



Boosting European Citizens' Knowledge and Awareness of Bioeconomy Research and Innovation

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Over the last months, the five regional BLOOM bioeconomy hubs have been very active with their outreach activities, enhancing knowledge and awareness of bioeconomy research and innovation in Europe. Different events, exhibitions and speeches were organized and have attracted a wide audience. International exchange always leads to new perspectives: students from Austria visited several scientific institutions, companies and organizations in the Netherlands to learn more about bioeconomy. And students from Poland travelled to Austria to participate in a workshop on bioeconomy and sustainable rural development and to visit a biodynamic farm. Find out more in the articles from our bioeconomy hubs in this newsletter.

Are you a teacher? Then get ready for the [BLOOM Stories of Implementation Competition!](#) In collaboration with the STEM Discovery Campaign 2020, the BLOOM project is inviting primary and secondary school teachers of all subjects to use bioeconomy as a way of engaging pupils in school subjects, and to share their stories of implementation. You can already start organising your lessons and prepare your stories of implementation to be submitted in February 2020! The competition will reward the most innovative classroom implementations.

We are continuously developing information and outreach materials on bioeconomy. Did you know that textiles can be made out of wood? In September we released the first episode of our video series on bioeconomy, a [video on "Wooden Shirts"](#) filmed in Austria. Moreover, we published a [quiz where you can test your knowledge on bioeconomy!](#)

We hope you will enjoy reading our newsletter!

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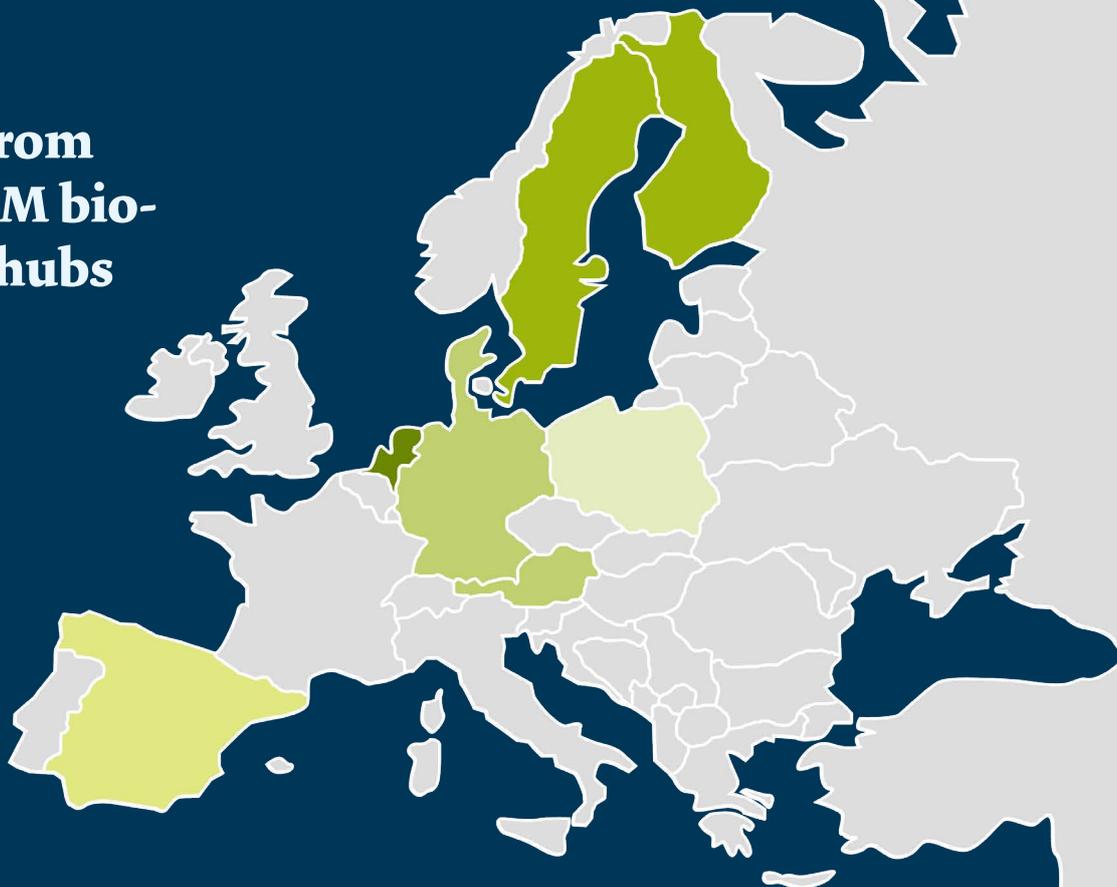
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Updates from the BLOOM bio-economy hubs



Dutch Hub

Area: Bio-chemicals and bio-plastics

The hub follows and promotes new cross-sectoral collaborations between chemical companies and the agro-industry



News from the Netherlands

Dutch Design Week in Eindhoven

BLOOM participated at the [Dutch Design Week](#) in Eindhoven, a 9-day exhibition from 19th October to 27th October 2019, the largest Design exhibition in Europe. BLOOM was part of the Embassy of Sustainable Design, at the Van Berlo Design Studio – the Innovation Powerhouse. The Embassy was an integrated exhibition, developed by the Embassy partners and 2 curators, who designed this exhibition. The other Embassy partners

were multinational companies such as Ikea, Friesland Campina and Renewi, all showing their ambitions within the circular economy. Further participating institutions were knowledge partners such as Universities of Delft and Eindhoven. Design Academy and Artez Arnhem represented designers who work with biomass and with waste materials.

In order to inform the visitors about the potential of the biobased economy, we have chosen to show the value chain from plant to biobased products. We chose two crops and showed the intermediate and final products:

Maize/Corn ----> PLA ----> packaging material, biofoam, bioplastics (Mouse), textiles (T-shirt, bag)

Miscanthus ----> Granulate (fibers/starch) ----> bioplastics (Lunchbox)

Miscanthus ----> fibers ----> construction materials (concrete) or papers and packaging



As examples, we decided to highlight the products of Corbion, Nature Works (both working with PLA) and Vibers (product development based on Miscanthus) as examples. To show how these value chains function, we used the BLOOM banner, two videos (the “[wooden shirt](#)” by Lensing, and a video based on our [dynamic presentation of the bioeconomy](#)) and the [BLOOM quiz](#).

We generated an enormous outreach: 25.000 people visited the Embassy of Sustainable Design. Different target groups were successfully reached, including the general public of all ages (elderly people, families and young people), interested in new developments. Also, many professionals from local, regional, national and international locations visited the exhibition, looking for new materials for application in different sectors

(textiles, packaging, fashion, construction, architecture and product designers).

The activity exceeded our expectations. We were continuously interacting with visitors during the 9 days. When people stood at our stand, we engaged in interesting conversations with them and explained our exhibition. There was a lot of interest and much discussion. Often people were surprised about the potential of plant-based products and that these developments are still relatively small. People were interested in the conversion techniques, the quality of the biobased products, where to buy these products and in climate issues (replacement of fossil fuels). Further we received many questions about the degradability of biobased products.

Outreach activities 2020

In 2020 a Gallery Walk will be developed and applied in the Emmen region and also in the municipality of Wageningen. Further BLOOM will participate in the [Expo on Sustainable Plastics and Materials](#) in Emmen.

Remco Kranendonk, Wageningen University & Research



Would you like to participate? Get in touch with the Dutch Hub:

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Nordic Hub

Area: Wood based products

The Nordic hub (Sweden & Finland) aims to raise public awareness about the possibilities of forest products.



News from Finland and Sweden

Bio-based and circular materials entered the library in the Nordic hub

Have you ever heard of banana fabric? What about leather made out of pineapple leaves? Did you know that one way of dealing with the ocean's plastic problem is to make fabric out of it? And that wood can be turned into soft fabrics and hard, waterproof bathroom furnitures?

These issues were presented and discussed in Central Finland, where the BLOOM Nordic hub organized an exhibition called "Get inspired from new bio-based and circular materials!" together with Creative Circular Economy project in Jyväskylä Central Library. The exhibition was open from the 12th November until 7th December 2019. During the exhibition, an open discussion session named "Let's talk about wood!" was also arranged in the library in order to raise awareness and discussion around whether wood can replace plastics.

Concrete examples of bio-based and recycled materials

The „Get inspired by new bio-based and circular materials!“ exhibition presented a variety of examples of fabrics that were made either from bio-based or recycled materials. The exhibition also included material and product examples of what can nowadays be made out of wood, and on how these solutions relate to global problems.



The idea was to showcase that there exists environmentally friendlier alternatives for many widely used materials or products, and that people could see and feel the concrete examples by themselves.

There were very traditional examples that have been used for decades – although somehow forgotten today – whilst on the other hand, examples still in development and not yet commercialized. Most of the bio-based fabric materials, such as hemp or nettle fabric, are very traditional fabrics which were used more commonly in the past. There were also a number of newly inven-



ted bio-based fabrics, such as pineapple leather that Pinatex is producing. These are new ways of strengthening the circular economy as the waste products of pineapple production are turned into high added value products that are suitable for those who don't want to use animal leather. The wood-based product examples were all new innovations, from which mechanically made wood-based textile by Spinnova and wood-based cushioning material by VTT aren't yet commercialized as product development still continues.



Guided tours were arranged in the exhibition twice a week and also tours were offered outside of predefined times on request. During the guided tours, we had the chance to have a lot of good discussion with the visitors about sustainability. Also new opportunities for collaboration were created when giving a guided tour for a student group studying in the environmental field.

All in all, the exhibition attracted attention amongst the library visitors and received a very positive reception shown through the many visitors signing the guest book.

Can wood replace plastics?

Yes it can, but we shouldn't replace everything, argued Senior Scientist Elina Pääkkönen from VTT Technical Research Centre of Finland. The topic was discussed in the „Let's talk about wood!“ open discussion session on 21st November that was organized in the library as a side event of the exhibition.

The presentation was very topical attracting some very active participants in the audience and many by-passers stopped to listen to the discussion. Elina is a true expert in the field and with her inspiring lead, the discussion would have continued until the closing time of the library!

One of the main messages Elina brought out was that it

is really important to think where the benefits of a specific material exceed the benefits of the competing materials. Conventional plastics have gotten a bad reputation in recent years but despite their drawbacks, they still are materials that outperform many others with their diverse qualities. In some applications, conventional plastics may still have better qualities compared to bio-based plastics and their use in these applications may be well reasoned. In some other applications, bio-based plastics have greater benefits than conventional plastics and therefore bio-based options should definitely be favored and further developed.

This is a topic researchers and product developers have to consider. But, from the consumer point of view, the main things are to reduce consumption and to recycle the plastics correctly – no plastics, whether it's bio-based or conventional, should enter the environment!



Aino Voutilainen, JAMK University of Applied Sciences



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Spanish Hub

Area: Food and agriculture

The hub promotes networking between all the actors involved into the agri-food sector in the Mediterranean area.



News from Spain

Launching C3-BIOECONOMY, an innovation journal on Circular and Sustainable Bioeconomy!

In the framework of the BLOOM project, the Spanish Hub is getting ready to launch a journal focused on bioeconomy! The C3-BIOECONOMY!

The bioeconomy encompasses all sectors and systems based on biological resources, their functions and principles, including agriculture, forestry, fisheries, food and bioindustries, and it is a key sector to encourage growth in rural and coastal areas. The European Bioeconomy Strategy addresses the production of renewable biological resources and their conversion into essential products and bioenergy. Since its update in 2018, the Strategy is focused on accelerating the deployment of a sustainable European bioeconomy to maximize its contribution to the Agenda 2030 and its Sustainable Development Goals (SDGs), as well as to the Paris Agreement: *'The bioeconomy must be circular, so that biological resources are maintained as long as possible in the productive chain in order to ensure that there are no unexploited resources'*. A sustainable bioeconomy contributes to **modernization and strengthening of the industrial basis**, through the creation of new value chains and more ecological and profitable industrial processes; it is the **renewable section of circular economy**, which can transform bio-waste, waste and discard materials from valuable resources and generate innovations and incentives to help retailers and consumers reduce food waste; and it promotes **healthy ecosystems**, contributing to their restoration.

C3-BIOECONOMY is going to be an international innovation journal on Circular and Sustainable Bioeconomy, on an annual basis, focused in the **agri-food and forestry** field and with a multisectorial approach. It accepts works from all sectors of the innovation system with particular

emphasis on business and academic sectors. In general, it includes innovative papers, written in Spanish or English, that deal with topics on food innovation, agriculture and forestry, and bioproducts and bioprocesses related to the agri-food and forestry sector.



C3-BIOECONOMY is going to be divided into the following specific sections:

- Sustainability of productive systems: energy, water and other natural resources
- Biotechnologies and bioprocesses in the food chain
- Biorefineries and bioenergy in agrifood and forest systems
- Bioproducts of high added value in food, health, cosmetics and industry
- Socio-economic issues related to bioeconomy

C3-BIOECONOMY is a combination of efforts, linking highly qualified research institutions with experience in knowledge transfer within areas of the journal scope. It is founded by the **Agrifood Campus of International Excellence (ceiA3)** and edited by the **University of Córdoba**, thanks to the network and work generated in BLOOM. We invite everyone to [stay updated about the Spanish Hub!](#) The journal is coming soon!



Would you like to participate? Get in touch with the Spanish Hub:

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Austrian & German Hub

Area: Innovative circular materials

This hub aims to better integrate stakeholders and increase the general understanding and interest for a bioeconomy.



News from Austria and Germany

Release of “Wooden Shirts” Video

In the beginning of September, we released an [educational video on wood-based textiles](#). The video was produced by [Otelos eGen](#) in cooperation with the [Eco-social Forum Austria](#) & Europe as part of the BLOOM video series on bioeconomy. One of the filming sites was the headquarters of [Lenzing AG](#), a global leader in cellulose fiber based in Upper Austria. The video also features input from academic experts and is available online to a broad European public. It imparts the promise of this bioeconomy sector to vastly improve the current ecological footprint of the textile and fashion industries.

Watch the „Wooden Shirts“ video now by clicking on the image:



Ecosocial Study Trip to the Netherlands

On the 25th of September, students and young farmers from Austria took off to the Netherlands, where they

were able to dive deeper into the field of bioeconomy and circular economy and to engage in workshops, seminars and hands-on experiences. The young people visited scientific institutions, companies and organizations, starting with a flourishing discussion about how to integrate bioeconomy in the daily life, during a workshop in the train.



After a long journey, the group went to the University of Wageningen to shed light on the topic of bio-plastics and bioeconomy in general. During a tour through the Biolabs and a presentation of sample products, a vivid discussion about potentials and difficulties of the bioeconomy occurred. Especially, the notion of a technical versus a more holistic approach to bioeconomy was debated by the participants.

Furthermore, the participants visited the World Horti Center, an innovative glasshouse center, which unites education, research, politics, trade and industry in the field of glasshouse production. The center is the first of its kind, which combines knowledge and innovation.

Afterwards, the group visited the Floating Farm, the first offshore dairy farm in the world. The activities follow a circular approach. For the participants, it was

of special interest that it supplies itself with electricity by means of floating solar systems, as well as that rainwater is collected by a special roof construction and introduced into the cycle. The final part of the program was an excursion to Rotterzwam. This company produces edible mushrooms from coffee grounds and re-thinks waste and recycling management. As a final activity of the study trip, the students experienced bioeconomy within a hands-on activity, where they built their own mushroom farm to take home. Find out more in our [blog post](#).

Bioeconomy – Motor for Sustainable Development in Rural Areas?

International exchange always leads to new perspectives. Following that motto, Austrian and Polish students, farmers and researchers within the field of bioeconomy got together in a deliberative workshop format. This workshop was a joint undertaking of the Ecosocial Forum Austria & Europe and the Polish Hub, the Federal Institute of Agricultural Economics, Rural and Mountain Research, as well as the AgrarThink-Tank.

Young people under 30 were invited to discuss the challenges, necessary framework conditions and policy options, for a bioeconomy to foster sustainable development of rural regions in Europe. First, three experts gave inputs about social, ecological and economic issues related to a rural perspective on bioeconomy. This was followed by a world café format, during which participants actively engaged with the experts. On three tables, participants elaborated on ethical and rational aspects of land use competition, innovation and rural development. More information and lecture slides [can be found here](#).

Planned Activities in January and February 2020

On the 23rd and 24th of January, four gallery walks will take place under the motto “[bioeconomy to touch](#)”. The aim is to offer a vivid opportunity to get in touch with real examples of bioeconomic action. In an interactive format, participants will get in touch with real showcases – provided by Austria’s pioneers of bioeconomy – followed by a discussion with leading experts of the field. It will take place in the Foyer of the [6th Central European Biomass Conference CEBC 2020](#) in Graz on the following dates: Thursday 13:00 – 14:00 & 15:00 – 16:00 Friday 11:00 – 11:45 & 14:00 – 14:45.

The valuable output of the preliminary Co-Creation Workshops and refining Webinars is informing a series of Outreach Activities. The next activity will be a TV discussion about Bioeconomy at a local TV station in Austria. It will be conducted in February 2020.



Would you like to participate? Get in touch with the Austrian & German Hub:

Ökosoziales Forum, Austria

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Wissenschaftsladen Bonn, Germany

Norbert Steinhaus: norbert.steinhaus@wilabonn.de



Polish Hub

Area: Food and agriculture

The main objective of the Polish hub is to increase interest in bioeconomy studies and education.



News from Poland

Bioeconomy Outreach Activities - from an Organic Food Market to a Study Trip to Austria

On 5th October 2019, together with Ekosfera Mateczny – organic food market we organized a family event. On the rainy and cloudy day, the customers of the market could take part in a game joined with a gallery walk format. At five stands, participants gained knowledge about the bioeconomy and various issues related to food production. They could also answer questions related to the topics presented at each position. At the same time, the youngest participants solved sensory puzzles by recognizing plants, herbs, grains, vegetables and fruits by smell, sound, touch and taste. Correct answers and a completed scorecard entitled participants to receive awards - organic food from producers present at the market!

From October 21st to 23rd, we organized workshops for the „young ambitious“ group. Among those who volunteered were students, PhD students, scientists from various universities and research centers, farmers and even an importer of natural wines who wanted to see sustainable farming methods. The first day of the workshop took place in Pamhagen Burgenland in the organic, biodynamic farm and winery of Michael Andert, who is also a certified herb educator. He presented his methods of work in the garden and vineyard, including plant protection means based on herbal infusion, ways of selecting plants and herbs so that they are a natural protection for each other and natural fertilization methods. The farm with its animals, plants and people is a closed loop, there are no resources wasted, as all the biomass here is useful and its value is understood.

The participants could also see a difference in the soil quality, condition and biodiversity in organic and biodynamic vs conventional vineyard.



The next day everyone took part in a whole day workshop titled “Bioeconomy – Motor for Sustainable Development in Rural Areas? Challenges, Preconditions and Policy Options” organized together with Ecosocial Forum Austria and the Federal Institute of Agricultural Eco-

nomics, Rural and Mountain Research, where after the presentations by bioeconomy experts there was time to work together on topics chosen by the experts like: “Prospects for agricultural capacity – A European Perspective; Future Innovation Necessities in Societal Practices for a Circular Economy” and “Bioeconomy as a Driver for Rural Development?”

Our next outreach activities will take a place in January 2020. We will be organizing two workshops:

- **precision farming**, together with the CLAAS company. The goal of precision farming is to recognize differences in soil properties and yielding capacity in individual parts of the field, and to respond appropriately to this information (probably 17th January)
- **bioplastic production**, together with Polish Science Academy. The participants will be able to spend 2 days in the bioplastic lab, where they will run their own process of creation of bioplastic, and a group of art students will work on possible design for industrial application of oil-based bioplastics (probably 20th - 21st January)

Also in January we will start a cooperation with youngest stakeholders – three primary schools contacted us to organize for their pupils an educative event based on a competition in the area of bioeconomy. We couldn't say “no”...

Malgorzata Pink, University of Agriculture in Krakow



Would you like to participate? Get in touch with the Polish Hub:

University of Agriculture in Krakow, Poland

Malgorzata Pink: malgorzata.pink@urk.edu.pl

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Adam Mandziejewski: adam.mandziejewski@kopernik.org.pl



Upcoming events

Would you like to participate? Join our regional bioeconomy hubs and BLOOM project partners in one of our upcoming events! Get in touch with the hubs to find out more.



17.01.2020 (TBC)	Precision Farming Workshop, together with the CLAAS company	Poland	Polish Hub
20. - 21.01.2020 (TBC)	Bioplastic Production Workshop, together with Polish Science Academy	Poland	Polish Hub
23. - 24.01.2020	“ Bioeconomy to Touch ” Gally Walks at the 6th Central European Biomass Conference CEBC 2020	Graz, Austria	Austrian & German Hub
27.01.2020	Third co-creation workshop	Jaen, Spain	Spanish Hub
07. - 08.04.2020	BLOOM at the Sustainable Plastics & Materials Expo 2020	Emmen, Netherlands	Dutch Hub

Updates from the BLOOM school network



Sharpen your pencil for the BLOOM Stories of Implementation Competition!

All over Europe and beyond, teachers are looking for innovative ways to engage their students with the big issues facing today's societies. In collaboration with the STEM Discovery Campaign 2020, the BLOOM project is inviting primary and secondary school teachers of all subjects to use bioeconomy as a way of engaging pupils in school subjects, and to share their stories of implementation.

Teachers can already start organising their lessons and prepare their stories of implementation to be submitted in February 2020! The competition will reward the most innovative classroom implementations in four different categories of submission:

- Teaching with bioeconomy in primary schools (individual work)
- Teaching with bioeconomy in secondary schools' STEM classes (individual work);
- Integrating Science, Technology, Engineering and Mathematics (STEM) teaching with bioeconomy (teams of two STEM teachers of different subjects)
- Integrating STEM plus any non-STEM subject (known as STEM) teaching with bioeconomy Integrating STEM teaching with bioeconomy (teams of up to three teachers of different subjects, including at least one STEM teacher and at least one non-STEM teacher).

What are the next steps?

From November 2019, participants can...

1. Choose which [BLOOM School Box resource](#) works well in their classrooms from the BLOOM School Box collection.
2. Think of how they will implement bioeconomy in their classroom and if they will work collaboratively with other colleagues or on their own.
3. Run at least one bioeconomy lesson with their students and think about what evidence they have of their students' engagement following their lesson(s).

The competition is open for submissions from February 2020 to 30th April 2020 at 23:59 Central European Time (CET).

Interested? Don't forget to:

- [Check the competition's page for more info](#)
- [Read the competition's terms and conditions](#)
- Explore the [BLOOM School Box](#)
- Fill in the submission form (available from February 2020)

The winners of each category will be invited to a teacher training workshop in Brussels, with travel, accommodation and meals covered, and the 20 finalist entries will be published on the School Network page of the BLOOM project!



[Follow the updates on the competition page](#)

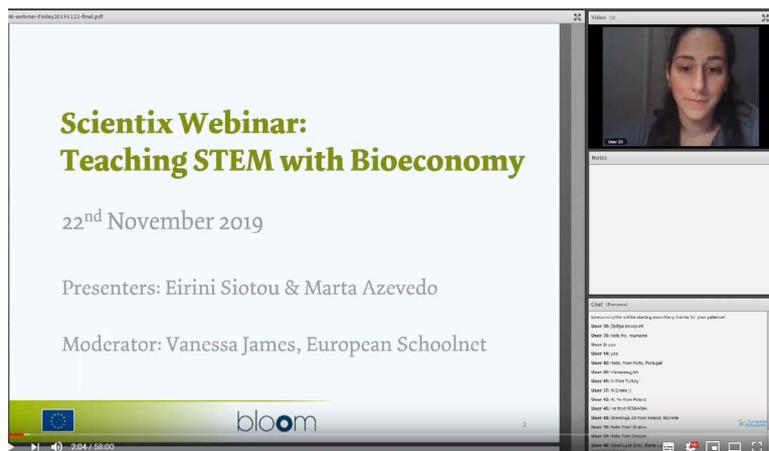


[Help us disseminate](#)

The BLOOM School Box

The [BLOOM School Box](#) is a collection of bioeconomy related teaching resources which educators can use to introduce the concept of bioeconomy in their classrooms as a trigger to raise student interest in science subjects and their awareness of important societal challenges. The basis of the BLOOM School Box are five innovative learning scenarios, created and tested in classrooms by the 20 BLOOM expert teachers. These Future Classroom Scenarios were developed using the [Future Classroom Toolkit methodology](#). Six additional bioeconomy teaching resources were selected to be included following the "Teach bioeconomy!" competition.

Learn more about bioeconomy in our webinar!



Would you like to participate in the competition? Stack all the odds in your favour and learn more about bioeconomy with the 'Teach STEM with bioeconomy' webinar!

On 22th November 2019, BLOOM Expert teachers, authors of some of the bioeconomy teaching materials included in the BLOOM School Box, were gathered during the [Scientix webinar 'Teach STEM with bioeconomy'](#) to share their experiences, challenges and success stories of bringing bioeconomy in their teaching. This successful webinar, which gathered more than 60 participants, raised numerous questions such as how to integrate bioeconomy into national curricula or how to create an interdisciplinary bioeconomy-based lesson together with other colleagues.

If you missed it, don't worry! The webinar is now available on the [Scientix website](#), the [Competition page](#) and [YouTube!](#)



GET
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Stories of Implementation
Competition - February to April 2020

@bloom_EU #bloom_competition #bloom_story



Strengthening the public awareness of bioeconomy in EU regions

Our session at this year's [European Week of Regions and Cities](#) from 7th to 10th October 2019 was designed to complement the array of engagement activities that we had set up at our kiosk only 20 meters away from where the session was held. From the outset, we wanted to stay true to the title of our session which is also the overarching goal of our project: to strengthen the public awareness of bioeconomy.

The Monday evening opening of our kiosk served as a fitting precursor to the session the next day, as we invited passers-by to come and chat and share ideas and experiences on bioeconomy. Already then, we observed and were impressed by the curiosity that visitors expressed regarding bioeconomy. We soon got a sense of the potential of EWRC 2019 and our session the next day; to connect with the broader public on issues pertaining to the bioeconomy.

The visual appeal and the overall design of the stands allowed us to accompany visitors through 3 different stages of engagement. First, through our videos and animated presentations that we looped on our screen, passers-by could catch a glimpse of images and visual stories about bioeconomy. Second, we invited those who were clearly curious about what they saw on the screen to hear more about the visuals and their purpose. This typically led to an explanation about BLOOM, what we've accomplished to date and sharing strategies to raise awareness even further. Third, we invited the visitors to take part in a 5-minute fun quiz on bioeconomy and afterwards would ask them to pin their region's current bioeconomy activities as well as their future wishes for a thriving bioeconomy on an interactive map of Europe that we had set up.

Our session on Tuesday the 8th of October followed a similar pattern of participation. We started with a visual presentation of the project, its goals and struc-

ture, followed by a more detailed discussion on the engagement activities at the 5 BLOOM hubs and how the needs of different kinds of stakeholders are met through the workshops that we facilitate there.

Last, we facilitated an interactive group discussion on the opportunities and challenges that come with the transition to bioeconomy, fielding suggestions on how BLOOM can continue to raise awareness and influence policy. We quickly became comfortable with the sound technology provided – microphone and headphones – instead of the traditional open space discussion. This somehow combined the advantage of public speaking which is to address many people at the same time, with the deeper connection that one-on-one conversations brings. We were more than satisfied that a meaningful conversation was had on the state of bioeconomy in the regions and could map our next steps towards an even wider impact. [Have a look at the pictures of our session.](#)

EWRC 2019 has provided us with the space and audience to test our ideas, take note of stakeholder feedback and consolidate our key messages for a more effective and responsive engagement with the broader public. The BLOOM project is in better shape for having participated and will seek out future European Commission events to repeat the success we enjoyed at EWRC 2019!

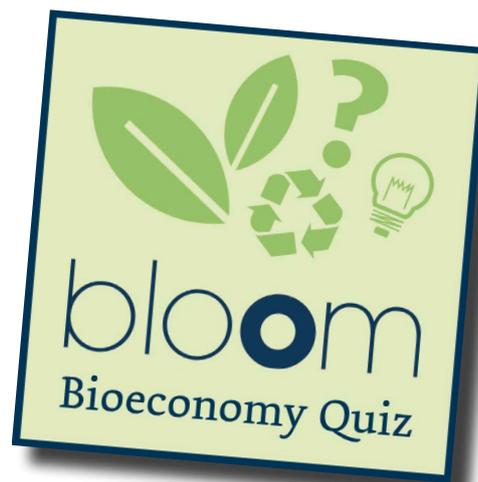
Herman Cloete, GEN Europe

BLOOM information and outreach materials

We are continuously developing information and outreach materials on bioeconomy and on the approach of the BLOOM project. Find our newest materials below: the first episode of our video series on bioeconomy, the Bloom bioeconomy quiz and two new podcasts on systems thinking, collaboration and science communication with Kazimierz Murzyn and Anna Maria Fleetwood.

How can textiles be made from wood? We visited Lenzing AG in Austria to learn more about the production process – from the tree to the shirt. Find out more about innovative biobased materials in the „Wooden Shirts“ video!

What do you know about bioeconomy? Take the [BLOOM Quiz](#) and find out!



Listen to [our newest bioeconomy podcasts](#): a conversation with Kazimierz Murzyn on systems thinking and fostering collaboration and with Anna Maria Fleetwood on science communication and society:



Stay updated how BLOOM is engaging EU citizens and civil society in the bioeconomy via the project website and social media:

bloom-bioeconomy.eu

 facebook.com/BLOOMEU

 [@BLOOM_EU](https://twitter.com/BLOOM_EU)

 [BLOOM EU](https://www.youtube.com/BLOOMEU)

 [@BLOOMEU](https://www.instagram.com/BLOOMEU)

 [BLOOM EU](https://www.linkedin.com/BLOOMEU)



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