



## **TALENT for the valorisation of agricultural BY-PRODUCTS. Newsletter #002 - March 2023**

### **Project Activities**

#### **PR2.- An expert profile in by-products and wastes valorization in the agri-food sector**

After identifying needs and opinion from target groups in PR1 of the project, project partners have defined the contents of Byp4Dev training course that will be then developed and shaped accordingly, adapting the contents to real needs.

In order to develop the online training course, **BYP4DEV** follows the recommendations of the European Commission to adopt ECVET as a framework that facilitates the validation, recognition and accumulation of work-related skills and knowledge acquired from one country to another and promotes transnational mobility and access to lifelong learning by making it easier for EU citizens to gain recognition for their training, skills and knowledge in another EU country.

This document focuses on the specifications of the training course by defining Learning Outcomes, Modules and Training Units, alongside with their duration and weight for the future acquisition of ECVET points.

More information: [link](#)



### **PR3.- A training Course in expert in by-products and wastes valorisation in agri-food sector**

The third activity of this project is to develop training material on by-product valorisation. The training material consists of the following study modules: Introduction, Trends and markets, By-products and wastes likely to be re-valuated, Main valorisation technologies, Main biocompounds and holistic (overall) solutions for utilization and Business strategies. Learning outcomes (knowledge, skills and competences) have been designed.

The leading principle in the development of the material has been versatility and suitability for different target groups: students of vocational institutes and universities, technicians and professionals in primary production and food and biomass processing. **BYP4DEV** Massive Open Online Course (MOOC) produced in this project does not require prior knowledge. As additional material, assignments and templates are offered with the teacher's instructions; for example, reflective questions that can be used in case the materials are used as part of contact teaching.

For the design of the pedagogical model, the first training materials will be tested in March-April 2023 with a group of biotechnology and food engineering students from Häme University of Applied Sciences, Finland. When the students have completed the self-study part and the test, they discuss in teams how they think it is possible to reduce the amount of side streams and waste in food production and how side streams can be utilized. Feedback is collected and used for the further development of the learning material.



## Events & News

### Transnational Project Meeting

On 15 March 2023, the 5 partners of the **BYP4DEV** partnership met at the fourth consortium meeting of the project. Originally intended to be organized as a physical event hosted by EXELIA in Athens, Greece, eventually the event took a hybrid form with 4 partners onsite and 1 partner online.

Despite the hybrid form, the engagement and collegial attitude of the **BYP4DEV** partners allowed the meeting to be efficient and fruitful. The meeting's purpose was to reflect on the activities of the past 4 months of the project and take stock of the achievements, as well as to discuss the upcoming activities.

During the meeting, Project Result leaders presented the activities undertaken under their Project Result during the last 4 months period, describing achieved milestones and results. During each session, active discussion took place, enabling the consortium to understand project requirements and co-shape the way forward. The workplan, tasks and responsibilities of the next four months were also thoroughly discussed, in order for all partners to be aligned on the forthcoming activities.

Partners praised the excellent collaboration of the partnership as well as the coordination and left the meeting with a renewed motivation to achieve the project's ambitious goals.

More information: [Link](#)



## BYP4DEV in S4AGRO Event

**BYP4DEV** project participated in the International Congress S4agro 2023, held on March 2-3 in Castelo Branco, reinforced the importance of the link between academia and the Agribusiness sector.

Organized by InovCluster, under the #S4agro project, it had over 170 participants and about 40 speakers. It brought together experts, researchers and agribusiness professionals from Portugal and Spain who, over two days, shared their knowledge, experiences and vision about innovative methodologies and products to support the green and digital transition of the agribusiness sector.

One of these practices, very current, is the recovery of agroindustry waste, a topic that was addressed by Carlos Cabo from FUNDECYT-PCTEX through the presentation of the ByP4Dev project. This international project, also developed by InovCluster, aims to create a European open access course (MOOC), for the creation of a new professional profile in the market: Specialists in the valorization of agro-industry waste and by-products.

More information: [Link](#)



## By-products Tips

### ByP4Dev Glossary



Words have the capacity to create new realities, and this transition process requires new mindsets, new technologies, new business models, but also new vocabulary.

This vocabulary will support in the understanding of these new processes and it will be integrated in our daily vocabulary in the short term.

Biomass Value Pyramid, Biorefineries or Value-added products are some of these essential concepts that are necessary to know if we want to start a by-product valorization processes.

**BYP4DEV** project has developed a brief glossary with these essential concepts. If you are interested to begin in the area, do not hesitate to visit the website: <http://byp4dev.eu/glossary/>

## By-products Good Practices

### Biomass ATLAS

Hämeenlinna – Finland.

In the utilization of side streams, biomass acquisition and logistics are important but challenging steps. By-products are generated in a decentralised, seasonal and otherwise variable manner, they often contain a lot of water and are usually perishable.

The Finnish Biomass Atlas is an open service that presents different types of biomasses on the map. The user can view the availability of the selected biomass types in a certain area. Biomass Atlas is developed by the Natural Resources Institute Finland together with the Finnish Environment Institute, Tapio, the University of Eastern Finland and the University of Vaasa, and with funding from the Finnish Ministry of Agriculture and Forestry.

Link to web: [link](#)

### Biogas calculation tool

Hämeenlinna – Finland.

Biogas production is a widely used technology for utilization of manure and other organic by-products and waste. Biogas tool is a freely available online planning tool for biogas production in a farm scale. The Biogas tool can be used to estimate the methane production from different raw materials and compare the profitability of different forms of energy production and utilization. It also helps to estimate the size of the biogas plant, nutrient content of digestate and the economic feasibility of the biogas plant investment.

The Biogas tool was developed under the HANDIHEAT project co-funded by the European Regional Development Fund (ERDF) through the Northern Periphery and Arctic Programme 2014–2020, the Ministry of Economic Affairs and Employment and the Natural Resources Institute Finland (Luke).

Link to web: [link](#)

## Partners



**FUNDECYT-PCTEX The Foundation FUNDECYT Scientific and Technological Park of Extremadura**

## The Lead Partner

Its main aim is to contribute to the social and economic exploitation of science and technology in the region and a better use of research and innovation outcomes.

Among other activities, FUNDECYT-PCTEX collaborates in the promotion and managing of the High Tech Bioeconomy and Circular Economy Incubator in Extremadura, which has been designed to support technology-based business projects aimed at obtaining new high added value products/processes from the natural resources of the region and the use of by-products and waste of agro-food industry.



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### Co-Funded by:

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