

# TALENT for the valorisation of agricultural BY-PRODUCTS. Newsletter #003 - September 2023

#### **Project Activities**

The 'Byp4Dev' project presents a PILOT COURSE (MOOC) for Experts in the Valorisation of By-products from the agro-industrial Sector.

Aimed at *vocational training or university students and those working professionals* who want to complete their knowledge, the Byp4Dev consortium is launching a free online pilot course after 19 months of work to create a new professional profile of expert in the valorisation of by-products from the agroindustrial sector.

The course, with a *total duration of 55 hours and a recommended schedule of 7 weeks*, will address issues such as new trends and market opportunities in the development of by-products, the valorisation of waste from agricultural, livestock and agri-food industries, the main technologies available for this type of processes, bio-composites and successful business strategies.

The professional profile of expert in the valorisation of by-products from the agro-industrial sector does not exist in the current educational structures. *The main objective of Byp4Dev is its integration into vocational training programmes,* as well as the coverage of needs and opportunities offered by the biobased labour market and the generation of bio-products.

Participants will gain in-depth knowledge of the current situation regarding the prevention and generation of waste and by-products, the importance of their valorisation (from bioprocesses, term, mechanical or extractive methods) and the value chain of biomass and bio-based products, as well as the main biocompounds that can be obtained from the by-products of different crops, circular business models and their scaling, the importance of multidisciplinary teams and circular ecosystems.

Below, we share the **"JOURNEY"** we have designed to become an expert in the valorisation of byproducts from the agro-industrial sector:

- Register yourself through our website www.byp4dev.eu (direct link will be available in October 2023).
- Discover the contents in English we have prepared for you: 6 modules and 26 units on trends, main by-products, technologies, biocompounds, markets, etc. Open and free of charge materials.
- o Do it your way: 55 hours planned in 7 weeks.
- o Access additional content: videos, recommended reading and best practices.
- o Complete simple *monitoring and evaluation questionnaires*.
- o Get your Diploma and

Become an Expert in the valorisation of by-products from the agro-industrial sector.... and take
advantage of all the opportunities that this sector offers.

#### **Byp4Dev Pilot Course PRE-TEST**



We are also pleased to share that on August 28th 2023, a group of **students at Häme University of Applied Sciences (Finland) started the "pilot course"** in order to pre-test it. The learning material and the information it provides will pass the test, as the students take the information they have learned to a practical level. Students got several cases to solve how to utilise by-products generating in two large companies. This is a good way to apply new knowledge directly into practice.

The student group was enthusiastic, and the projects started immediately during the day. Learning material promoting the valorisation of by-products offers basic information for solving practical problems, innovating, and designing processes.

#### PR5.- Blueprint/ /Roadmap

Vidzeme Planning Region is currently working on the development of a Blueprint and Policy Recommendations Guide to involve the key policy makers and stakeholders for the recognition of project learning outcomes as well for supporting the integration of by-product valorisation skills into occupational standards. It will help the project partners and the rest of stakeholders (public and private) promote and foster this new expert profile with the aim of supporting the bio-based sector as well as strategies to speed up the updating of professionals to this new bio-based sector.



## BYP4DEV BLUEPRINT & POLICY RECOMMENDATION GUIDE

Becoming the world's first climate-neutral continent by 2050 is the greatest challenge of our times for the European Union.

In this framework, the bio-based industry plays a crucial role, with special focus on the bioeconomy in the agri-food sector.

This new challenge, besides the need of technological advances, needs to rely on new professionals which can valorise the by-products and waste from the agri-food sector into new, innovative and high added value biocompounds.



By Product for Development - Byp4Dev Erasmus+ Cooperation partnerships in vocational education



The Blueprint focuses on **four pillars – awareness, training, policy/frame and implementation/operational level and proposes** a set of recommendations for stakeholders at national, regional and local level. The selected pillars, challenges and recommendations resulted from the research and brainstorming performed by partners, involving different stakeholders.

Currently the first version of the Blueprint is sent out to the project partners to elaborate and perfect the information presented until the end of September. The work on the clarifications will take place on October 2023 and the end result will be presented during the multiplier event on November/December 2023.

#### **Events & News**

#### **Transnational Project Meeting**

On the 28<sup>th</sup> June 2023 all Byp4Dev partners met in Cēsis (Latvia) to participate in the fifth transnational project meeting TPM#5, organised by VIDZEME. This time, different creative and innovative education tools were analysed to find the best approach for the pilot training course "A training Course in expert in by-products and wastes valorisation in agri-food sector", looking also at the integration process of the training content into an eLearning Platform.

Following the formal consortium meeting, we were invited to visit the Institute for Environmental Solutions (IES), which is an international research and innovation organisation. Understood as a Good Practice, it is more in depth described in the Section below.

More info: Link



The next transnational project meeting will be held in October, 05th 2023 online.

### **By-products Good Practices**

#### **The Institute for Environmental Solutions**

Cēsis – Latvia

The Institute for Environmental Solutions (IES), which is based in the Vidzeme region, Cēsis (about 100 kilometers northeast of Riga), specialises in environmental research and development on a one-to-one basis. The activities of the IES are based on a multidisciplinary strategy. Openness and a desire to learn are two of IES's basic values. The team consists of international and local experts in several scientific disciplines, including physics, mathematics, computer science, hydrology, environmental science, biology, chemistry, and forestry.



With 3000 hectares of forest and agriculture lands and 12 hectares of trial land – cooperation projects and information exchange are continually being developed together with partners from Latvia and all over the world. From biorefinery approach for the development of bioactive cosmetic ingredients to utilising Copernicus data and services to discover new methods for learning about the Earth's surface in the context of landscape and spatial planning – IES combines the latest technologies with traditional knowledge to tackle the challenges faced daily by farmers, foresters, policy-makers, decision-makers and conservation organisations.

Link to web: link

#### **Partners**



**VIDZEME** Planning Region (**VPR**) is one of the five planning regions in Latvia whos' mission is to promote sustainable and well-balanced development of Vidzeme Region and to provide effective services to regional governments, businesses, NGOs and citizens for the achievement of the jointly defined development targets. One of VPR's long-term priorities is a sustainable business and innovation environment to help the region and businesses move to an economy that is smarter about natural resources.

By cooperating with several national and international experts, **VPR** is developing activities such as hackathons, bioeconomy innovation forums, innovation cooperation laboratory and have elaborated an action plan for a knowledge-based bioeconomy innovation ecosystem to foster knowledge-based innovation in the bioeconomy.

**VPR** is also engaged in numerous international bioeconomy networks like BIOBORD, Transnational

Innovation Brokerage System, ERIAFF network, Plan4All, BIC Bioeconomy Platform and BSSSC. The smart specialisation areas, as defined in the region's development strategies, puts VPR on a firm path towards bioeconomy development and making the region attractive for new investments.

Link to the web: link







#### Co-Funded by:

**ERASMUS+** Cooperation partnerships in vocational education and trainingERAS

This project has been funded with support from the European Commission. This website reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein



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