






Welcome to the first issue of our newsletter!

BLOOM is a European Horizon 2020 funded project which involves 12 partners from 8 European countries. The project is coordinated by the [Centre for Social Innovation, ZSI](#), in Vienna. Through five regional hubs, each focusing on different fields of bioeconomy, the BLOOM project is raising awareness and enhancing knowledge on the bioeconomy amongst European citizens. Additionally, schools in ten different European countries are involved and working on how to integrate bioeconomy into the diverse European school systems.

## BLOOM objectives

-  Raise awareness and enhance knowledge on bioeconomy
-  Demonstrate the potential economic, environmental and social impact of bioeconomy
-  Build and strengthen regional bioeconomy communities of practice
-  Create space for debate and exchange of information, knowledge and aspirations
-  Make bioeconomy knowledge and research available for education, from school programs to vocational training and more

In this newsletter you can find out more on our recent activities, like the second BLOOM teachers' workshop and a co-creation training for our hubs. Furthermore, we share our impressions from the conference "Sustainable and Circular Bioeconomy, the European way" on the 22<sup>nd</sup> October 2018 and explain how BLOOM is supporting the implementation of the new EU Bioeconomy Strategy. And you can learn more about new forest-based products in an article from our Nordic Hub.

Enjoy reading the BLOOM newsletter!

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## Bioeconomy Strategy Brussels Conference – impressions from BLOOM perspective

In October 2018, the new and updated EU strategy has been launched: *A sustainable bioeconomy for Europe: strengthening the connection between economy, society and the environment*. BLOOM was present at the conference in Brussels on the 22<sup>nd</sup> October.

In October 2018, the new and updated EU strategy has been launched: *A sustainable bioeconomy for Europe: strengthening the connection between economy, society and the environment*. Key in the strategy are the 5 objectives and the 3 main action areas leading the way towards a sustainable, circular bioeconomy.

### Objectives:

1. ensuring food and nutrition security
2. managing natural resources sustainably
3. reducing dependence on non-renewable, unsustainable resources whether sourced domestically or from abroad,
4. mitigating and adapting to climate change,
5. strengthening European competitiveness and creating jobs

### Action areas:

1. strengthen and scale-up the bio-based sectors, unlock investments and markets
2. deploy local bioeconomies rapidly across Europe;
3. understand the ecological boundaries of the bioeconomy

At the conference “Sustainable and Circular Bioeconomy, the European way”, on October 22, the new strategy has been presented and discussed. BLOOM participated in this meeting, with four team members and with one of the BLOOM pilot

teachers and a group of 15 students from Austria who actively work on bioeconomy topics with their teacher. The students had the opportunity to ask questions to the panel on Key Strategic Research Priorities.



One of the Bloom pilot teachers from Austria brought 15 students to join the bioeconomy conference in Brussels.

The representatives of the European Commission addressed the problem of unawareness of citizens and the invisibility of the bioeconomy. There is a lack of investment, due to limited demand and uncertain market opportunities. The new strategy should have a clear focus on showing the perspectives of the bioeconomy and to optimize the potentials of land and sea based biomass valorisation of components and the production of sustainable



building blocks, materials and products. BLOOM will contribute to the application of this strategy. BLOOM will share the perspectives of bioeconomy in terms of climate benefits and innovation potential, show the products of bioeconomy and reach out for civil society engagement.

Another issue which has been discussed during the conference is the attention to regional differences; many regions have selected bioeconomy as a driver for regional development, innovation and growth (RIS3 strategy); local authorities are of growing importance for the implementation of the strategy. BLOOM has a regional focus, aiming at reaching out to civil society representatives and involving them in the regional bioeconomy innovation networks. In 5 regional hubs, BLOOM is supporting the creation of common perspectives, strategies and activities. The co-creation workshops will provide interactions at local level between the domains of government, business, knowledge and civil society.

Another critical aspect for the deployment of the bioeconomy, as mentioned in the discussions at the conference, is behavioural change of EU citizens. Therefore, much attention is given to enlarging the knowledge base: we need data, environmental impact studies, evidence-based information.

There is also much expectation of investment in new generations, with a focus on education at schools on bioeconomy. BLOOM is contributing to this by developing new educational materials. 20 pilot teachers representing schools from Greece, Austria, Spain, Sweden, Poland, Italy, Belgium, Portugal, Israel, and Croatia who teach physics, biology, mathematics, engineering, technology or chemistry are working together with the BLOOM consortium partners to develop lesson plans using bioeconomy (the BLOOM School Box). The School Box will be finalized by February 2019 and will be shared via the BLOOM website with other teachers in Europe, and beyond.

There is a need for new perspectives and means and the use of imagination and creativity to arrive to a common understanding, direction and communality in regional bioeconomy practices. BLOOM will organise co-creation sessions in regional hubs, in which creative tools and techniques will be used in order to enhance the engagement of society, and to develop common ideas on how to proceed together towards a regional bioeconomy, as well as strategically, organizationally, and in creating new practices and projects.

*Remco Kranendonk, Brussels, 22<sup>nd</sup> October 2018*



*Students at the Bioeconomy Strategy Conference want to know: How can the EU make sure that each member gets the same chances to implement bioeconomy strategies and reach their 5 objectives? What is the most efficient way to make EU citizens aware of bioeconomy?*





## Does the forest hold the key to the future?

Environmentally friendly and recyclable products made from residues from industrial production processes such as helmets, packaging materials, fabric and translucent wood, may sound like science fiction. But these are some of the new forest-based products that are currently being developed in Sweden and Finland and which, in the future, may replace many of the fossil-based materials we use today. Maybe cellulose is the new plastic?

In the EU BLOOM project, we want to increase knowledge about these new products and materials and show how we can reduce our environmental impact and fossil fuel use by choosing bio-based products in our daily lives. BLOOM's Nordic Hub has now been launched by [JAMK University of Applied Sciences](#) in Jyväskylä and VA (Public & Science) with the aim of increasing the public's knowledge of the bioeconomy and new forest-based materials and products. We also want to help research institutes, universities and companies to become better at communicating and to use dialogue throughout the innovation and research process to inform their knowledge and improve their products.

### New products and materials from the forest

Jyväskylä in central Finland is the country's strongest centre for research on forest-based products and the forest industry. During the Nordic Hub meeting at JAMK in August, we got a glimpse of new investments in the bioeconomy and of some of the forest-based materials we might be using in our daily lives in a not too distant future. JAMK is currently further developing a regional campus and a science park for the bioeconomy where academia, industry and society will work together to develop sustainable solutions and products.

One of the major research players in central Finland, is [VTT Jyväskylä](#) that we had an opportunity to visit during a recent BLOOM Nordic Hub meeting. Their research includes developing and manufacturing insulation and packaging materials from residues of forest waste. These include new types of paper-based materials that resist heat and moisture, as well as forest-based materials that may replace plastic in the future.

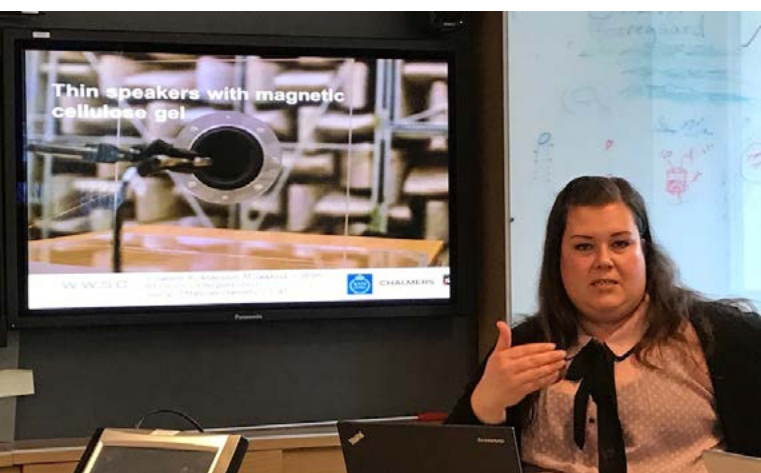


*"Cellulose is the new plastic but to get our research out into the market and to consumers, we need companies that can invest in this new research," says Elina Pääkönen, a VTT Research Scientist.*

Another example of what is happening in the bioeconomy field in central Finland is the new, next generation bioproduct mill [Metsä Fiber](#) in Ääne-



koski. Their newly built visitor centre Pro Nemus is designed to highlight the potential of forests, new materials and products that are being produced in the new bioproduct mill to forest owners in the group, other stakeholders as well as visitors.



Linda Fogelström, Wallenberg Wood Science Center presents cutting-edge research at the BLOOM Nordic Hubs kick-off meeting in Stockholm.

## Swedish research at the forefront

Some of the Swedish organisations engaged in research on new materials and products derived from forestry are the [Wallenberg Wood Science Center](#) (WWSC), the national education and research initiative [Tresearch](#), [RISE bioeconomy](#), as well as members of the [Swedish Forest Industries Federation](#). The goal of WWSC is to develop new forest-based materials and educate researchers in the field. Translucent wood, nanocellulose that can be used to produce materials stronger than kevlar, as well as cellufoam, a new packaging material, were some of the new materials that were highlighted.

## BLOOM workshops for stakeholders

The goal of our work in the BLOOM Nordic Hub is to communicate the opportunities and challenges with the bioeconomy as well as increase knowledge and demand for forest-based products and materials amongst the public. In order to help research institutes, universities and companies to improve their communication and dialogue, we will therefore be organising workshops in November with stakeholders from NGOs, civil society, the research and innovation sector, academia and education, decision makers and industry to design future communication activities for the bioeconomy and forest industry. Participants will be able to exchange ideas, ambitions and challenges, as well as share opinions and experiences of the bioeconomy.

Together, we will create ideas about how we can best communicate with different audiences. If you are interested in getting involved, read more on our website or contact one of the people below.

## Get in touch and join the network!

Please contact us, if you are interested in joining the BLOOM Nordic Hub network, participate in our workshops, if you have any questions or would like further information.

**Vetenskap & Allmänhet**, Sweden: Project Manager [Maria Hagardt](#), or [Lotta Tomasson](#)  
**JAMK University of Applied Sciences**, Finland: Project Manager [Kirsi Knuuttila](#), +358 40 776 88 80 or [Aino Voutilainen](#), +358 40 186 75 49.

This article is [also available in Swedish](#).







## Partnership between BLOOM and BioWatch

BioWatch and BLOOM are delighted to announce a strategic partnership. The objective of both projects is to raise awareness and encourage debate surrounding the potential of the bioeconomy.

BLOOM and the [BioWatch platform](#) are both European projects that have received funding and support by the EU, and BioWatch also from the Bio Based Industries Joint Undertaking (BBI-JU). BioWatch was a key output of the Bioways project and is now managed by the science communications agency Insight Publishers, one of the partners within the project. All Bioways partners are active in the bioeconomy and will be contributing to the ongoing development of BioWatch.

Within the BLOOM project five regional hubs have been established to foster public engagement in the bioeconomy and to create a space of knowledge exchange and dialogue. Each hub is focusing on areas of the bioeconomy that are specific to the region, as for example food and agriculture at the Spanish hub and forest and wood at the Finnish & Swedish hub. The hubs include and engage with civil society organisations, young citizens, science communication networks, NGO's, media and crucially the general public. They do this through a series of co-creation workshops and outreach activities. Additionally, schools in ten different European countries are involved and working on how to integrate bioeconomy into the diverse European school systems.

BioWatch is an interactive online platform that provides bioeconomy projects with a free service to position themselves alongside one another and provide direct access to industry, political stakeholders, the media and the general public.

BioWatch can be described as an e-library for bio-based research and projects. Each project is represented through a multi-media digital brochure on the platform; a so-called SEED. It displays information about each project in an accessible and engaging format. They contain similar information to the project's website, but also offer a stronger level of engagement with the target audience that cannot be achieved by a website alone.

Interested stakeholders and general members of the public can both view the projects' SEEDs and communicate directly with contact persons of the projects. Members of BioWatch can follow SEEDs they are interested in and receive push notifications when an update has been made.

The partnership between the two projects will provide members of the BLOOM hubs access to the latest innovations and ongoing research projects, whilst at the same time providing them with access to useful documentation. BioWatch will provide its members with access to the regional hubs so they can become part of their regional network.

Join the [BioWatch platform](#) now!







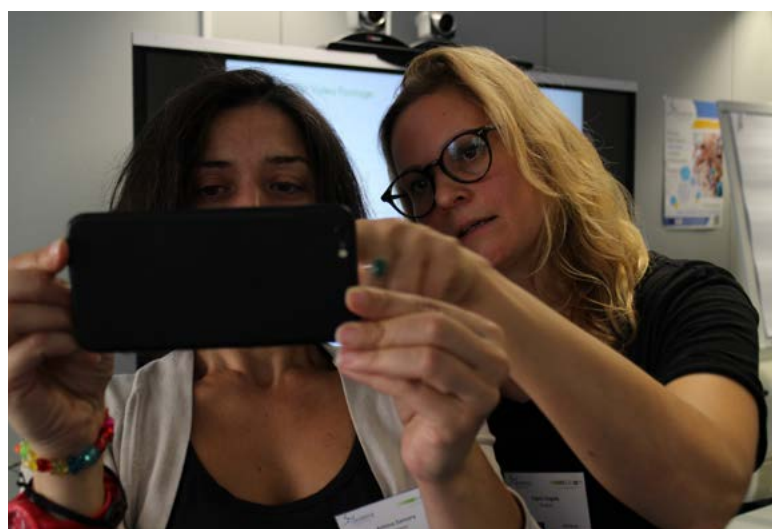
## Second BLOOM teachers' workshop at EUN

10 BLOOM teachers participated in a 2-day workshop at the European Schoolnet's offices in Brussels in September. The workshop is a second in a series of three workshops in which 20 pilot teachers from 10 countries are working together to develop five bioeconomy lesson plans (BLOOM School Box).

The 24th Science Projects Workshop (SPW24) was co-organised by BLOOM and [Scientix](#) projects. The workshop took place at the [Future Classroom Lab](#) in Brussels on Friday 14<sup>th</sup> and Saturday 15<sup>th</sup> September 2018. This workshop welcomed 37 participants in total, including 26 teachers from 17 different countries.

The 10 BLOOM teachers worked on finalizing the BLOOM School Box on how to integrate bioeconomy in Science, Technology, Engineering or Mathematics classes, which they will then be testing in classes, as well as learning about the next tasks, including training other teachers and preparing materials for a Massive Open Online Course (MOOC) to be launched in March 2019.

On Friday, the teachers participated in a workshop on making video interviews and classroom implementation films with Medienwerkstatt Linz (MWL) and a module on classroom filming. On Saturday, the teachers participated in trainings and worked on preparation of learning scenarios.



*Teachers learning how to make video interviews in a workshop provided by Medienwerkstatt Linz (MWL).*





## Co-creation training for BLOOM hubs in Wageningen, Netherlands

BLOOM pursues a nucleus-centric approach, where five regional hubs strive to foster public engagement and develop with regional stakeholders outreach activities and materials on bioeconomy.

The Centre for Social Innovation (ZSI) organised a project internal training on co-creation methods for the BLOOM hub leaders on 3<sup>rd</sup> and 4<sup>th</sup> October 2018.

The training fostered peer-to-peer learning and exchange. The participants tested several co-creation methods on bioeconomy related questions in order to achieve confidence in successfully planning and facilitating co-creation workshops with stakeholders in their hubs. The participants had room to plan, test, reflect and discuss the different approaches. The training was described by the participants as very intensive, constructive and inspiring.

The venue, Wageningen Research, was chosen, because the BLOOM partner WR hosts the Biobased Products Innovation Plant; a large R&D facility aiming at developing innovative processes to convert green raw materials (biomass) into biobased products. The participants of the training had a study visit subsequent to the training, where they learned about the research on biobased products and its processes in Wageningen.



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

**[bloom-bioeconomy.eu](https://bloom-bioeconomy.eu)**

 [facebook.com/BLOOMEU](https://facebook.com/BLOOMEU)

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

 [BLOOMEU](https://youtube.com/BLOOMEU)

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

 [BLOOMEU](https://linkedin.com/BLOOMEU)



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