Press Release:

Launch of the BIOARC Insights Hub, an Open Knowledge Base on Bio-Based Building Materials from Sunflower, Rice, Wheat and Hops Residues

October 21st, 2026 (Munich) – The Horizon Europe project BIOARC has launched its **Insights Hub**, an open knowledge base on the project website that brings BIOARC's public results together in one place. Launched as the project reaches its midpoint, the Hub opens with a first set of content and will grow steadily as new results arrive from the project's activities.

Since May 2025, twelve partners from eight European countries have been working together in BIOARC to turn agricultural by-products into **bio-based building materials**. Residues from sunflowers (France), hops (Germany), wheat (Poland) and rice (Italy) are bound through **microbial biomineralisation**: natural bacteria grow a stone-like mineral binder around the agricultural fibres. The resulting materials are being developed into four products: **insulation boards**, **construction panels**, **acoustic panels** and **modular partition walls**.

The Insights Hub is the centrepiece of BIOARC's commitment to open science. It is designed to give open access to the project's research outputs, data and developments, as well as to the feedback of the farmers, designers, communities and other stakeholders who help shape the materials. Its starting version presents the project's first public reports and scientific publications, led by the open-access paper *BIOARC: Bioregional Bio-Mineral Materials*, published in *Biotechnology Design* (Cambridge University Press) by researchers from Northumbria University, Cresco Biotech and the Technical University of Munich (TUM), together with two forthcoming conference papers.

This is only the beginning. Over the coming months, the Hub will be expanded as results become available. Planned additions include **practice abstracts** offering ready-to-use guidance for professionals in construction, agriculture, design and policymaking; info-booklets on each of the four bioregions and their crops; infographics; explanatory and educational videos; and episodes of the BIOARC podcast. In the second half of the project, the Hub will also present the results of product testing and life cycle assessment, along with the **four community pavilions** to be built in the bioregions and the full-scale mock-ups for construction professionals.

The Insights Hub is intended for everyone with a stake in more sustainable construction: architects, engineers and construction companies; farmers and processors of agricultural by-products; researchers in biomineralisation and bio-based materials; policymakers and standardisation bodies; the **New European Bauhaus** (NEB) community; and the wider public. In line with the NEB's values of sustainability, beauty and inclusion, it aims to make knowledge on regionally rooted, low-impact building materials available to all who can put it to use. Visitors can explore the Hub at bioarc.eu/insights-hub, subscribe to the BIOARC newsletter on the project website to hear about new content, and follow the project on social media.

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Coordinator: Technical University of Munich (TUM)

Website: bioarc.eu | Insights Hub: bioarc.eu/insights-hub

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