permanent materials alliance

29 April 2026

PERMANENT MATERIALS ALLIANCE

Making the Circular Economy Act a strategic tool for the efficient use of materials and a strong economic base in Europe

The upcoming Circular Economy Act (CEA) provides a crucial opportunity to strengthen Europe's resource security, industrial resilience and competitiveness in an increasingly constrained and volatile global environment. Reducing dependence on primary raw materials and retaining material value within Europe must be at the core of this initiative.

To achieve its objectives, the CEA must reflect material performance and recognise materials that can be recycled repeatedly without loss of quality. Permanent materials such as aluminium, glass and steel are key enablers of a resource-efficient, low-carbon, and circular European economy. However, the strategic importance of these materials is not reflected in current EU policy.

Aluminium, glass and steel are widely used in packaging, and they are fundamental to industrial resilience and circularity. Unlike other material groups, permanent materials can be recycled multiple times without losing their intrinsic properties, allowing recycled material to fully substitute primary raw materials over successive cycles. This reduces dependence on virgin resources, preserves economic value, and ensures access to high-quality secondary materials.

Despite these advantages, the specific characteristics of permanent materials are not adequately recognised in EU legislation. The CEA should therefore establish a distinct category for permanent materials within the policy framework, building on existing material-specific approaches such as the EU Plastics Strategy and the Bioeconomy Strategy.

Methodologies such as the Product Environment Footprint (PEF) using the Circular Footprint Formula (CFF) already account for material quality by recognising that 1 kg of aluminium/steel/glass can replace 1 kg of primary aluminium, glass or steel in subsequent production. This approach should be consistently applied to reflect material performance across multiple recycling cycles and to ensure high-quality outcomes that meet product safety and functionality requirements.

Explicit recognition of permanent materials would strengthen policy coherence and complete the EU's material-specific framework. It would also support the EU's climate objectives, as the use of recycled aluminium, glass and steel significantly reduces energy consumption and CO_2 emissions compared to primary production.

European Aluminium · FEVE The European Container Glass Federation · Metal Packaging Europe · STEEL FOR PACKAGING EUROPE

Our proposals:

1. Recognise permanent materials in CEA and related legislation

The Circular Economy Act (CEA) should recognise permanent materials as a strategic pillar of EU circular economy policy and ensure its coherent implementation across relevant legislation.

- **Circular Economy Act (CEA)**

The CEA should include a dedicated chapter on permanent materials, formally recognising materials that can be recycled multiple times without loss of quality. It should establish a distinction based on material performance, introduce indicators reflecting real circularity (e.g. material retention, number of life cycles), and ensure coherence across EU legislation.

- **Waste Framework Directive (WFD)**

The WFD should be amended to include a definition of high-quality recycling, and the minimum Extended Producer Responsibility (EPR) requirements should be amended to reward highly circular materials.

- **Ecodesign for Sustainable Products Regulation (ESPR)**

The ESPR should integrate permanent materials at the design stage by promoting materials capable of maintaining performance across multiple life cycles. The Digital Product Passport (DPP) should include information on material permanence, and product requirements should support high-quality recycling. The delegated acts on aluminium and steel and aluminium should integrate permanent materials as a basis for sustainability.

2. Reform minimum requirements for EPR schemes

Within the framework of the Circular Economy Act, key shortcomings in the current design and implementation of the minimum requirements for Extended Producer Responsibility (EPR) schemes under the Waste Framework Directive (WFD) must be addressed through targeted review and amendment to ensure their effectiveness, coherence, and full alignment with circular economy objectives.

- **Material-specific net cost principle**

EPR systems should be based on transparent, proportional and non-discriminatory EPR-fees, covering the net costs of collecting, sorting and recycling the type of product being paid for. These fees should reflect the ease with which a certain type of packaging can be recycled.

EPR systems should ensure that financial contributions paid by producers for a specific material are not used to finance the management, treatment, or system costs of other materials or systems.

Member States should ensure that no cross-subsidisation occurs between materials, and no financial transfers occur that distort material neutrality or competition.

PROPOSED AMENDMENT

WFD Article 8a Point 4 a) and c)	**WFD Article 8a Point 4 a) and c)**
"Member States shall take the necessary measures to ensure that the financial contributions paid by the producer of the product to comply with its extended producer responsibility obligations:	"Member States shall take the necessary measures to ensure that the financial contributions paid by the producer of the product to comply with its extended producer responsibility obligations:
(a) cover the following costs for the products that the producer puts on the market in the Member State concerned: — costs of separate collection of waste and its subsequent transport and treatment, including treatment necessary to meet the Union waste management targets, and costs necessary to meet other targets and objectives as referred to in point (b) of paragraph 1, taking into account the revenues from re-use, from sales of secondary raw material from its products and from unclaimed deposit fees,	(a) cover the following costs for the products that the producer puts on the market in the Member State concerned: —***net*** costs of separate collection of waste and its subsequent transport and treatment, ***of the material it is paid for,*** including treatment necessary to meet the Union waste management targets, and costs necessary to meet other targets and objectives as referred to in point (b) of paragraph 1, taking into account the revenues from re-use, from sales of secondary raw material from its products and from unclaimed deposit fees,
— costs of providing adequate information to waste holders in accordance with paragraph 2, — costs of data gathering and reporting in accordance with point (c) of paragraph 1. This point shall not apply to extended producer responsibility schemes established pursuant to Directive 2000/53/EC, 2006/66/EC or 2012/19/EU;	— costs of providing adequate information to waste holders in accordance with paragraph 2, — costs of data gathering and reporting in accordance with point (c) of paragraph 1. This point shall not apply to extended producer responsibility schemes established pursuant to Directive 2000/53/EC, 2006/66/EC or 2012/19/EU;
(c) do not exceed the costs that are necessary to provide waste management	*(c)* do not exceed the costs that are necessary to provide waste management

services in a cost-efficient way. Such costs shall be established in a transparent way between the actors concerned."	services in a cost-efficient way ***for the material it is paid for.*** Such costs shall be established in a transparent way between the actors concerned."
Justification: *EPR fees must be based on the genuine cost of managing each material. This means considering the financial value of the recovered material, and each material being responsible for its own net cost, defined as the net cost for the collection, sorting, and recycling.*	

Net costs of financial contributions by the producer: cost of collection and sorting of the packaging type it is paid for, considering the revenues from sales of secondary raw material from its products.

- **Transparency in cost calculation and fee setting**

Transparency and enforcement will be key in ensuring well-functioning and harmonised EPR principles. If net costs are respected, then the financial cost coverage must be fully transparent. Producer responsibility organisations must clearly show the costs from upstream operators and how those costs are allocated per material.

PROPOSED AMENDMENT

	WFD Article 8.6 (new)
	In order to ensure uniform conditions for the application of point (c) of Article 8a(4) the Commission shall adopt by […] an implementing act establishing common requirements for the transparent establishment of costs between the actors concerned, in particular as regards: ***(a) consistency as to the costs to be covered;*** ***(b) the methodology to be applied*** ***(c) the scope and granularity of the cost data required;*** ***and (d) the frequency with which such costs are updated.***

- **Eco-modulation of EPR fees: high quality recycling and recycling rate criteria**

EU EPR needs common and mandatory criteria formulation and governance, ensuring their transposition at national levels, to avoid gaps in achieving the recycling targets and address the problem of low quality of recyclates.

Financial contributions should be modulated, where applicable, in accordance with the recyclability and circular performance of the material, at the product and application level. Permanent materials that are valuable resources and can undergo high-quality recycling over multiple cycles should be rewarded for their circularity. The fees should also reflect the likelihood of the packaging being collected, sorted and recycled multiple times with no loss of quality.

We are calling for a regulation to ensure harmonisation, to introduce the definition of high-quality recycling and to include it in the eco-modulation minimum criteria.

PROPOSED AMENDMENT

WFD Article 8a point 4 b)	**WFD Article 8a point 4 b)**
(b) in the case of collective fulfilment of extended producer responsibility obligations, are modulated, where possible, for individual products or groups of similar products, notably by taking into account their durability, reparability, re-usability and recyclability and the presence of hazardous substances, thereby taking a life-cycle approach and aligned with the requirements set by relevant Union law, and where available, based on harmonised criteria in order to ensure a smooth functioning of the internal market	(b) in the case of collective fulfilment of extended producer responsibility obligations, are ***eco***-modulated, where possible, for individual products or groups of similar products***, and where relevant, across product categories***, notably by taking into account their durability, reparability, re-usability and recyclability ***grades***, ***high-quality recycling, recycling rate*** and the presence of hazardous substances, thereby taking a life-cycle approach and aligned with the requirements set by relevant Union law, and where available, based on harmonised criteria in order to ensure a smooth functioning of the internal market
Justification: *Financial contributions should be modulated, where applicable, in accordance with the recyclability and circular performance criteria at the material level. Such modulation shall be based on objective and measurable criteria related to recyclability performance and be applied within each material category, rewarding higher recyclability as well as the recycling rates.*	

PROPOSED AMENDMENT

WFD Article 4.1 Waste hierarchy	**WFD Article 4.1 Waste hierarchy –high quality recycling**
The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:	*The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:*

(a)prevention; *(b) preparing for re-use;* *(c) recycling;* *(d) other recovery, e.g. energy recovery; and* *(e) disposal.*	*(a)prevention;* *(b) preparing for re-use;* ***(ba) high-quality recycling*** *(c) recycling;* *(d) other recovery, e.g. energy recovery; and* *(e) disposal.*
Justification: The current definition of 'Recycling' as it is stated in Art. 3(17) of the Waste Framework Directive (WFD) creates a common high level framework for all materials However, its use in the 'Waste hierarchy' (Art. 4 of the WFD) fails to differentiate sufficiently between materials which are circular by nature and fit for multiple recycling without losing their inherent properties, and materials that degrade over time and are finally lost. Such hierarchy would promote circularity and multiple recycling loops and could help to achieve a circular economy.	

PROPOSED AMENDMENT

	Article 3 (17bis new) Definition of High-Quality recycling
	"High-quality recycling implies that the recycled materials, based on their preserved technical characteristics, are of equivalent or higher quality compared to the original material and can be used as a substitute for primary raw materials for the same product or similar applications. The recycled material can be recycled multiple times."
Justification: *High-quality recycling must be set within the EPR common minimum criteria to be properly incentivised. It implies that the recycled materials, based on their retained technical characteristics, are of equivalent or higher quality compared to the original material and can be used as a substitute for primary raw materials in packaging or similar applications.* *The proposed definition has been endorsed by the co-legislators in the Packaging & Packaging Waste Regulation (PPWR).*	

- **Ban state-run Producer Responsibility Organisations (PROs)**

The notion of State-run PROs has recently been introduced in different pieces of EU legislation, undermining the EU's legal definition of EPR. Emerging State-run PROs do not guarantee transparency and could allow contributions paid by packaging manufacturers to be used to finance the general state budget (i.e. a tax) instead of being reinvested to finance the circularity of packaging This could have significant negative repercussions undermining efforts to achieve large-scale recyclability of packaging.

3. Ground the Circular Economy Act on an Internal Market legal basis

To achieve a true circular economy and a functioning European market for secondary raw materials, the upcoming New Circular Economy Act must be grounded in an internal market legal basis (Article 114 TFEU). Ambitious circular economy goals can only be met through harmonised rules driving a step-change in waste management across the EU. Today's waste management landscape across the EU remains extremely fragmented, marked by uneven performance and divergent national regulatory frameworks.

The Circular Economy Act must embed permanent materials (aluminium, glass and steel) as strategic, circular enablers that underpin Europe's sustainability and industrial resilience. The Permanent Materials Alliance stands ready to support the Commission's efforts through constructive dialogue and evidence-based recommendations.

Benefits of '*permanent material*'

The aluminium, glass and steel sectors are top performers in recycling packaging materials

- Recycling rate for aluminium beverage cans (2022 - EU27 + UK + Switzerland + Norway + Iceland): 74.6%
- Collection for recycling rate for glass packaging (2023 – EU27): 80.8%
- Recycling rate for all steel packaging (2023 - EU27 + UK + Switzerland + Norway): 82%

Resources are kept within the economy for longer: When permanent materials are collected and recycled properly, they become the raw material for endless new production cycles, reducing reliance on virgin raw materials.

Boosting circularity supports climate neutrality: Recycled materials help reduce energy consumption and CO_2 emissions from aluminium, glass and steel production.

ANNEXES:

- **Final scientific Report on Permanent Materials**, Carbotech 2014, https://carbotech.ch/cms/wp-content/uploads/Final_PeM_Report_Carbotech.pdf
- **Report on Glass as Permanent Material, 2016,** Stazione Sperimentale del Vetro https://feve.org/wp-content/uploads/2016/09/SSV-Report-on-Glass-as-Permanent-Material.pdf

The Permanent Materials Alliance comprises Steel for Packaging Europe, European Aluminium, the European Container Glass Federation (FEVE) and Metal Packaging Europe.

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More information www.circularchampions.eu

European Aluminium
EU Transparency register 9224280267-20

FEVE The European Container Glass Federation
EU Transparency register 1550133398-72

Metal Packaging Europe
EU Transparency register 867965517169-77

STEEL FOR PACKAGING EUROPE
EU Transparency register 70036906501-10