



**INDUSTRIAL
RESIDUE
ACTIVATION FOR
SUSTAINABLE
CEMENT
PRODUCTION**

CE-SPIRE-09-2020

ReActiv

Full Title: Industrial Residue Activation for sustainable cement production

Aim:

ReActiv will create a novel sustainable symbiotic value chain, linking by-products from alumina production to cement production. Bauxite Residue is the main by-product of the alumina sector produced at rates of 6.8 million tonnes per year in the EU, but the recycling rate is currently less than 200,000 tonnes per year. ReActiv will modify the bauxite residue properties, transforming it into reactive material suitable for production of new, low CO₂ footprint cement products.

Concept:

To achieve its objectives the ReActiv project brings together the global leader in cement production with the biggest alumina producers along with top research and technology centres with significant expertise in the field. Furthermore, the European Alumina Association and the International Aluminium Institute are participating in the project to further the industrial dissemination and deployment of project results within the European and global alumina industry. The methodology developed under the ReActiv project can be replicated in by-products from other industrial sectors as well. To this end the project will seek to include, via modelling and/or labscale environment, other by-products in the developed flowsheets.

Start date:

01/11/2020

End date:

30/10/2024