

EuroWindowor position on the evaluation of the Circular Economy Act

EuroWindowor welcomes the European Commission's intention under the Circular Economy Act (CEA) to foster a genuine single market for waste and secondary raw materials and to strengthen circularity in products. According to the Call for Evidence, the Commission plans to achieve this through a mix of measures, including the reform of end-of-waste criteria, the simplification, digitalisation and extension of extended producer responsibility (EPR) schemes and the introduction of mandatory public procurement criteria for circular products and services.

EuroWindowor supports the general objectives of improving resource efficiency, facilitating recycling and stimulating demand for circular products in the internal market.

However, we would also like to point out that any recommendation or requirement must be chosen with care, taking into account the differing situation of each product group especially in the construction sector with very long-lasting products.

1 Windows and doors as long-lasting and inherently circular products

Windows and doors are construction products with an average service life of more than 50 years because of a window replacement rate is about 1.2%. Their longevity already makes them circular by nature, as they delay the need for replacement and reduce resource consumption over time.

Throughout their life cycle — from raw material extraction, manufacturing, installation, use, maintenance and repair to end-of-life — windows and doors offer multiple opportunities for circularity that go far beyond waste management and should therefore be fully recognised in the CEA's impact assessment. Moreover, modern windows significantly contribute to energy efficiency, thermal comfort and indoor air quality, thereby reducing CO₂ emissions during the use phase of buildings.

Any future legislative approach should therefore consider the holistic life-cycle benefits of windows and doors when defining circularity objectives.

2 Established recycling processes and existing challenges

At the end-of-life, established recycling processes already exist for most materials used in window and door manufacturing, notably PVC, aluminium, steel and glass.

- PVC, aluminium, steel and glass have well-developed recycling streams that substantially contribute to the reuse of secondary raw materials in Europe.
- Wood can often be reused or recovered energetically, depending on coatings or preservatives used.

However, several regulatory and practical barriers continue to limit the full recycling potential:

- Under REACH and RoHS, the reintroduction of recycled PVC containing legacy substances (e.g. lead stabilisers) is heavily restricted and exceptions are temporary with additionally labelling requirements, despite existing technical solutions for safe reuse.
- Wooden windows may contain historic coatings or preservatives to ensure durability, restricting circularity options to energy recovery.
- For glass, high-quality post-consumer flat glass is still scarce, as bottles or container glass cannot be used to produce new window glass.
- The availability of post-consumer aluminium varies significantly across Europe, limiting the circular supply in some regions.

To foster further circularity, the CEA should recognise these material-specific conditions and promote realistic recycling pathways that balance circularity with chemical safety, while supporting innovation in selective dismantling, collection and material recovery.

3 Reuse potential and material purity – legacy substances and safety considerations

While the reuse of entire windows may appear circular in principle, meaning the old window with its original function (after minor treatment/repair) without technical improvement, it is in practice rarely feasible. Windows are mainly made-to-measure and tailored to a specific opening with individual characteristics. This makes reuse in another building virtually impossible.

Given the long lifespan and rapid technological advancement, older windows are often technically outdated and cannot meet modern thermal or safety standards. For instance, average U-values have improved from around 4.6 W/(m²K) in the 1970s to below 1.0 W/(m²K) today.

Reusing such outdated products in new or renovated buildings would not contribute to the EU's energy efficiency goals and might even conflict with building codes. Therefore, remanufacturing a dismantled product by reuse usable components and replace unusable components improving the performance to an updated product are being investigated in pilot projects but are limited to fit to the specific opening and building requirements. Sometimes the refurbishment of an existing product to extend its service life could be an option, if the new performance meets the requirements of building code. This is done especially in the preservation of heritage buildings.

Moreover, old materials may contain hazardous legacy substances such as lead or cadmium in PVC or coatings with restricted chemicals in wood. While some exemptions currently allow the limited use of recycled legacy materials, these are time-limited, costly to manage and create uncertainty for manufacturers. Especially since a used product is considered waste when taken out of the building, the bureaucracy intensifies. End consumers also want the freedom to choose whether they want to buy products with or without recycled content of legacy materials or any other option.

Therefore, the CEA should not impose reuse targets that are technically or economically unrealistic, nor fixed obligations for recycled content where this may compromise product performance, durability or safety.

Manufacturers must retain the flexibility to choose virgin materials when necessary to ensure high quality and compliance with environmental and health standards or user requests.

4 Building new windows from recycled materials

Modern window technology allows for disassembly and separation into recyclable components at the end-of-life, enabling efficient material recovery and reducing any material going into the landfill where still legally allowed.

Pre-consumer recycled materials are already widely used, reducing waste generation during production. However, the use of post-consumer recycled content remains limited by availability and regulatory constraints:

- PVC: Recycled content is technically feasible where sufficient post-consumer material is available, but a mixture also contains legacy substances that may be rejected by consumers.
- Aluminium and steel: Recycled and primary aluminium / steel are indistinguishable; the key barrier is availability of post-consumer scrap as they are also in demand worldwide in other industries.
- Glass: Requires high-quality flat glass cullet, currently being organised through new circular collection chains across Europe.

EuroWindow supports the ongoing industry efforts to improve post-consumer recycling but stresses that availability differs between Member States and that technical standards for high-quality recycled inputs must be safeguarded to maintain product performance.

5 Variety of materials and product requirements

Windows and doors are not uniform products — they comprise a variety of different window types, sizes, materials and multifunctional components that must meet diverse building requirements such as for fire safety, hygiene and health, safety and accessibility, thermal and acoustic performance, sustainability and aesthetic design.

A one-size-fits-all approach to recycled content or material rules would therefore be inappropriate. The CEA should ensure flexibility and sector-specific differentiation when designing measures for circularity in complex construction products like windows.

6 EuroWindoor's position on the potential measures

EuroWindoor supports the objective of creating a true single market for waste and secondary raw materials and agrees that end-of-waste criteria and EPR systems should be simplified and harmonised across Member States. However, for windows and doors these measures must:

- Remain voluntary and incentive-based, not prescriptive or mandatory;
- Recognise the specificities of construction products and their long life cycles;
- Be harmonised to provide the same incentives in EPR schemes across member states
- Avoid duplicating existing recycling schemes already operated successfully by industry;
- Allow the use of recycled materials containing legacy substances on a permanent basis but not require minimum recycled content.
- Ensure proportional administrative requirements, particularly for SMEs.

As for public procurement, EuroWindoor supports stimulating demand for circular products, provided that criteria are practical, measurable and reflect the real-life circularity potential of products such as windows and doors — where longevity, energy efficiency and recyclability together define their circular performance.

7 Conclusion

EuroWindoor welcomes the Commission's efforts to accelerate circularity in Europe and agrees that reforming end-of-waste criteria and streamlining EPR schemes can strengthen the single market.

However, for the building sector, circularity must be understood in a comprehensive life-cycle perspective — not limited to waste management or recycled content quotas.

Windows and doors are already long-lived, resource-efficient and mostly recyclable products that make a significant contribution to the EU's sustainability and energy goals.

EuroWindoor therefore calls for the Circular Economy Act to support innovation and harmonisation, while avoiding rigid legal obligations that could undermine flexibility, product safety or competitiveness in the European window, door and façade sector.

About EuroWindoor AISBL – EuroWindoor AISBL was founded as an international non-profit Association, in order to represent the interests of the European window, door and facade (curtain walling) sector. Our 20 national associations speak for European window, door and facade manufacturers that are in direct contact with consumers, and thereby having large insights on consumers' demands and expectations. We are at the forefront interacting with dealers, installers and consumers buying windows and doors, and the companies behind the associations cover selling all over Europe.

EuroWindoor AISBL
Schuman Business Center, 40, Rue Breydel, 1040 Bruxelles / Belgium
or
Walter-Kolb-Str. 1-7, 60594 Frankfurt am Main / Germany
Internet: www.EuroWindoor.eu

EU Transparency Register ID Number: 29749561729-18