

ESTIMATED IMPACT SCENARIO IF RECYCLED AGGREGATES WOULD NO LONGER BE PERCEIVED AS AN ARTICLE UNDER REACH REGULATION

1. Situation of the industry

The European industry for construction and demolition waste recycling consists of a large number of small and medium enterprises (SMEs) each with only a few employees per site. Since the REACH regulation came into force back in 2007, more than 2.7 billion tonnes of recycled aggregates have been produced in the EU27 alone. Thus, the industry has made a major contribution to the circular economy for several years.

Recycled aggregates are used in a wide range of applications, particularly in earthworks (as unbound materials) and in road construction (primarily as high-quality unbound materials). For some years, the production of high-quality recycled aggregates for concrete has also been on the rise. They are increasingly in demand from the concrete industry due to commitments on sustainability and the circular economy. In addition, there is an increasing demand for small sized recycled aggregates in the cement industry to produce clinker-reduced (CO₂-reduced) cement. Thus, the recycling industry is now also recognized as an important supplier of secondary raw materials for processing industries.

The production of recycled aggregates from construction and demolition waste takes place either in static or mobile plants during demolition work on the construction site. Mobile plants are often operated by construction companies that use the recycled aggregates produced on the construction site itself for unbound applications. Due to restrictions on noise, dust, and vibration, static plants produce recycled aggregates either on primary extraction sites (quarries, sand & gravel pits), in recycling centres or on transport hubs (ports, railway junctions, motorways) with fixed machinery.

The industry is still struggling with acceptance problems, which often manifest themselves in the exclusion of recycled aggregates from tenders. In this context, end-of-waste (EoW) criteria play an important role. For psychological reasons, the use of "waste" tends to be a deterrent, although recycled aggregates that have reached EoW and are now products, must fulfil the same technical and environmental requirements as primary materials. While some countries have already established EoW criteria, discussions on this are still ongoing in other countries and the EU. This is one of the reasons why the recycling of construction and demolition waste is very different in European countries.

2. Burden of REACH registration for recycled aggregates

Materials subject to waste legislation are generally exempt from the REACH Regulation. The reclassification would only apply to recycled aggregates that have reached the EoW stage. Due to the current classification as an "article", recycled aggregates are exempt from the REACH registration obligation. A change in classification to a "substance" or "mixture", such as ECHA has proposed in 2023 in its document "Recovered aggregates: aggregates from construction and demolition waste", would therefore primarily affect those recycled aggregates for which EoW criteria have already been established. Manufacturers in countries with introduced EoW criteria would thus be treated unequally.

Comment: In our view, recycled aggregates should still be regarded as an article under REACH. It is clearly an "article which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition." As recycled aggregates are bulk materials, the definition here cannot naturally refer to an individual grain but must instead consider the group of grains that is produced. We have explained this in detail in our statement "Recycled Aggregates and REACH".

The cost impact is difficult to assess, as there are so many uncertainties. For instance, a recycling company may produce up to 10 or more different products. Some may be grouped to form one registration, but for now this is not clear. This uncertainty bears the risk to render the production of recycled aggregates unprofitable.

If a reclassification of recycled aggregates were to require registration under REACH, the associated administrative burden would be immense. First of all, the recycling company does not always know the origin or specific components of materials used in a building or infrastructure. A reclassification of recycled aggregates would mean that all these components of the aggregates would be subject to individual registration under REACH. A recycling company would therefore have to ensure that each component of the aggregates is properly registered and documented in accordance with REACH. It is unclear if a registration would have to be carried out anew for each batch and each construction or production site. The administrative effort involved in analysing the recycled aggregates, searching through various REACH databases and the resulting additional financial and time expenditure is difficult to measure for now but seems to completely change and threaten the existing ecosystem of many small and medium sized enterprises (SMEs) active in C&D (Construction and Demolition) waste recycling, with unknown consequences on labour.

3. Feasibility of REACH-Registration

The process of recycling is such that significant variations may occur in the input material at each crushing facilities, with materials from multiple demolition sites. For example, there are considerable differences in the construction products used in buildings and infrastructures from the 1930s and 1970s. These materials are selected carefully and processed in such a way that the products meet all necessary requirements. It can be assumed that the composition of recycled aggregates undergoes continuous changes due to the varied supply of feed stock from demolition. According to REACH production changes must be notified. There would be much uncertainty how to deal with this impact under REACH registration. Would each incoming batch of construction and demolition waste give rise to new notification or registration? This would be impossible in practice and would bring the production of recycled aggregates to complete stop.

Mobile crushers can adapt and produce recycled aggregates that meet all technical requirements in accordance with EU harmonized product standards. As the crushing operators move from one location to the next, they continuously start up a new production process. As the nature of the feedstock will differ significantly for each project, the composition of recycled aggregates will vary for each project. How can this meet the requirements of REACH registration?

4. No necessity for REACH-Registration

Only non-hazardous (inert) types of construction and demolition waste are used to produce recycled aggregates. The products are already subject to regular testing on dangerous substances with strict national threshold levels. Where EoW criteria apply, recycled aggregates receive the EoW status because their environmental soundness has been tested that extensively. According to criteria set in the Waste Framework Directive, **the EoW status can only be reached when no adverse environmental or human health impacts can occur**. There is therefore little point in undergoing further scrutiny which is demanded by REACH regulation. This will only verify what has been confirmed by the fact that recycled aggregates have ceased to be waste: they are sound to use and have no adverse impacts on environment or human health. In addition, general health and safety regulations apply to these materials.

5. Harming the circular economy and environmental protection

The EoW status is relevant to smooth markets and receive full recognition of the high-quality products. When the EoW status comes with increased cost and administrative burdens, companies may choose not to apply this status. Consequently, their markets will reduce, and companies will turn to lower quality markets. High quality recycling, for instance separating crushed concrete for use into new concrete, is very much depending on the EoW status. There would be no further investment in this area, which would jeopardise the goal of high-level circularity. The increasing circular demand for recycled aggregates for use in concrete and cement would not be satisfied, taxonomy criteria (for instance use of at least 30 % recycled materials in new construction products) would be almost impossible to achieve.

In Member States where recycling is developing, stakeholders wish to implement EoW criteria. In this delicate situation, companies in the start-up phase (mostly SME) are at a vulnerable stage. Any positive development will increase chances of survival, any negative impact will directly reduce chances. The threat of having to register will have significant reducing effects. All current efforts to work on EoW criteria may come to an end to avoid REACH registration. To foster recycling, EoW criteria in all Member States is crucial. There is currently no level playing field for recycled aggregates in the EU.

In several Member States it is not permitted to use waste or recycled aggregates in (road) construction, EoW criteria are therefore key. It is already a major challenge for companies in these Member States to meet EoW criteria. The additional burden of registration for REACH would only increase the barriers for companies to enter markets. REACH requirements and all related extra testing do not add value, for materials such as recycled aggregates which have already proven their environmental status.

Currently recycled aggregates are classified as articles with no technical or chemical issues noted through the production of hundreds of millions of tonnes of circular and environmentally beneficial materials produced and used for more than 30 years across Europe. Should the REACH re-assessment of Recovered (recycled/manufactured) aggregates be implemented, it is increasingly likely that many SME will withdraw from the production of recycled aggregates due to the excessive bureaucratic and financial burden of REACH registration. The environmental impact of this withdrawal could mean a dramatic increase in the volume of valuable resources going unprocessed and being sent to landfill.

In general, a high degree of uncertainty will result when recycled aggregates are required to be registered under REACH. As a result, it may become unclear for sellers and buyers whether recycled aggregates are a product or a waste. An immediate drop of demand would follow. It is very likely that, at least in the short term, existing markets will be negatively impacted. Primary aggregates production will not be able to immediately fill the supply gap of 10-12% of the total demand of around 3 billion tonnes which will heavily impact the European construction industry, responsible for a significant part of the EU's GDP.

Considering the impacts detailed above, SMEs will be faced with a task unable to handle. Treatment of construction and demolition waste is not a chemical process where all variables are stable. Aggregates producing companies are not producers of chemicals but do produce articles. If the industry will have to deal with REACH, it will have to fully depend on consultants, further increasing the administrative and cost burden. This will very negatively influence the production of secondary raw materials which contributes significantly to the general and circular economies.

6. Jeopardising EU ambitions

As a minimum the following policies could be jeopardised:

- The New Circular Economy Action Plan. This plan fosters the circular economy in general, it is aimed at developing a well-functioning internal market for high quality secondary materials. Reclassifying recycled aggregates will with great certainty not contribute to that goal. Instead, markets will get uncertain, developments to recycle C&DW will be delayed, and high-quality recycled aggregates will meet a more difficult market.
- Taxonomy ambitions will be harder to fulfil, as supply of secondary materials for construction works will be hampered.
- The Commission is elaborating a transition pathway for a resilient, greener, and more digital construction ecosystem. As for the greening of the construction ecosystem, reclassifying recycled aggregates is expected to prove an important obstacle. The main contribution for the green credentials of recycled aggregates is replacement of primary materials, as explained above inert materials are the main ingredient of construction.
- The Commission is considering EoW criteria for materials in C&D waste referring to already existing implementation of EoW in several Member States. If, as a consequence, recycled aggregates would have to be REACH registered, support for such criteria will diminish greatly.

7. Conclusion

Mandatory identification of substances in construction and demolition waste for aggregates recycling and registration under REACH would render the production of recovered aggregates unprofitable and could bring the circular economy for C&D waste to a halt for several years. Since waste is exempted under REACH, countries with an end-of-waste (EoW) criteria in place would turn this advantage into a disadvantage for their industries. Targets for Green Public Procurement and sustainable finance criteria would be difficult or impossible to meet in practice for years to come. The EU and national Waste Management Protocols would have to be revised. Capacities for backfilling and landfilling as well as existing market-based instruments would no longer work since incentives for aggregates recycling will have shifted. A significant supply gap of 10-12% of the total demand of 3 billion tonnes of aggregates

cannot be closed with the increased production of primary aggregates. These undesired consequence of the technical recommendation of ECHA would only result in disproportionate costs for producers without any added environmental or social value.

In our view, the reassessment that recycled aggregates are not an article within the meaning of the REACH regulation is technically and legally incorrect, and do not add any value to society, safety, humans, and environment.



Aggregates Europe – UEPG represents the European Aggregates Industry since 1987, with Members in 25 countries. It is by far the largest non-energy extractive industry, covering a demand of 3 billion tonnes of primary and secondary aggregates per year, produced on 26,000 sites by 15,000 companies (mostly SMEs) across Europe. Our industry produces natural aggregates from quarries, sand & gravel extraction sites and from marine aggregates, it produces recycled aggregates from construction & demolition waste and manufactured aggregates from industrial processes such as steel slags or incinerated bottom ash.



Concrete Europe is the umbrella organisation of six associations representing the concrete sector and its value chain in Europe. These associations consist of BIBM (the Federation of the European Precast Concrete Industry), CEMBUREAU (the European Cement Association), EFCA (the European Federation of Concrete Admixtures Associations), and ERMCO (the European Ready Mixed Concrete Organization), alongside two associate members: Aggregates Europe – UEPG and EUPAVE (the European Concrete Paving Association). It aims at promoting concrete as the backbone of sustainable construction and to better communicate to EU stakeholders and those within the construction value chain the concrete sector's role in attaining the objectives of the EU Green Deal. Founded in 2023, the new entity is the successor to The European Concrete Platform and The Concrete Initiative.



The European Asphalt Pavement Association (EAPA) is the voice of the Asphalt Paving Industry in Europe, with 16 national associations and 23 equipment and material suppliers as members. It works to ensure that the use of asphalt, as the optimum choice for the construction and maintenance of the vital European road infrastructure, is fully appreciated, promoted and implemented. The primary objective of EAPA is to build a sound evidence base for promoting the economic, technical, and societal benefits of asphalt paving in road construction and maintenance. Further, to create the future for an innovative and modern asphalt industry in Europe that cares for health and safety as well as for protection of the environment and sustainability.



The European Recycling Industries' Confederation (EuRIC) is the umbrella organisation for the recycling industries in Europe. Through its 75 members from 23 European countries, EuRIC represents more than 5,500 large companies and SMEs involved in the recycling and trade of various resource streams. They represent a contribution of 95 billion EUR to the EU economy and 300,000 green and local jobs. By turning waste into resources, recycling reintroduces valuable materials into value chains over and over again. By bridging circularity and climate neutrality, recyclers are pioneers in leading Europe's industrial transition.



The European Waste Management Association (FEAD) represents the private waste and resource management industry across Europe, including 19 national waste management federations and 3,000 waste management companies. Private waste management companies operate in 60% of municipal waste markets in Europe and in 75% of industrial and commercial waste. This means more than 320,000 local jobs, fuelling €5 billion of investments into the economy every year.



The Fédération Internationale du Recyclage (FIR) represents the European recycling industry of Construction & Demolition Waste and of Incinerator Bottom Ash (IBA). It is the largest recycling industry of Europe. Together the members of FIR recycle more than 200 million tonnes of C&D waste. Members of FIR have contributed to achieve full and high quality recycling in some of the EU Member States. More than 40 years of expertise is available to also assist other Member States to achieve these levels.