

Position paper

**To promote the use of secondary raw materials
in the manufacture of ceramic products**

1. About secondary raw materials in ceramic construction products

Increasing the use of secondary raw materials in ceramic construction products plays a pivotal role in strengthening the circularity of our industry sector. This is also relevant for the new Taxonomy Technical Screening Criteria in the second Delegated Act on 'Transition to a circular economy' (chapter 3 - 'Construction and real estate activities') adopted in June 2023.

To increase the share of secondary raw materials in ceramic construction products, the use of additives and materials derived from both closed and open loop recycling processes should be included regardless of their current legal status (recycled material, by-product or waste). An essential component of this endeavor involves the sorting and treatment of ceramic construction and demolition waste.

Ceramic construction products manufacturers already engaged in recycling and reusing materials/products coming from their own production processes, such as grinding dust and internal residual flows (e.g. products with defects after shaping, drying and firing). These recycled or reused materials serve as substitutes for virgin primary raw materials in the production process (**closed loop recycling and reuse**).

In addition, this grinded material finds application in other industry sectors, such as concrete, where it can serve as granulates substitute for cement (**open loop recycling**). Furthermore, fired ceramic 'dropout' (originating from defective products) has the potential to become a valuable input material for the sub-foundation of several infrastructure works.

Moreover, the ceramic industry also uses by-products from other industries. As an example of industrial symbiosis, the recycled content of the mix of raw materials also includes other streams of secondary raw materials coming from other industrial processes (e.g. paper fibers and granite powder) as secondary raw materials (open loop with streams entering the ceramic production process).

It is the overall aim of ceramic construction product producers to substitute primary raw material significantly and thus contribute to a resource-efficient, decarbonized and circular Europe.

2. Definition according to the Waste Framework Directive 2008/98/EC

According to article 3 of the Waste Framework Directive, 'waste' is defined by any substance or object which the holder discards or intends or is required to discard.

Many countries classify both grinded materials (e.g. dust) and residual flows, such as ceramic 'dropout' resulting from drying and firing processes, as by-products of their own production processes and not as waste according to article 5 point 1.c. Ceramic construction products manufacturers actively incorporate this dust into their production processes. Therefore, in full alignment with the Waste Framework Directive, grinded dust as well as internal residual flows should consistently be regarded as by-product as the producers do not discard these materials.

Sorted and treated ceramic construction from demolition waste can obtain the end-of-waste status when it has undergone a recovery (including recycling) treatment and complies with specific criteria to be developed in accordance with the following conditions according to article 6:

- a. the substance or object is commonly used for specific purposes
- b. a market or demand exists for such a substance or object
- c. the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products and
- d. the use of the substance or object will not lead to overall adverse environmental or human health impacts

The criteria shall include limit values for pollutants where necessary and shall take into account any possible adverse environmental effects of the substance or object.

3. Definition in the new Taxonomy circular economy Delegated Act

According to the EU Taxonomy Environmental Delegated Act, secondary raw materials are defined as: ‘materials that have been prepared for reuse or recycling and have ceased to be waste.’

4. Position from the ceramic industry

As example, grinded material (e.g. dust) and internal residual streams (from drying and firing processes) recycled or reused in their own production processes and sorted and treated ceramic construction and demolition waste are, according to some Member State’s specific ‘waste’ regulations, not considered as ‘have ceased to be waste’, the use of these materials would not be considered in the Taxonomy definition in the share of secondary raw materials being used.

Therefore, to support circular buildings in the EU, we kindly ask to include in the Taxonomy secondary raw material definition also existing open and closed loop recycling and reused processes (which often support the substitution of virgin raw materials) regardless the legal status as waste or raw material.

Thus, we propose to change the definition as follows: ‘secondary raw materials being materials that have been prepared for re-use or recycling’. The definition of secondary raw material should be as broad as possible, such as the definition that can be found in EN 15804 standard: ‘secondary material is a material recovered from previous use or from waste which substitutes primary materials’.

- ✓ **Ceramic construction products manufacturers consider both open and closed loop recycling and reused as best practice examples to increase the share of secondary raw materials in ceramic construction products. The closed loop flows integrated into the industrial process come from internal reprocessing; the open loop flows come from other industrial processes.**
- ✓ **We kindly ask the European Commission to provide guidance to Taxonomy stakeholders that secondary raw materials from open and closed loop recycling and reuse processes (such as grinded materials from ceramic production processes) shall be included in the secondary raw material share of a product in order to be taken into account in the decrease of primary raw materials.**
- ✓ **Additionally, it is important that the internal reuse and recycling from reprocessing, regrind or residues generated by a given manufacturing process and which are reintroduced into the same process that generated them are included in the definition of secondary raw materials, in addition to pre- and post-consumer materials. In this way, we do not create any distortion compared to a**

company that would discard these flows (generating environmental impact due to transport) to another ceramic manufacture, which itself would value them.

- ✓ We are convinced that by taking into account the recommendations from the ceramic industry on the secondary raw material definition and on recycled materials, the share of secondary raw materials used in ceramic construction products can enhance and thus decline significantly the use of primary raw materials.

Cerame-Unie is the European Ceramic Industry Association, representing interests of all major European ceramic producers. The EU Ceramic Industry is a world leader in producing value added, uniquely designed, high quality ceramic products manufactured by flexible and innovative companies, the majority of which are SMEs. The ceramics industry represents an annual production value of around €30 billion, accounting for approximately 25% of the global production, and over 200,000 direct jobs throughout the EU.