion stakeholder is mandatory.
- 2) University, VET and high school educational programmes are set up by the different countries educational ministries, so it makes it difficult to implement the changes suggested by the "UrBIOfuture Experience" (which includes a draft of the outline of an educational program addressing the gaps and skills needed by the bio-based industry and not meet by the current educational programmes) from the educational institutions.
 - In this case, the "UrBIOfuture Experience" is conceived as a first step to make the change happen. Educational ministries and their advisors should be reached during the "UrBIOfuture Experience" implementation to let get to know the project results. However, as funded by the BBI, the project results will be acknowledge by the European Commission which could influence, in the mid-term, towards the changes needed in the member states educational programs in order to foster the bio-based economy and training programs aligned to the bio-based industry needs, boosting new job opportunities.





3) According to the differences among the project audiences, should we create different UrBIOfuture social media profiles?

This option was not recommended by the communication experts attending the workshop, suggesting as alternative the inclusion of different content and messages targeting each audience.

3.4 Co-creation exercise assessment

After the debate, all the attendants were pleased to fill in a brief questionnaire about the event.

This are the final average marks of the 15 answers received (up to 5):

Venue and arrangement	4,67
Themes and contents interest	4,80
Communication with/from the organisers	4,87
General event organisation	4,93
Preparation actions: information about the purpose and main objectives of the event	4,67
Preparation actions: quality and usefulness of the preparatory documents	4,73
Co-creation roundtables organisation	4,87
Speakers quality	4,80
Overall evaluation	4,83