

BioCannDo

BIOECONOMY AWARENESS AND DISCOURSE PROJECT
www.AllThings.Bio

4th Educational Community of Practice Webinar, 6 December 2018

This project has received funding from the Bio Based Industries Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement No 720732.



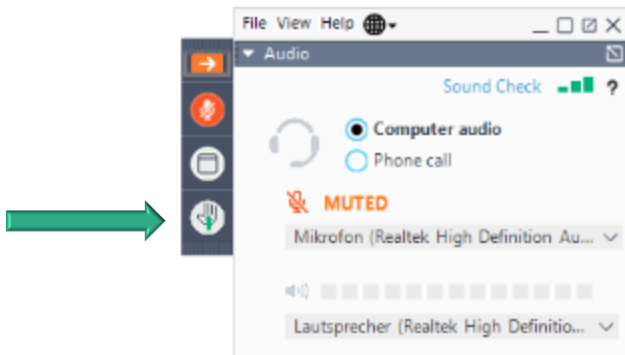
About this Webinar

- ▣ Our webinar will be recorded
- ▣ We will answer your questions after each presentation.
- ▣ Participants who registered today will be invited to future activities unless you tell us otherwise.

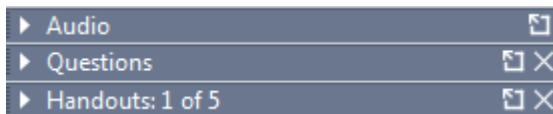


About this Webinar

- During presentations you are in listen-only mode
- For questions and answers after each presentation you can be unmuted – please indicate by raising your hand via the control panel



- You can also send us your question through the question box



Webinar agenda

Time	Item
13:00	Short welcome and introduction - Katharina Faradsch, Prospex
13:05	Explaining the Community of Practice – Han van Osch (Centre of Expertise Biobased Economy)
	Competition: The Think Biobased Challenge – Monique Bakker (Centre of Expertise Biobased Economy)
13:15	Platform on Bioeconomy Education - George Sakellaris (University of South Bohemia)
	Discussion and exchange
13:30	Borderless Biobased Education – Erik Lammers (Centre of Expertise Biobased Economy)
	Discussion and exchange
13:45	Dutch nationwide Biobased network – Maurice van Londen (Centre of Expertise Biobased Economy)
	Discussion and exchange
14:00	Closure

BioCannDo

Community of Practice - Introduction

Han van Osch, Centre of Expertise Biobased Economy

This project has received funding from the Bio Based Industries Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement No 720732.



Community of Practice

Goal:

- Enhance the quality, scale and diversity of bio-based education in Europe, by bringing educational actors in contact with each other, both virtual and live.

Together, they form a professional community, in which materials can be assessed, shared and developed (together)

Community of Practice

- Starting with existing networks
 - These will be presented today

- Interested to join: please let us know.

- The more partners, the more possibilities.

BioCannDo

**Monique Bakker, Centre of Expertise Biobased
Economy (Avans & HZ University).**



This project has received funding from the Bio Based Industries Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement No 720732.



Competition for College or University students in Europe



Why this competition ?

- Creating awareness
- Teaching materials for ages 9-12, 13-16, 17-22
- New educational material created by young people
- Necessary for transition to a biobased economy
- Young people are more close to the target group

What's in it for the student ?

- Very cool if students and schoolchildren from all over Europe work with the materials you have created.
- Prize money: Total € 9000,-
- 1 prize in each category € 1750,-



Conditions

- **The teaching material:**
- Will be immediately usable in education (primary (9-12) or secondary education(13-16), or secondary vocational education(17-22)),
- Stimulates awareness about Biobased thinking and doing among young students,
- Is realized in English and in your own language (if that is not English),
- Will be judged by an international jury consisting of subject experts,
- Challenge deadline February 1st 2019.

We are looking for

- ▣ European College or University student (you can also participate as a group of students),
- ▣ live or study within Europe,
- ▣ feel connected to biobased thinking and doing.
- ▣ No specific study is required!

Please share this news

- ▣ The information: <http://bit.ly/biobased-challenge>
- ▣ Also social media
- ▣ Email
- ▣ Questions?
- ▣ M.bakker13@avans.nl

EDUCATION FOR BIOECONOMY

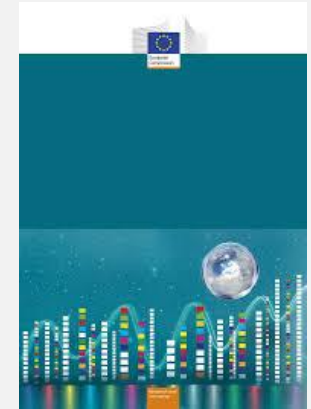
A EUROPEAN PERSPECTIVE

Dr George Sakellaris

University of South Bohemia

THE BIOECONOMY OBJECTIVES IN EUROPE

- Ensuring Food Security
- Managing Natural Resources Sustainably
- Reducing dependence on non-renewable resources
- Mitigating and Adapting to the Climate Change
- Creating Jobs
- Maintaining European Competitiveness



Objectives to be reached by improving the knowledge basis and by fostering innovation

- **Bioeconomy Action Plan** (Revision of 2012) Expert Group Report – European Commission – 2017
- **New Bioeconomy Strategy for Sustainable Europe** (October 2018 – EC)

A Bioeconomy dedicated Education frame is a substantial pillar in order to achieve the Objectives !

WHAT DO WE NEED

A new generation of experts:

- **Widely Educated in terms of conventional disciplines**
 - [Life Sciences / Economy / Social Sciences / Regulation / Communication]
- **Highly Specialized in terms of:**
 - Domains of Application
 - Regional Consideration
 - Synergies and Cooperation
 - Modelling & Systems optimization
 - Public – Private Consideration
 - Other



WHAT IS NEW

- Common consideration of Societal, Economic and Environmental needs
 - Common Solutions to the above
 - Respecting the (micro or macro) Regional Dimension
 - Multi-disciplinarity in tools and expertise
- Lateral issues (Legal frame, Public perception, Communication)
 - Looking to the broader picture (competitiveness, brain drain, independency)



HOW TO DO IT

- It is important to **decide on whether** :
 - **to integrate Bioeconomy** and value chain approaches into the existing curricula (plant and animal science, food technology, forestry, engineering)
 - **or launch a separate curriculum** to address different aspects of the Bioeconomy.
- **First**, students should **learn a discipline** – become a good chemist, a good process engineer or a good agronomist.
- **Second**, they should be able to relate their expertise to the bigger picture.

THE AXES

- The universities should rethink the traditional approach where the curricula are faculty-based. We must move **towards a multidisciplinary approach**.
- At university level, we need to develop an integrated **approach involving economy, society, natural sciences, technology and lifelong learning**.
- Efficient **collaboration with policymakers and the Bioeconomy sectors** to identify what type of knowledge and competences need to be developed
- Improved **collaboration between the university and industry** is necessary for the integration of academic studies and practical experience.

THE POTENTIAL

- Techno – Economic Evaluation
- Market Uptake Potential
- Social – Economic Impact
- Efficient Regulatory Frame
- Networking
- Stakeholder and General Public Acceptance

Distinction: The Potential of Bioeconomy Education NOT The Bioeconomy alone



THE OUTCOME

Bioeconomy Strategy has the capacity to create 1 million new jobs by the year 2030

Today's students will be part of the transition during their working career. If teachers are able to inspire this current generation of students, they can help speed up this

THE REGIONAL CONCEPT

- Screening and Evaluation of the Regional potential
 - Natural and Human Resources / Particularities / Infrastructure / Funding
- Screening and Evaluation of the Regional needs
 - Societal / Economic / Environmental / Other
- Involvement of the Stakeholders
- Contribution to the National Strategy Plan
- Horizontal Actions
 - Interaction / Synergies / Cooperation / Networking / Communication



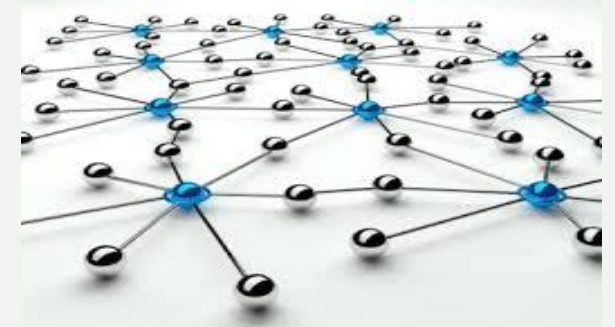
THE CURRENT SITUATION

- European Particularities:
 - Complicated political and decision making structures
 - Fragmented social, cultural, and economic societies
 - Lack of proactivity in the legislative process
 - Not optimized public-private partnership
 - Differentiated public perceptions and adoptions
- Despite them, Europe still remains the most advanced area on Earth in the domain of Bioeconomy Education
- Since it is impossible to change the European Particularities, we must adapt the Educational Model to them



ACTIONS AND NETWORKING

- Development of a multidisciplinary approach is possible **via active networking inside and outside the university.**
- **Transnational character of research and education is adequate.**
- Orientations and developments in **extending the national character of the strategies/policies** by moving up to a trans regional scale clustering competences and resources for regional and global Bioeconomy topics.



BIOECONOMY EDUCATION: COST PROPOSAL

- Data Collection and Mapping
 - Stakeholders, Initiatives, Objectives, Target Audiences, Contents, Funding
- Methodologies
 - Educational & Teaching Activities, Good Practices, Learning Outcomes, Case Studies
- Regional Character
 - Homogeneity, Susceptibility, Importance, Funding Mechanisms, Infrastructure
- Enabling the Potential
 - Impact on SME's, Technology Transfer
- Institutionalization
 - Platform on Bioeconomy Education



CONTACT

- g.sakellaris@gmail.com

Discussion and exchange on experiences

Let's discuss!

BioCannDo Webinar 06/12/2018

Erik Lammers (Avans)

Agenda

- Borderless Biobased Education
- Objective of the project
- How do we collaborate?

Borderless Biobased Education

- Project between regional government organizations, knowledge universities, non-profit organizations and enterprises.
- Lead partner is the municipality of Drechtssteden
- Project period: 01.11.2016 - 31.10.2019
- Total budget: €2.949.974,41

Objective of the project

- The development of courses and training at the secondary education, university of applied sciences and research university level and the sharing of training and exercise facilities in combination with the Netherlands and Flanders region to improve labor mobility for the Biobased Economy.

How do we collaborate?

WP3

Market demand

- Market study

WP4

Teaching material

- Courses and modules
- MOOC's

WP5

Infrastructure

- Shared facility program

WP6

Knowledge dissemination

- Digital platform
- Events
- Student exchange

Partners



- 14 partners
- 10 knowledge institutions
- 2 foundations
- 1 company



Contact:
Erik Lammers
Avans University of Applied Sciences
Ekf.lammers@avans.nl



Discussion and exchange on experiences

Let's discuss!

LANDELIJK BIOBASED KENNISNETWERK

MBO | HBO | WO

Biocanndo webinar 06-12-2018



“Dutch Biobased Knowledge Network”



LANDELIJK BIOBASED
KENNISNETWERK
MBO | HBO | WO

Dutch Biobased Knowledge Network

Education

- Providing insight and share education materials
- Lecturers days
- Develop education together

Research

- (More) mutual cooperation
- financing
- recognizability
- internationalization

Valorisation

Biobased Expertises in Dutch UASs



Online platform

<https://biobasednetwork.eu/>

Overview of:

- Biobased education materials
- Biobased Research groups
 - researchers
 - expertises

EUROPEAN BIOBASED KNOWLEDGE NETWORK



The European Biobased Knowledge Network aims to bladietla. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod.

tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis.

tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim venia.



STEP 1 WHAT ARE YOU LOOKING FOR?



**BIOBASED
EDUCATION**



**A BIOBASED
EXPERT**



**BIOBASED
INTERNSHIP**



**SHARED
FACILITIES**



**BIOBASED
EVENTS**



Discussion and exchange on experiences

Let's discuss!

Contact

Han van Osch – Centre of Expertise Biobased Economy
e-mail: ja.vanosch@avans.nl

Erik Lohse – Agency for Renewable Resources (FNR)
e-mail: e.lohse@fnr.de

Katharina Faradsch – Prospex
e-mail: katharina.faradsch@prospex.com



Thank
You!