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EUSAIR

HIGH-LEVEL CONFERENCE ON **CIRCULAR ECONOMY 2**



CIRCE 2020 – Expansion of the Circular Economy concepts through the productive districts of Central Europe

Ivo Benzon

PI RERA S.D

Interreg 
CENTRAL EUROPE European Union
European Regional
Development Fund

CIRCE2020

AI-NURECC PLUS ONLINE EVENT

11 | APR | 2022



@AI_NURECC_PLUS

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EXPANSION OF THE CIRCULAR ECONOMY
CONCEPT IN THE CENTRAL EUROPE LOCAL
PRODUCTIVE DISTRICTS



MAKE IT CIRCULAR!

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Project overview

Programme priority: 3. Cooperating on natural and cultural resources for sustainable growth in CENTRAL EUROPE

Programme priority specific objective: 3.1
To improve integrated environmental management capacities for the protection and sustainable use of natural heritage and resources

Lead partner: ARPAV - Regional Agency for Environmental Protection and Prevention of Veneto

Project duration: 39 months

Start date: 01.07.2017

End date: 30.09.2020



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Project Partners

ARPAV – Regional Agency for Environmental Protection and Prevention of Veneto – Italy

ETRA spa – Italy

AM TRANS PROGRES Co. Ltd. – Poland

IFKA Public Benefit Non-Profit Ltd. for the Development of Industry – Hungary

Bay Zoltán Nonprofit Ltd. for Applied Research – Hungary

Waste Management Association Mid-Tyrol – Austria

Public Institution RERA SD for Coordination and Development of Split Dalmatia County – Croatia

Cistoca Cetinske krajine Ltd. – Croatia

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The aim of the project is to expand and encourage the concept of the circular economy in five industrial pilot areas of each of the partner countries - Croatia, Italy, Austria, Hungary and Poland.

LINEAR ECONOMY



CIRCULAR ECONOMY



University of Split, Faculty of Civil engineering, Architecture and Geodesy, Split

**STUDENTS
OUR
FUTURE**



- Lectures to students of the master study of **architecture** within the course of **Urban space ecology**
- Lectures to students of the master study of **civil engineering** within the course of **Waste management**
- Recovery of industrial waste in circular economy - good practice examples, use of recycled materials in civil engineering industry and waste management
- **Construction and Demolition Waste (CDW)** is defined as a priority inflow waste by the EU Commission

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Croatian Chamber of Economy, Split

- Potential representatives of fish by-product donors and recipient companies, business intermediaries, utility companies, public authorities, NGOs were invited to the lectures
- Municipal Waste Management on the Islands
- Green Public Procurement as leverage for the circular Economy (i e. CEMEX Croatia)
- Examples and good practices in Split Dalmatia County
- Defining a participatory approach for development of action plan to expand and uptake secondary raw materials markets in Split Dalmatia County





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GREEN PUBLIC PROCUREMENT

- Voluntary environmental protection instrument which encourages protection environment and sustainable consumption and production.
- The procedure by which contracting authorities procure goods, services and works which during its life cycle result in less effect on environment of goods, services and works with the same basic function as would otherwise order.

CIRCULAR GREEN PUBLIC PROCUREMENT

A process in which public bodies purchase works, goods or services in order to contribute to closed energy and material circuits within the supply chain, while minimizing and, at best, avoiding negative effects on the environment and waste throughout life.





BENEFITS OF GREEN PUBLIC PROCUREMENT

ENVIRONMENT

Environmental protection, pollution reduction,
EE increase

SOCIAL BENEFITS

Increasing the quality of life setting high
standards of product and service quality

POLITICAL BENEFITS

Public support for environmental policy

ECONOMIC BENEFITS

- Incentives for companies developing green technology
- Increasing competition and reducing the price of green technology
- Increase efficiency (higher value for the same money)



Pilot Action 1 -High-value omega 3 acids from fish processing waste

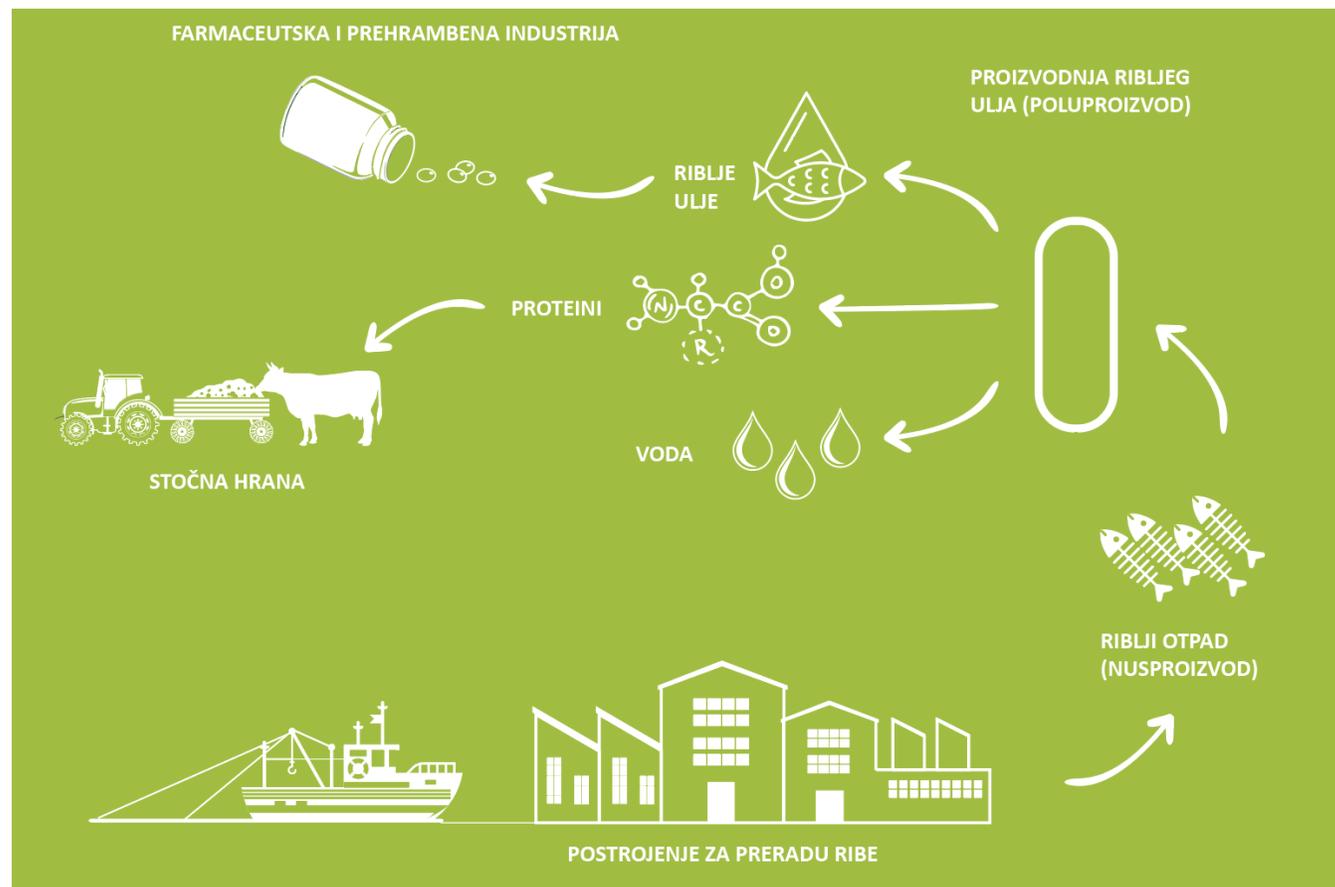
Alternative way of managing fish by-products with the aim of valorizing the most valuable components of fish tissue, fish oil, which may be used as input material for the production of **omega 3 concentrate**, a high value product of the pharmaceutical and food supplement industry.



Laboratory extraction of **fish oil, water and protein** from the fish waste sample was carried out at the Faculty of Chemical Engineering and Technology, University of Zagreb. Fish oil was later presented to the possible waste recipient companies in a raising awareness campaign. Furthermore, Teaching Public Health Institute of Split-Dalmatia County conducted the fish oil quality and health analysis (5 samples of fish oil and 5 samples of protein residue).



Fish by-product infographic



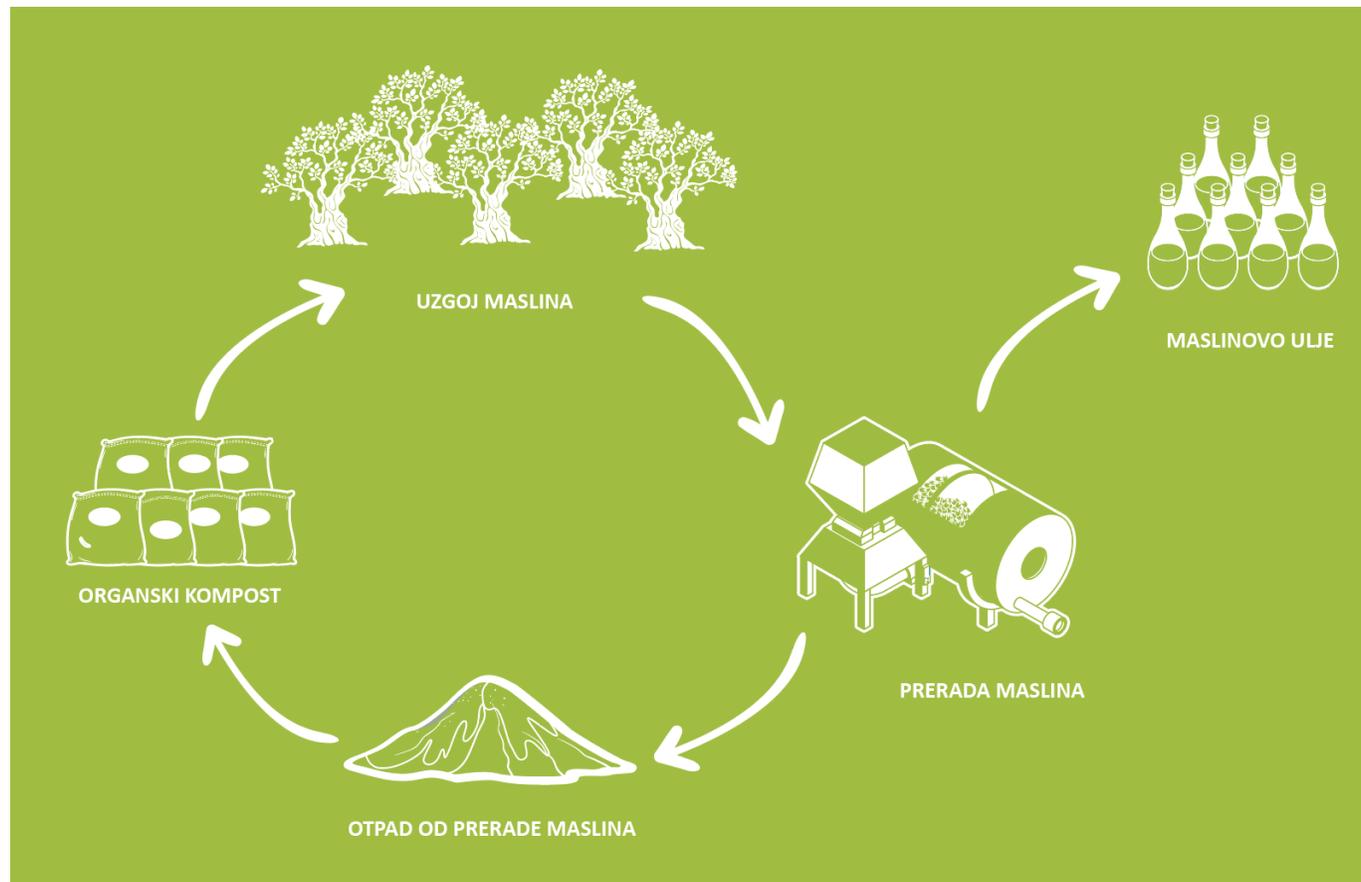
Pilot action 2 - Olive processing waste

Raising awareness of small and medium-sized olive growers and olive mills on the problem of waste management from olive oil production.

Enhanced sustainability of olive oil industries by pomace composting.



Olive processing waste infographic





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CIRCE2020 documentary video

https://www.youtube.com/watch?v=_VnRQVI745U



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LESSONS LEARNT

- 1) The application of the circular economy is **an obligation**.
- 2) Circular Economy is already a relevant issue of the market and this relevance will probably increase in the coming years (**Green new deal, marketing, raw materials strategy**, etc)
- 3) Companies need to stay in the market and the most relevant factor of the market is the economic one, so we need a policy of coherent **INCENTIVES & DISINCENTIVES**
- 4) Better implementation results mean easier access to EU funds from different envelopes.
- 5) The policies imposed by the circular economy will be **increasingly demanding** as the issue of sustainability becomes more pronounced.
- 6) The CE system is mature but still unstable, mostly due to:
 - price dynamics
 - missing markets for secondary raw materials
 - some uncertainty and lack of flexibility in the regulatory framework
 - missing coordination and planning at regional level (waste management is a 0 km issue)
 - still weak application of Green Public Procurement
- 7) A strong and honest cooperation among politics (planners), businesses and researchers is needed, not only to find solutions but also to find the problems and understand their priorities
- 8) Need for **change of attitude and behaviour**
- 9) **Raising awareness** is always welcome



THE END?

Circularity is a never-ending story!

Most of the pilots will continue beyond the project

- Tools and knowledge are transferable
- Networking open to new projects and new ideas of collaboration
- Circular initiatives have been integrated in counselling programmes of some key service agencies for the industrial sector
- Action plan for development of Split Dalmatia County



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Thank you!

