



GLOBAL
BIOECONOMY
SUMMIT 2026

VALZEO AT THE GLOBAL BIOECONOMY SUMMIT 2026 · DUBLIN

From agro-industrial waste to **bioeconomy solutions**

VALZEO turns rice husk ash, an abundant agro-industrial residue, into zeolite-based composite materials for removing pollutants from water and for biodiesel production. Universities, research centres and companies from Spain, Italy, Ireland, the UK and Cuba have worked together for four years under the EU's Marie Skłodowska-Curie Staff Exchanges programme. Now we want to share these results with companies, researchers and policymakers.

CHALLENGES WE ADDRESS

Emerging contaminants

Pharmaceuticals, dyes and other micropollutants that conventional treatment struggles to remove, under increasingly strict EU wastewater requirements.

Safe water reuse

Removing pollutants and inactivating bacteria, including antibiotic-resistant strains, so that treated water can be reused in industry and agriculture.

Waste into value

Giving a second life to rice husk ash and other residues as raw material for advanced materials and cleaner bioenergy.

FROM RESIDUE TO SOLUTION

1 · Residue

Rice husk ash from rice processing

2 · Silica

Optimised extraction of silica from the ash

3 · Materials

Zeolites with metal oxide nanoparticles & MOFs

4 · Applications

Water treatment and biodiesel catalysis

WHAT VALZEO HAS ACHIEVED

29+

Emerging contaminants degraded at the same time in real river water by a Fe-Cu zeolite catalyst activated by visible light, which also inactivated coliform bacteria.

7×

Reuse cycles without loss of efficiency: the catalyst keeps its activity over repeated use, which is key for operating costs.

A&X

Reproducible synthesis of zeolites A and X from silica extracted from rice husk ash, a low-cost, waste-derived raw material.

2

Applications validated in the lab: water treatment (adsorption and photo-Fenton) and catalysts for biodiesel from vegetable oils, with pilot-scale validation in the project's final phase.

Results reported by the VALZEO consortium (laboratory scale unless stated otherwise).



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WHAT VALZEO OFFERS YOU

SMEs & industry

- Low-cost materials made from a waste stream
- Visible-light catalysts and reusable adsorbents for water treatment
- Pilot testing, licensing and feasibility support

Researchers

- An international EU-Cuba-UK network built through MSCA staff exchanges
- Synthesis and characterisation know-how on zeolites, MONs and MOFs
- Open-access results and joint proposals for follow-up projects

Policymakers

- Evidence on valorising agricultural residues in a circular bioeconomy
- Solutions for micropollutants under evolving EU wastewater rules
- Policy recommendations on rice-waste valorisation, water treatment and biodiesel

HOW TO WORK WITH VALZEO PARTNERS

Pilot testing & demonstration

Test VALZEO materials and integrated pilot solutions with real water or process streams, under real operating conditions.

Access to materials & know-how

Explore licensing or transfer of materials and methods developed in the project, in line with the consortium's IP rules.

Research collaboration

Exchange methods and data, co-author studies and build on VALZEO results in new research lines.

Joint projects & policy dialogue

Build joint R&I proposals and feed project evidence into regional, national and EU bioeconomy policy.

WHO SHOULD TALK TO US

SMEs & water-tech providers

Water utilities

Agri-food & rice processors

Biodiesel producers

Universities & research centres

Policymakers & public authorities

Bioeconomy clusters & networks

HOW IT WORKS

01

Meet us in Dublin

Talk to the VALZEO team at GBS 2026 or scan the QR code to tell us about your interest or challenge.

02

Connect with partners

We link you with the right VALZEO partner to discuss needs, data, evidence and options.

03

Collaborate

Agree the next step together: testing, a joint study, a project proposal or a policy exchange.



MEET US AT GBS 2026

Global Bioeconomy Summit 2026

Tuesday 20 & Wednesday 21 October 2026
The Convention Centre Dublin (CCD)
Dublin, Ireland



valzeo.eu



gbs2026.org

VALZEO consortium: Universitat Autònoma de Barcelona (coordinator), Universidad Pablo de Olavide, Università Politecnica delle Marche, AERIS Tecnologías Ambientales, SITES, Z Prime, Universidad de La Habana, EEPFIH, Instituto de Investigaciones de Granos.

Contact & follow-up: www.valzeo.eu · LinkedIn: VALZEO · #VALZEO #GBS2026

