

Avenue d'Auderghem 22
1040 Brussels
27 March 2025

Industrial
symbiosis
in action:

aluminium
and cement
industrial
sectors
advancing
resource
efficiency
and CO₂
reduction

Final event organised
under the H2020
ReActiv project



Industrial symbiosis in action: aluminium and cement industrial sectors advancing resource efficiency and CO₂ reduction

27 MARCH 2025 FINAL EVENT
ORGANISED UNDER THE H2020 REACTIV PROJECT

Workshop scope, objectives & registration

Context and motivation

Processed bauxite (also known as bauxite residue and/or red mud), a waste/by-product of alumina production, presents both a challenge and an opportunity for the alumina refineries. With approximately 6 Mt of processed bauxite generated annually and over 250 Mt cumulatively stockpiled (including legacy sites) in Europe alone, there is growing interest to turn processed bauxite into a resource for large-scale, sustainable applications. The cement industry, responsible for 4% of Europe's emissions, emerges as a key ally in this effort. According to CEMBUREAU, the carbon footprint of cement was estimated at 667 kg CO₂ per tonne in 2017. Currently, European cements incorporate an average of 23% Supplementary Cementitious Materials (SCMs), such as ground limestone, granulated blast-furnace slag, and fly ash. However, the declining availability of conventional SCMs amplifies the urgency to explore alternatives. Valorising processed bauxite as a reactive SCM could offer a game-changing solution—reducing clinker content, lowering CO₂ emissions, and significantly reducing processed bauxite disposal. In alignment with the EU Green Deal objectives, this synergy fosters innovation, circularity, and sustainability, setting the stage for transformative progress across both sectors.

The EU ReActiv project approach

The EU ReActiv project represents a groundbreaking initiative aimed at addressing the dual challenge of industrial waste management and decarbonization by forging a symbiotic value chain between the alumina and cement industries. Through innovative processing, ReActiv transforms processed bauxite into a high-performance Supplementary Cementitious Material (SCM), unlocking its potential as a sustainable alternative for clinker substitution in cement production. To ensure this transformation's success, ReActiv unites key stakeholders, including industry leaders, research and technology organizations (RTOs), SMEs, and associations. By integrating expertise in material science, process engineering, and industrial operations, while addressing technical and regulatory challenges, ReActiv lays a robust foundation for market adoption, advancing sustainability and circularity across industries.

Why you should join?

ReActiv partners invite you to join the project's final event. Together, we will dive into the crucial role of processed bauxite in advancing sustainable cement production and circular economy practices. The event will deal with how a complex interplay of policies, technological advancements, and market dynamics is reshaping the future of industrial waste valorisation. Within this framework, key ReActiv advancements will be presented, illustrating how these innovations align with broader sustainability goals and contribute to the transformation of both the cement and alumina industries.

Who should attend?

Any interested stakeholder in exploring SCMs and the transformative role of processed bauxite in building a symbiotic value chain between the cement and alumina industries is welcome. This event is particularly relevant for policymakers, industry leaders, technical and scientific experts, and members of the press. Join us to discover innovative solutions shaping the future of sustainability and industrial collaboration.

How to register and reserve your spot?

Access to the event is limited to registered participants. Register and find event details on our platform: [click to register](#)

On-site registration closes on 24 March

For online attendance, contact: events@european-aluminium.eu

For general inquiries, please contact: kollias@european-aluminium.eu; for media inquiries, please contact: georgopoulos@enalos.gr

For more details on the ReActiv project, visit: <https://reactivproject.eu/>

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Programme

09:30 Welcome remarks

Speakers: **Philippe Benard**, Holcim & **Paul Voss**, European Aluminium

09:45 The timely journey of processed bauxite
towards a promising circular future

Speaker: **Ken Evans**, IAI

10:15 New Supplementary Cementitious
Materials from processed bauxite for low-
carbon cement products

EU ReActiv project: a win-win approach for a symbiotic
value creation

Speaker:

11:15 Networking coffee break

11:45 Policy discussion

Unlocking the potential for processed bauxite in cement
applications: Challenges and opportunities

Moderator: Panelists:

12:45 Networking lunch

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Programme

14:00 Paving the way forward in
industrial innovation

Assessing the financial viability of processed
bauxite valorisation

Speaker: **Paraskevi Efstathiou**, AdMiRIS

Shaping Sustainable Cements through Standards:
Insights from the SuStaCEM Project

Speaker: **Xavier Guillot**, CEN-CENELEC

15:30 Networking coffee break

16:00 Panel discussion

Horizon Innovation to market: Industry needs and
pathways towards a more EU sustainable future

Moderator: Panelists:

17:00 Final remarks

17:15 End of the event

