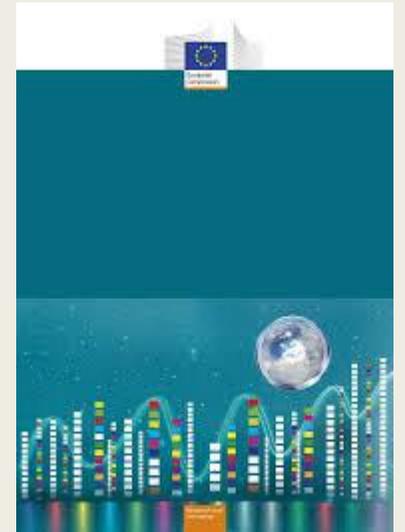


BIOECONOMY EDUCATION:
A SUBSTANTIAL TOOL IN ORDER TO REACH THE
BIOECONOMY OBJECTIVES IN EUROPE
LODZ, 24 SEPTEMBER 2018

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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



- 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)

What we Need

In order to achieve such requirements 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*



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

Means and Methodologies

■ Screening and Evaluation of the existing Programs

- *Locations Countries Regions*
- *Inclusiveness into eventual National Strategies*
- *Platform for curricula and course mapping*
- *Detecting synergies and networks*
- *Evaluation of the outcomes*

■ Planning for the Future

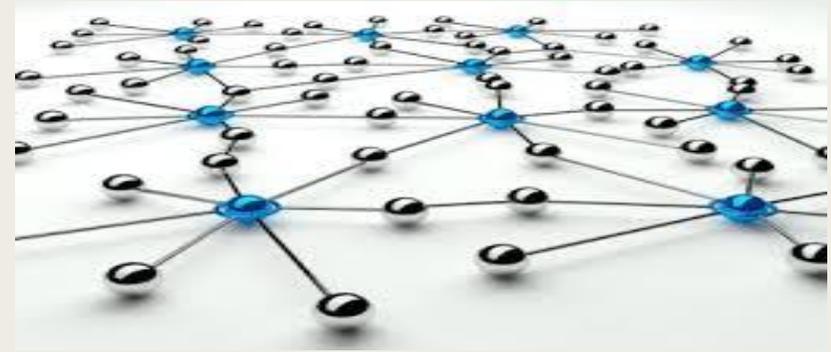
- *Level of Education*
- *Tailor made Education*
- *Digital Education*

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*

Actions and Networking

- Bioeconomy Initiative in the European Commission
- European Federation of Biotechnology – Bioeconomy Task Force
- Europa-Bio / EFIB / IFIB
- Bio TIC Consortium / Bio-Based Industries
- EU Bioeconomy Clusters & Consortia (Danube, Bio-East, Baltic, CEI)
- Non EU Initiatives (Malaysia, USA)
- A Platform for the Bioeconomy Education



Thank you !!