# NEWSLETTER

July 2023 / No.1

Co-funded by the Horizon 2020 Framework Programme of the European Union - Marie Skłodowska-Curie actions GA Nº 101086354

# Valorisation of agro-industrial wastes via the production of zeolite-based composite materials and their use in environmental remediation and biofuel production.


## WELCOME

VALZEO TEAM

Welcome to VALZEO Newsletter. We are thrilled to have you as part of our community and to share our sustainable journey with you. Our focus is on developing solutions for removing pollutants from water and for improving bioenergy production using zeolite-based composite materials sourced from recycled resources. By embracing the principles of a Circular Economy, we believe we can contribute to a more sustainable world. Through this newsletter, we aim to keep you informed about our progress, breakthroughs, and future plans. We are committed to transparency, collaboration, and sharing knowledge every step of the way. Your thoughts and feedback are invaluable to us, so we encourage you to actively engage with us. Don't miss out on the opportunity to learn about the cutting-edge technologies and methodologies that are being developed to promote sustainability and a cleaner future.

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# VALZEO KICK -OFF MEETING. TRANSFORMING RICE HUSK ASH INTO VALUABLE RESOURCES

Barcelona 23/1/2023: A multidisciplinary team from nine organisations across Spain, Italy, Ireland, Cuba, and the UK met in January to launch the VALZEO project, a 4-year initiative funded by the Horizon Europe programme (HE) to revolutionize how we use the ash from rice husk combustion for achieving a cleaner environment.

Each year, over 750 million tons of rice husk are produced globally, and this number is on the rise. Rice husk accumulates in the environment and is typically eliminated through combustion, resulting in the creation of rice husk ash (RHA). The issue with RHA is that it pollutes the environment, and it may impose a respiratory issue for humans and animals if not handled properly, posing a significant challenge for areas where RHA is dumped.

# TRANSFORMING ENERGY. REVOLUTIONARY APPROACH TO BIOENERGY PRODUCTION

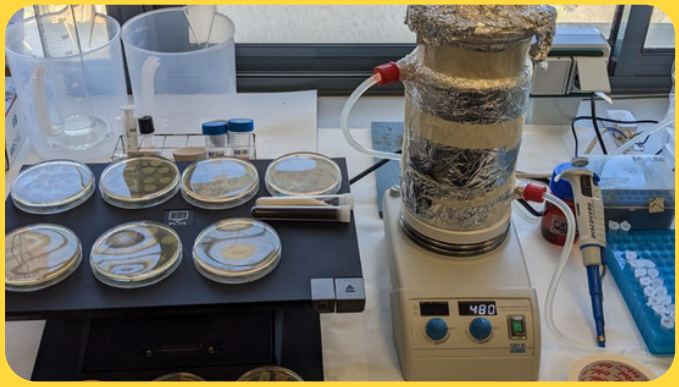
VALZEO team has successfully produced Zeolite-Based Composite Materials from Agro-industrial Wastes, dedicating extensive research and development efforts to transform the way we valorize RHAs for the production of bioenergy or water treatment applications. By utilizing and repurposing agro-industrial wastes, we have harnessed the power of zeolite-based composite materials, which have shown significant promise in energy production. By participating in VALZEO secondments, researchers, and experts gain access to cutting-edge technologies, research facilities, and a network of renowned scientists. This facilitates a deeper understanding of the latest advancements in bioenergy and biofuel extraction from agricultural waste, enabling participants to make significant contributions to the field. Additionally, the interdisciplinary nature of the project encourages collaboration and the exchange of ideas, fostering innovation and propelling the research forward.

## INITIAL PROJECT OUTPUTS DISCLOSURE

The Indio Hatuey Experimental Station, operated by the Ministry of Agriculture of Cuba, is an iconic research institution known for its contribution to the development and innovation of sustainable livestock production systems. Universitat Autònoma de Barcelona's researchers presented the VALZEO results at Indio Hatuey in Cuba with the aim of enhancing transfer of the knowledge and data between project partners.

## NEW RESEARCH CENTER FOR SUSTAINABLE ENERGY AND NANOTECHNOLOGY

Francisco Oliva from University Pablo de Olavide has recently presented a new research centre set to launch in July 2023, the centre will be specialize in promoting renewable energy and developing new nano-materials and improved processes in environmental and health biotechnologies.



## INNOVATIVE BIOSCRUBBER SYSTEM FOR BIOGAS DESULPHURIZATION

Aeris in partnership with ECOTEC has developed and installed a new bioscrubber system for Biogas depressurization at in industry in Lithuania, which treats over 1000 cubic metres/hour with hydrogen sulfide, is used in the production of biofuels and biogas from biomass.


## OPPORTUNITY FOR ENTREPRENEURS TO SHOWCASE INNOVATIVE IDEAS

Cup Marche is a competition focused on project with high knowledge content formalized in business plan aimed to creating and establishing innovative companies in Marche Region of Italy

## NEW FACILITY TO BOOST RENEWABLE PRODUCTION IN THE REGION

ETW Energietechnik (ETW), which is headquartered in the German city of Moers, has built a Bio-methane plant in Rittershoffen, in Alsace. The plant was built in cooperation with construction company Rytec, based in Baden, Germany, The plant went into operation in February this year, and possesses a processing capacity of about 700 m3 of raw Biogas per hour. Up to 350 m3 of Biomethane are fed into the natural gas grid every hour, roughly equivalent to the average fuel consumption of 20,000 passenger cars, according to ETW.

## BIOENERGY INDUSTRY URGES EUROPEAN POLICYMAKERS TO EMBRACE SUSTAINABLE SOLUTIONS

European policymakers have been presented with a manifesto highlighting the significant benefits provided by Bioenergy solutions and emphasizing the sector's crucial role in achieving the European Union's net-zero Goals for 2050. Bioenergy Europe, a leading organization in the sector, facilitated the manifesto and released an open letter to further emphasize the importance of Bioenergy technologies in our future energy system. As of 2 June, the letter has already garnered over 300 signatories, showcasing the widespread support for Bioenergy solutions.
In the letter, Bioenergy Europe stressed that European policymakers should not hesitate to embrace the advantages presented by Bioenergy and recognize its potential in achieving a sustainable and carbon-neutral future.