

## Danube S3 Cluster Transpational Cluster Cooperation acti

Transnational Cluster Cooperation active on Agro-food, based on Smart Specialization Approach in the Danube region Final Conference and 4<sup>th</sup> Policy Dialogue Workshop October the 21<sup>st</sup>

### Circular bioeconomy in Serbia – a success story

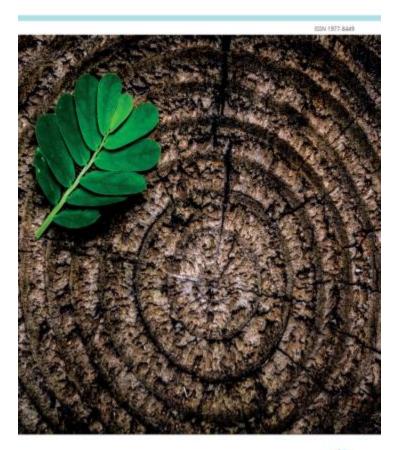
Prof. Dr. Milan Martinov
Faculty of Technical Sciences, Novi Sad, Serbia



# LAP on Business models that work in circular economy in Serbia

The circular economy and the bioeconomy





European Union focuses bioeconomy and circular economy, and these, for sure, closely includes activities in the field of agrofood.

Circular economy and circular bioeconomy integrated in university syllabus, developed teaching material.



Actions considerate, within Local Action Plan, as a support of the circular economy and bioeconomy:

- Linking different activities like fishery and growing plants in order to minimize any negative environmental effects, maximize yields and optimize the use of resources (aquaponics).
- Starting a project related to the improvement of clusters' status, featuring their operability in the Western Balkan Countries, including the promotion of circular bioeconomy.
- Working out and testing new models to realize a complete circular biorefinery process.
- Testing the possible substitution of synthetic materials with bio-based solutions, whilst utilizing waste and by-products of other processes (filtering materials for water and air treatment).

Within S3 Cluster developed proposals for six projects related to clustering, smart specialization and LAP

One project approved and running

Initiative on small biogas facilities for manure to attain GHG mitigation in agriculture

Financed by:

**European Climate Initiative ("EUKI") 2020** 

The German Ministry for Environment, Nature Conservation and Nuclear Safety (Bundesministerium für Umwelt – BMU)

Application for other project ideas is foreseen. Cooperation with SMEs and clusters.

#### Two PhDs finalized during project duration at FTS



Insulation panels made of cereal straw and crop residues of hemp. As binding material used fungi's mycelia.

Bio filtering materials, for air and water, made of pits (bones), byproducts of fruits' processing.



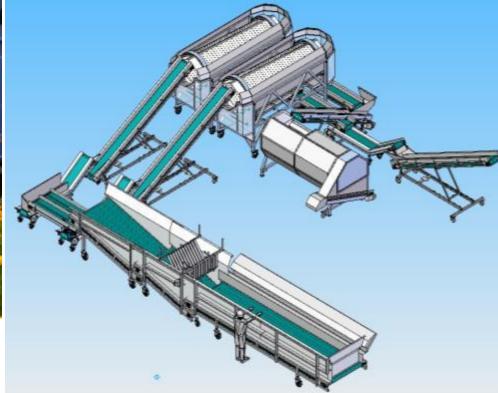
#### **Example 1: SME EUROPRIMA**

Machinery for harvesting, drying and processing of medicinal and aromatic crops

Exported to more than 50 countries. Examples: South Korea, Chile, New Zeeland...



Calendula picker and processing line



#### **Example 2: SME BIOELEMENTS**

#### Diverse agricultural machines



Cherry picker for modern orchards

Roller crimper for crop residues and cover crops

