News on biobased resource recovery

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Dear circular economy enthusiast,

We are back with a new issue of our Bulletin to share the most relevant updates from our network!
This month, two new projects joined our community to work together towards the transition to a greener economy. We are happy to welcome Agro2Circular and MicroAlgae 4.0!

Agro2Circular aims at boosting the upcycling of agri-food wastes (from F&V and MPF) through innovative routes of valorisation, leading to high extraction yields, bioactives with the purity and stability required to be used for the production of new food, cosmetic and nutraceutical formulation.
MicroAlgae 4.0 is a research and career development project that aims to develop a biorefinery scheme based on microalgae cultivation biotechnology to maximise reclaimed water production and nutrient recovery from wastewater, produce by-products from microalgae biomass, and minimise environmental pollution.

Check below to learn more on these two interesting projects!

In this issue we also turn our spotlight on the AgriWasteValue project, which aims

to integrate agricultural by-products and residues into a circular economy by using innovative methods to identify valuable ingredients and environmentally- friendly extraction and modification processes, which are easily scalable. Discover more on the project below!

As usual, breaking news from our members will enrich your reading and will update you on their latest initiatives, progress and results. And lastly do not forget to take a peek at publications and events we chose for you.

We wish you a pleasant reading!

The BCE Team

Our latest updates will be waiting for you at @Bioref_Cluster and www.biorefine.eu. See you there!
You wish to share any news with us? Get in touch! info@biorefine.eu

Biorefine Community

Agro2Circular and Microalgae 4.0 join our network!

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Biorefine Community

Meet the project: the role of biomaterials in circular economy!

The Biorefine Cluster Europe is delighted to invite you to the first episode of its 'Meet the project' webinar series.

This new format aims to showcase innovative solutions from projects of our community, striving to contribute to a more sustainable resource management in the framework of circular economy systems. For this first episode we would like to turn our spotlight on biomaterials and their role in fostering the transition to a greener economy.

Read more and register here

Project's corner

AgriWasteValue

Currently, the majority of natural actives used in cosmetic or nutraceutical formulations are imported to Europe, while a great diversity of resources is present in North-West Europe. A large amount of residues in covered areas, known for their arboriculture and viticulture sectors, are not fully exploited for the sourcing of natural actives and are not used. The AgriWasteValue project searched for sources of supply of vine, apple and pear prunings in order to extract high added value molecules for the cosmetic and nutraceutical sectors.

After selecting the most promising prunings, one of the project partners, Celabor, developed green extraction methodologies applied to apple, pear and vine residues for the recovery of potentially interesting bioactive ingredients for the nutraceutical and cosmetic sectors.

Once the most interesting molecules had been extracted, they were sent to the URD ABI AgroParisTech to carry out enzymatic modifications of these natural extracts to produce new bioactive molecules and improve their biological properties for use in cosmetics.

With the residues left over from the green extraction steps and the enzymatic modifications, the AgriWasteValue project tried to valorise them in a biomethanisation unit to produce biogas.

Finally, the digestate from the biogas plant, which comes from the residues of the pruning of vines, pears and apples, has been used as fertiliser in the Netherlands. The loop is closed and the valorisation was as complete as possible.

Food for thoughts

Sea2Land - Hydrolysis and thermochemical technologies for the recovery of bio-based fertiliser from fishery waste
Lex4Bio - Review and assessment of published Life Cycle Assessment studies on bio-based fertilisers

Project news

The last General Assembly of Circular Agronomics in Berlin!

The Consortium of Circular Agronomics met in Berlin from 26 to 28 September for the 4th General Assembly. After 2 years of virtual meetings, they could finally see each other's in person. The three-day assembly took place in the Technical University of Berlin.
As Circular Agronomics is at the last semester of its running, all the partners presented and discussed the final results and planned the last activities to end the project.
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Read more here

Project news

Sea2Land at Aquaculture Europe 2022

Last month project partners CAVIAR PIRINEA and BETA Technological Centre presented a poster at Aquaculture Europe 2022 as they participated in a by - products valorization session.

Read more here

Project news

The first edition of Bionanopolys Open Innovation Test-Bed News is released!

Are you are interested in the development or the application of bio-based nanomaterials? Then the series of Bionanopolys OITB news is your perfect source of information. Have a look on the Bionanopolys service portfolio and get to know their one-stop-shop for industrial requirements.

Read more here

Marco Ugolini from F-CUBED Work Package 3 leaders Care For Engineering discusses the pilot testing conducted at the Appo olive oil mill in Bari, Italy, where olive pomace was hydrothermally treated and dewatered by TORWASH and Limburg Filter to produce intermediate bioenergy carriers and extract value-added products such as oils and nutrients.

Upcoming events

Save the date!

AlgaEurope 2022

13 - 15 December 2022, Rome, Italy

Algae have become a multi-billion sector in terms of biotechnology development that is expected to grow rapidly, providing valuable goods and services in multiple applications. AlgaEurope is a unique opportunity to learn and understand all about algae production and commercialization and interact with over 350 key players from more than 45 countries.

Continue reading

2nd Summit of Organic and Organo-Mineral Fertilisers Industries in Europe

Brussels & hybrid, 17-18 January 2023

Delayed by Covid, the SOFIE2 will centre on how organic and organo-mineral fertiliser products and technologies deliver specific agronomic performance characteristics for farmers' needs. The event is co-organised by ESPP, ECOFI, EUFEMA and Fertilisers Europe with support of the International Fertilisers Society.

Continue reading

EUBCE

5 - 8 June 2023, Bologna & hybrid, Italy

EUBCE is the largest biomass conference and exhibition in the world.

Each year, EUBCE brings together the greatest minds and latest advancements in biomass, with the aim of accelerating research and market uptake across the globe.
During the conference, over 2,000 experts from both academia and industry share and discuss groundbreaking ideas, technologies, applications, and solutions for the sourcing, production, and utility of biomass.

Continue reading

The Biorefine Cluster is supported by the European Biogas Association (EBA), a no-profit organisation which advocates for recognition of biomethane and other renewable gases as sustainable, on demand and flexible energy sources that provide multiple knock on socio-economic and environmental benefits. Learn more here

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