# 

Boosting
European Citizens'
Knowledge and Awareness
of Bio-Economy
Research and Innovation





# Objectives

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







# Approach

- Anchoring at regional and local level
- Co-creation:
  - Involving all stakeholders in the creation of value and meaning
  - Enabling cross-fertilization and idea generation through shared knowledge and experiences
- Communities of practice Hubs







# BLOOM hubs & schools

#### Regional hubs:

- Spain, Cordoba: Food and Agriculture
- Poland, Krakow: Food, Agriculture and/or Waste Water Treatment
- Netherlands, Wageningen: Bio-chemicals and bio-plastics
- Finland, Central Finland & Sweden, Stockholm: Forest and Wood
- Austria, Vienna & Germany, Bonn: Bio-chemicals and bio-plastics

#### Schools:

Austria, Belgium, Croatia, Greece, Italy, Israel, Poland, Portugal, Spain, Sweden















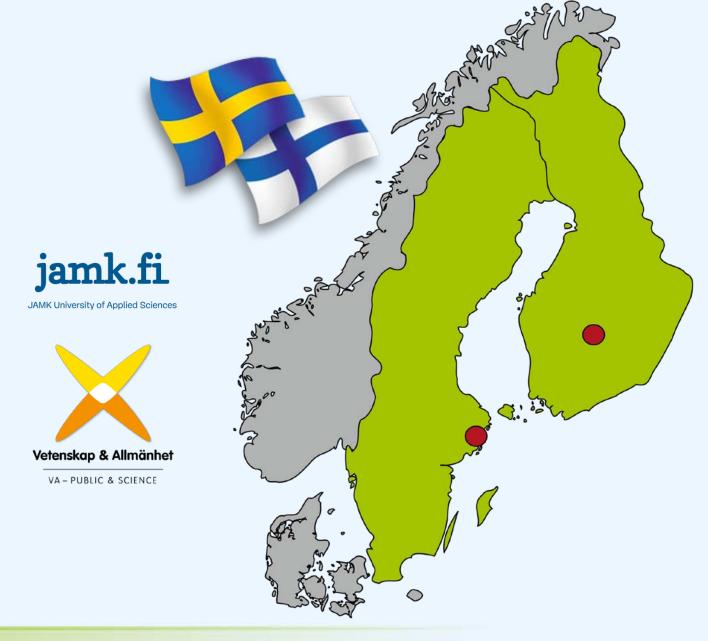


# The Nordic Hub

## Finland & Sweden

- Bioeconomy Institute of JAMK University of Applied Sciences
  - Central Finland
- Vetenskap & Allmänhet VA (Public & Science)
  - > Sweden

New wood-based products and materials







## Focus: New wood based products and materials

### Aim.

Raise public awareness about the possibilities with forest products;

Showcase new innovative materials and products;

*Increase interest* for bioeconomy studies/education.

Create open space for discussion about forest bioeconomy

### Activities:

Awareness, outreach and networking.









# Stakeholder

- Who is active in BLOOM
  - FINLAND

#### Authorities/other public entities

- Regional council of Central Finland
- Forest Centre

#### Civil society

- Youth council of Central Finland
- Forest Association of Central Finland
- JAPA Sustainable Development

#### **Research and Education**

- Gradia
- University of Jyväskylä
- VTT Technical Research Centre of Finland

### Businesses/

business associations

- Finnish Forest Association
- Finnish waadwarking industry

#### **Projects**

- Let's build from wood project
- Local energy project
- The New wood project
- The Creative Circular Economy project



"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.







# Stakeholder workshops

- Identified Barriers and Needs
  - Different knowledge and definitions about bioeconomy
  - Little knowledge of the whole production chain from forest to a product.
  - Get bioeconomy in the sustainability work in the public sector.
  - Lack of tools to make decisions in your own everyday life to make it more sustainable.
  - Need for objective facts.
  - We need to use the passion/interest of young girls, i.e. sports, fashion, climate engagement, to reach out.
  - Need to collaborate with social media influencers in order to reach out to young.



What does bioeconomy mean to me? From Swedish workshop Photo: VA



A co-creation workshop arranged for young people in Jyväskylä, Finland.





# "Good for you, good for the nature." (Motto of Alina, 27 years)









KAIKKEA PITAA KOKEILLA PAITSI KANSANTANSSIA

"Everything is worth of trying out, but folk dance."



"Internet knows the thruth."

Kaikki TIETO MIKA ON NETISSA, ON











# New wood based products

Sulapac® -products are made from wood chips and biodegradable natural binder thus making the product fully biodegradable. Still, the product has the advantages of plastic.

These packaging products tolerate water and fats and they do not let through oxygen. They can be used as packaging material for cosmetic and food industry.

www.sulapac.com



Photo: Sarita Piipponen/Sulapac



©Spinnova

Spinnova manufactures textiles and clothing made of completely wood-based fibers. CELLULOSE.

The textile warms as well as lamb wool and contains no harmful chemicals, and production is more sustainable than cotton. www.spinnova.fi

This product, a bicycle helmet made of wood veneer, with a strap made of durable paper and shockabsorbing inside of a foam material made of pulp. The material is called Cellufoam ™ and is made of NANO CELLULOSE.

The entire helmet is completely renewable and biodegradable.

www.cellutech.se/helmet



© Cellutech, Rasmus Malbert





# New Wood based material

**Transparent wood** is a novel material which combines transparency with the unique structure and strength of wood.

The material is a wood-polymer composite, resulting in transparency.

Intensive research and development is being conducted between <u>cellutech.se</u> and <u>treesearch.se</u>



Photo: Cellutech

#### 3D technology into wound care

Nanocellulosefibrils have features which can enhance the features of biobased 3D printing pastes.

VTT is developing a 3D wound care product for hospital use to monitor the condition of the wound. Nanopulpfibrils have the potential to develop sustainable, bio-based 3D printing materials into the market. *vttresearch.com* 



Photo: VTT





# Communication and Outreach

## **Recent Hub Activities**

- Articles
- Presentations
- 2 Seminars
- Webinar
- Science espressos
- Social media campaign about bioeconomy in people's daily lives
- Stand developed in co-creation workshop

#### with

- ➤ 1 Networking-mingle
- > 5 Science espressos
- > 1 gallerywalk
- Survey for young people about wood-based products







# Communication and Outreach









## Communication and Outreach

## **Upcoming Hub Activities**

- A bio-based gallery walk
  - From Nov 11th to Dec 9th
  - In the central library of Jyväskylä, Finland
- Science espressos
- European Researchers Night 2020
- And much more!
  - For getting updated about upcoming activities, check out our event calendar at <a href="https://www.bloom-bioeconomy.eu/nordic-hub/">www.bloom-bioeconomy.eu/nordic-hub/</a>





## Contact

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Get involved!

www.bloom-bioeconomy.eu/nordic-hub/

## #forest4future





### **Bloom Partners**



























