

Circularity as a Growth Strategy

CIRCULAR ECONOMY ACT: INVESTMENT DRIVER INSTEAD OF ADDITIONAL COMPLIANCE BURDEN

The circular economy is a key industrial policy factor for Europe's industrial competitiveness. Today, only around 12% of materials used in Europe come from recycling, while at the same time large volumes of valuable materials remain unused. For the chemical industry, the regulatory and economic framework conditions determine whether circular feedstocks, new recycling technologies, and climate-neutral value creation can scale in Europe—or whether investments shift to regions where energy prices, permitting procedures, access to raw materials, and regulatory frameworks are more favourable. This would further increase Europe's strategic dependencies and undermine its industrial resilience.

Policy ambition: With the Circular Economy Act (CEA), the EU aims to create a single market for secondary raw materials, increase the supply of high-quality recycling material, and strengthen demand. This is also economically decisive: studies show that a consistent circular economy could increase Germany's gross value added by up to €125 billion by 2045, while significantly reducing dependency on critical raw materials (up to 20% for rare earths) and achieving additional CO₂ savings of around 11 million tonnes annually across global value chains.¹

However, the business case for circularity often fails not due to a lack of technology, but because of market and regulatory barriers: secondary raw materials are not available in sufficient quantities or at competitive prices in the EU market, not reliably specified, often more expensive than primary materials, and cannot be used seamlessly across borders due to fragmented End-of-Waste rules. In addition, inconsistent EPR systems, unclear recognition of innovative recycling technologies, and lengthy permitting procedures hinder scaling.

The CEA should therefore only create new legislation where it genuinely improves the business case. Additional obligations without improving feedstock availability, investment conditions, and legal certainty would not strengthen Europe, but instead increase regulatory pressure.

Key question for the CEA: *Does it make circular business models investable in Europe — or does it create additional compliance burden?*

¹ [BDI Study -Wirtschaftliche Potenziale der Circular Economy](#)

GUIDING PRINCIPLES FOR THE CIRCULAR ECONOMY ACT

The design of the CEA should be assessed against the following key principles:

› Business Case first

New obligations are only justified if they improve the business case for circular value creation. Without available secondary raw materials, competitive energy prices, feasibility of permitting, and investment certainty, additional targets primarily lead to increased burdens or to the relocation of investments outside the EU. The CEA should therefore not primarily create new compliance obligations but enable markets – through improved access to raw materials, legal certainty, demand-side incentives, scalability, and a level playing field in global markets.

› Single market instead of fragmentation

The circular economy does not function in national silos. The CEA must reduce fragmentation in End-of-Waste rules, EPR systems, verification and certification requirements, as well as standards, and establish a genuine European single market for secondary raw materials. Where full harmonisation requires time, pragmatic interim solutions such as mutual recognition and EU guidance are necessary to ensure legal certainty in the short term.

› Feedstock, material and technological neutrality aiming at output quality

Regulation must be designed in a feedstock-, material-, and technology-neutral way and must not favour or exclude specific options in advance. The decisive factor is the contribution to raw material availability and resilience, in particular whether a process provides safe, high-quality and usable secondary raw materials. All relevant feedstocks, waste streams, materials, and technologies are needed to achieve the EU's ambitious targets. Restrictions would reduce the resource base, increase import dependencies, and hinder the development of a European market for circular products.

› Coherence with existing EU law

The CEA must not overlay existing frameworks such as ESPR, PPWR, SUPD, REACH, and waste legislation with additional, conflicting requirements. It must act as a coherence instrument simplifying existing regulation while establishing a clear and dedicated framework for secondary raw materials at EU level. This also includes the consistent application of the “one-in-one-out” principle. Delegated and implementing acts should also be systematically assessed for feasibility, interactions, and administrative costs before additional detailed obligations are introduced.

POLICY RECOMMENDATIONS - SUMMARY

➤ 1) Enable early transformation from waste to resource: EU-wide End-of-Waste instead of 27 national decisions

A key lever for creating a functioning single market is a horizontal recognition mechanism for “circular managed materials” or EU-wide tradable secondary raw materials. The CEA should introduce a harmonised EU-wide system for this purpose, based on clear quality criteria, standardised verification, and a notification or registry approach.

In addition, binding timelines for authorities as well as a clear single market effect (including mutual recognition of national decisions) are required in order to overcome legal uncertainty and fragmentation in End-of-Waste and to enable cross-border use.

➤ 2) Strengthen demand for circular products and feedstock: Use VAT reduction as a key incentive

A reduced value-added tax (VAT) rate can specifically address the structural price disadvantage of secondary raw materials compared to primary materials and generate stable demand effects. However, legally this cannot be implemented directly through the CEA: the legal basis is the VAT Directive 2006/112/EC (in particular Article 98 in conjunction with Annex III) based on Article 113 TFEU, requiring unanimity in the Council.

The CEA should therefore include a clear mandate for the Commission to assess VAT instruments as a targeted complementary lever to strengthen demand and lead markets for circular products.

➤ 3) Strengthen product responsibility: Design incentives instead of fee complexity

EPR should be further developed at EU level into a harmonised, eco-modulated system that coherently integrates existing legislation (including WFD, SUPD, PPWR, WEEE, Batteries Regulation) and establishes a uniform fee logic. Fees must be material-neutral and aligned with the actual circularity and environmental impact within the real system, and act as a clear steering and investment signal. The revenues should be earmarked for collection, sorting, high-quality recycling, innovation, and market surveillance.

An interoperable data base – including integration with the Digital Product Passport (ESPR) – is a prerequisite for transparency, a level playing field, and the scaling of circular markets within the single market.

➤ 4) Chemical recycling and mass balance: Output quality instead of process dogma

A functioning circular economy requires a technology-neutral framework that recognises all recycling pathways capable of delivering high-quality and safe materials. While mechanical recycling remains essential, it is not sufficient for many complex or contaminated waste streams, leading to a projected recyclate gap under current EU targets.

The regulatory framework should therefore focus on the quality and usability of the output rather than on process-based distinctions. The CEA should introduce a horizontal principle of technological neutrality and output-based assessment to ensure that chemical and other innovative recycling technologies are recognised.

An EU-wide harmonised, credit-based mass balance approach – based on the fuel-use-exempt method – is needed to enable recognition towards recycled content targets.

1) Enable early transformation from waste to resource: EU-wide End-of-Waste instead of 27 national decisions

Secondary raw materials must be able to move within the single market in the same way as primary raw materials. As long as End-of-Waste status is assessed differently at national level, the circular economy will remain fragmented, legally uncertain, and not investable.

» Regulatory need:

- » EU-wide harmonised End-of-Waste criteria through the introduction of a new category: *circular managed material* for priority material streams, in particular plastics, chemical feedstocks, and relevant industrial waste streams that are further processed for a defined purpose.
- » Until harmonisation is achieved: EU-wide recognition of national End-of-Waste decisions
- » Clarification that high-quality secondary raw materials must not unnecessarily remain within the waste regime if they are safe, specified, and marketable (and therefore REACH registered)

» Link to the CEA:

- » The CEA should establish the framework for a genuine Single Market for Secondary Raw Materials. An EU-wide End-of-Waste approach is a key litmus test in this regard.
- » Omnibus linkage: In the short term, the Waste Framework Directive should be amended so that national decisions are recognised more quickly and waste streams can be more effectively transformed into material streams.

» Legislative implementation:

- » CEA Regulation: Introduction of a horizontal recognition mechanism for “circular economy goods” or EU-wide tradable secondary raw materials. Operational elements should define: criteria, verification, registry/notification, timelines for authorities, and the effect within the single market.
- » WFD Omnibus: Amendment of Article 6 WFD (end-of-waste status). Article 6(1) should be specified so that safely specified and marketable secondary raw materials must not remain within the waste regime; Article 6(2) should include a clear timeline for EU-wide criteria for priority material streams; Article 6(4) should be supplemented with mutual recognition of national End-of-Waste decisions, provided comparable protection standards are met.
- » Option for legal form: A conversion of the WFD into a regulation would be legally conceivable but would not be mandatory for the CEA. A more practical option would be a CEA Regulation as a *lex specialis* for secondary raw materials combined with a targeted revision of the WFD.

2) Strengthen demand for circular products and feedstock:

Use VAT linkage as a key incentive

Recycled content quotas can create demand, but they do not solve the underlying problem of insufficient availability. Before introducing quotas, a functioning market is needed for sufficiently available, quality-assured, and competitive secondary raw materials.

› Regulatory need:

- » Establishment of a European market for secondary raw materials and circular products with reliable standards on quality, specifications, verification, and tradability.
- » Market transparency regarding availability, quality, and possible applications of secondary raw materials, without creating additional reporting obligations that do not provide market value.
- » Promotion of collection, sorting, pre-treatment, and recycling capacities as a prerequisite for realistic minimum quotas in the future.
- » Complementary economic incentives (e.g. reduced VAT on secondary raw materials) to offset competitive disadvantages compared to primary materials.

› Link to the CEA:

- » The CEA should primarily strengthen the single market for secondary raw materials and establish the necessary market infrastructure before setting horizontal quotas.
- » Targets for companies must not depend on external factors beyond their control (e.g. feedstock availability), as this would otherwise create price and procurement risks without generating additional circularity effects.

› Legislative implementation:

- » CEA Regulation: Establishment of a market infrastructure chapter for secondary raw materials and circular products on the basis of Article 114 TFEU. This chapter should define minimum requirements for specifications, quality classes, verification, digital tradability, and mutual recognition.
- » VAT linkage: A reduced VAT rate for circular products cannot be introduced directly through the CEA alone. This would require an amendment or use of the VAT Directive 2006/112/EC, in particular Article 98 and Annex III; the legal basis in tax law lies in Article 113 TFEU and requires unanimity in the Council. The CEA should therefore at most include a review mandate or a request to the Commission.
- » Quota logic: Horizontal recycled content quotas should not be set across the board in the CEA. Where quotas are politically desired, they should be anchored sector-specifically in PPWR, SUPD, ELVR, construction products law, or textile legislation and be linked to availability assessments, quality, review clauses, and safeguard mechanisms. As an example, for packaging the PPWR rules on recycled content and recyclability are relevant; for beverage bottles, the SUPD refers to Article 6(5).

- » Requirement for equivalent environmental, safety, traceability, and verification standards for all secondary raw materials that are placed on the EU market or counted towards recycled content targets.

3) Strengthen product responsibility: Design incentives instead of fee complexity

Extended Producer Responsibility can be an effective lever for the circular economy – but only if it sets targeted incentives and does not become a patchwork of national fee, reporting, and verification systems.

» Regulatory need:

- » Harmonisation of key EPR elements, in particular definitions, fee structures, data requirements, and verification obligations.
- » Eco-modulation as a steering instrument: differentiated, evidence-based, and system-oriented – based on the actual circularity and environmental impact within the relevant system, not solely on abstract design criteria.
- » Consideration of different contributions to the circular economy (e.g. recyclability, use of secondary, bio-based, or bio-attributed feedstocks) where environmentally meaningful.
- » Avoidance of double reporting obligations through linkage to digital product information and existing company data (“once only”).
- » Stronger alignment of EPR systems towards investments in collection, sorting, high-quality recycling, and innovation rather than administrative costs.

» Link to the CEA:

- » The CEA should frame EPR as a single market issue and establish minimum requirements for uniform, economically viable, and investment-effective systems.
- » In the medium to long term, a stronger linkage with an EU-wide harmonised, eco-modulated financing or fund-based approach should be explored.
- » Sectoral linkage: the CEA should prevent parallel or contradictory EPR data obligations arising from SUPD, WFD, PPWR, ESPR, and national systems.

» Legislative implementation:

- » CEA Regulation: Establishment of horizontal minimum requirements for EPR systems as a single market issue: uniform definitions, registration, data formats, verification, fee structures, criteria for eco-modulation, and recognition of digital product information.
- » Eco-modulation: Fees as an effective steering instrument along the actual circularity and environmental impact within the real system. Building on the provisions of the EU Packaging Regulation (in particular Article 6(8) PPWR), further development towards an EU-wide harmonised, eco-modulated EPR approach or fund model should take place.

The funds should be levied in a material-neutral manner and earmarked for collection, sorting, high-quality recycling, innovation, and market surveillance.

- » Harmonisation of EPR systems in the Circular Economy Act: The CEA should further standardise and coherently develop the currently fragmented rules on extended producer responsibility – in particular under the Waste Framework Directive (WFD), the Single-Use Plastics Directive (SUPD), the Packaging Regulation (PPWR), as well as other product-related frameworks such as WEEE or the Batteries Regulation. The objective is an EU-wide consistent fee logic, common minimum requirements, and an interoperable data base that also integrates instruments such as the Digital Product Passport (under ESPR). This is a key prerequisite for a functioning level playing field and the effective scaling of circular markets within the single market.
- » Digital verification: The linkage to the Digital Product Passport under ESPR, in particular the product passport-related requirements and data obligations, should be designed according to the “once-only” principle: data that is reliably available in the product passport or in existing company systems must not be requested again in diverging national EPR formats.

4) Chemical recycling and mass balance: Output quality instead of process dogma

Mechanical recycling remains essential but is not sufficient for many complex or contaminated plastic waste streams. In addition, under the current quota requirements in Europe, we are heading towards a recycle gap of 30% without additional investments. Chemical, physical, organic and enzymatic recycling must be recognised as complementary solutions where the output can be used in a high-quality and safe manner.

» Regulatory need:

- » Technology-neutral recognition of all recycling processes that produce high-quality secondary raw materials and ensure the protection of human health and the environment.
- » An EU-wide harmonised credit-based mass balance approach based on the fuel-use-exempt method, in order to allow chemical recycling to be legally counted towards recycled content targets.
- » Output-based assessment: the decisive factor is the quality and usability of the produced material, not a regulatory preference for a specific process.

» Link to the CEA:

- » The CEA should ensure, at a horizontal level, the recognition of innovative recycling technologies so that investments do not fail due to inconsistent interpretation in product or waste legislation.

» **Legislative implementation:**

- » CEA Regulation: Inclusion of a horizontal principle of technological neutrality and output-based assessment. The CEA should stipulate that mechanical, chemical, physical, enzymatic, and other recycling processes may be recognised, provided that the resulting output is safe, specified, and suitable for its intended use.
- » PPWR linkage: With binding recycled content quotas and recycling requirements, the PPWR creates a structural demand signal for high-quality recyclates that cannot be met by mechanical recycling alone. This opens up key opportunities in the forthcoming secondary legislation to anchor chemical recycling – in particular via mass balance approaches – as a complementary technology in a regulatory-effective manner.
- » Credit-based Mass balance: The preferred fuel-use-exempt method should be identified as the target model. However, the CEA itself should rather define the guiding principles: uniform, auditable, and traceable at installation or site level.
- » ESPR linkage: For products and product groups, the recognition of high-quality secondary raw materials should not be undermined by diverging definitions of recycling, recyclate, and verification requirements. Within the ESPR, Article 5 on ecodesign requirements as well as the product passport provisions are particularly relevant as an interface for verification.

ANNEX I

MODERNIZATION OF THE WASTE FRAMEWORK DIRECTIVE TO SUPPORT A CIRCULAR ECONOMY

The European Union has committed to becoming a global leader in circular economy and climate neutrality. Achieving these ambitions requires a fully functioning internal market for secondary raw materials. Today, this market does not yet exist. End-of-life materials are often treated as waste for too long, leading to fragmentation, legal uncertainty and barriers to investment across the Single Market.

In the past the major aim of EU waste legislation has been the protection of human health and the environment and the safe management of waste. Today circularity is a core element of Europe's industrial, climate and competitiveness agenda and no longer merely an environmental objective. Under the Clean Industrial Deal, the European Union has committed to strengthening its economic resilience, reducing dependencies on imported raw materials, and building globally competitive circular value chains.

Despite significant progress, the transition to a circular economy in the EU remains too slow. The supply of and demand for secondary raw materials is insufficient, and markets remain fragmented across Member States.

A key structural barrier to a circular economy is the lack of coherent and harmonized End-of-Waste criteria across Member States. Diverging national interpretations prevent secondary raw materials from circulating freely within the Single Market.

The forthcoming Circular Economy Act (CEA) provides a unique opportunity to address these structural barriers. It offers the chance to create a genuine Single Market for secondary raw materials, increase the availability of high-quality recycled materials and strengthen demand across European value chains.

Policy Framework for Implementation

The Circular Economy Act (CEA) should introduce a harmonized EU-wide mechanism for recognition of circular managed materials and secondary raw materials. This should include quality criteria, documentation requirements, notification systems and clear effects within the Single Market.

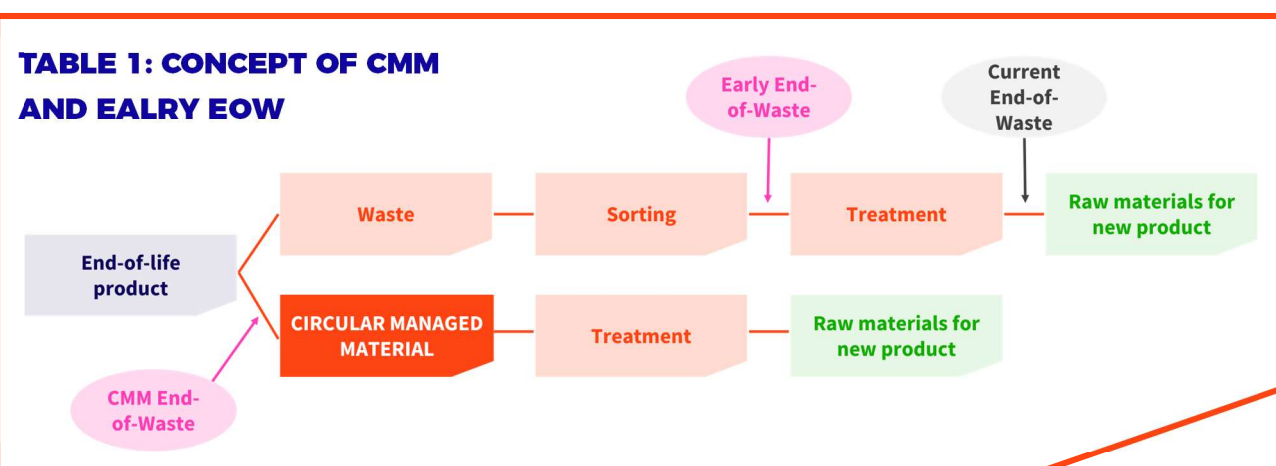
In addition, targeted amendments to Article 6 of the Waste Framework Directive (WFD) are required:

- Article 6(1): clarify that safe, specified and marketable secondary raw materials should not remain unnecessarily under the waste regime
- Article 6(2): introduce a timeline for EU-wide End-of-Waste criteria

- Article 6(4): introduce mutual recognition of national decisions

This document describes ideas on how the waste framework directive could be modified:

- Circular Managed Material (CMM)
- Early End-of-Waste (EoW)



Circular Managed Material (CMM)

The Waste Framework Directive (WFD) should introduce a new regulatory concept of “circular managed material (CMM)” to provide legal certainty for materials transitioning from waste to product. This concept aims to bridge the regulatory gap between waste and products, while ensuring full compliance with applicable products, environmental and safety legislation.

The decision whether a material at the end of its life becomes a CMM is made immediately after the end of its life. A CMM has the status of raw material and therefore must comply with all product regulations. At the same time, it must have a purpose which means that it must be ensured that it will be used to create a new product. On its way to a new product, it can be treated to enable the creation of a new product. All treatment steps must be transparent; input and output must be well defined and monitored. Each treatment step is equivalent to a standard “manufacturing” process. Besides circular managed material the processes can create waste and by-products like any other manufacturing process. The mass balance of input and output streams must be traceable. For each treatment step the requirements and conditions of a manufacturing process apply.

A substance or object whose holder gives up the previous purpose of the substance or object is a circular managed material and not waste if

- the holder determines a next intended use for the substance or object at the latest immediately after the date on which the previous intended use was abandoned

- b) the substance or article is suitable for its intended next use either immediately or after preparation or reprocessing,
- c) the implementation of any necessary preparation or reprocessing in accordance with b) is ensured,
- d) it is ensured that the substance or object will be used for the defined next intended use and
- e) the use corresponding to the defined next intended use is lawful; this is the case if the substance or article - after any necessary preparation or processing - fulfills all applicable product, environmental and health protection requirements for the defined next intended use

The next intended use within the meaning of a) may be the previous intended use or another intended use.

Preparation within the meaning of b) is any testing, cleaning or repair by which the substance or object is prepared in such a way that it can be used for the specified next intended purpose without further pre-treatment. Reprocessing within the meaning of b) is any further treatment that goes beyond testing, cleaning or repair.

The implementation of any necessary preparation or reprocessing and the further use of the substance or object in accordance with the defined next intended use is ensured within the meaning of d) if there is a demand for or a market for the substance or object. Interim storage of the recycled asset for no longer than is necessary to meet the demand or for sale on the market in accordance with d) shall not prevent the implementation of any necessary preparation or reprocessing and the securing of the use corresponding to the specified next intended use in accordance with d).

Early End-of-Waste (EoW)

Accelerating the point at which materials cease to be waste is essential to enable circular value chains and avoid unnecessary regulatory burdens—while maintaining high standards of protection for health and the environment.

For each waste treatment step, starting from the material at its end of life it should be verified whether the end-of-waste (EoW) has been reached. This approach would facilitate more efficient circular value chains by ensuring that materials meeting all relevant criteria can exit the waste regime at the earliest appropriate stage.

At each step, the criteria of EoW are checked. The criteria are the four criteria of Article 6 (1) of the WFD. These should be applied in a way that enables, rather than delays, the transition of

high-quality materials into the product regime, while maintaining a high level of protection. If all criteria are met after the step, the EoW has been reached.

CRITERIA EOW (ART. 6 (1) WFD)

- ▶ (a) the substance or object is to be used for specific purposes;
- ▶ (b) a market or demand exists for such a substance or object; the further use of the substance or object as intermediate for a new product or as new product is ensured
- ▶ (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~~

With this, harmonization of criteria for CMM and End-of-Waste should be pursued at EU level to ensure consistent application and a level playing field across the Single Market. In this context, criterion (d) of Article 6 (1) WFD should be deleted. Where criterion (c) is fulfilled, compliance with all applicable product, environmental and health protection legislation is already ensured, so that criterion (d) may not provide additional regulatory value but rather result in a duplicative assessment.

Recycling Targets

One of the favored instruments by European and German legislators to promote the circular economy are recycling targets in the form of recycling quotas or targets for end-of-life materials or the use of recycled materials in new products. These targets are intended to conserve natural resources by reducing the use and consumption of primary raw materials through waste recycling.

For Germany, § 3 (7b) of German Circular Economy legislation ("Kreislaufwirtschaftsgesetz") provides the legal definition for the term "recyclate", which was newly introduced in 2020. It refers to secondary raw materials that are obtained through the recovery of waste or are generated during the disposal of waste and are suitable for the manufacture of products. With this definition and the current definition of recycling, CMM and as well as early EoW materials will be excluded from being accounted for recycling targets. Firstly, a material must be waste, and secondly the recycling targets or quotas are either related to the input of a waste stream or to the content of recycled material in the final product.

There are two possible solutions to address this gap. Either the definitions of recycling and recyclate need to be revised and harmonised at EU level, or a new methodology for calculating the recycled content in materials produced from end-of-life inputs must be introduced.

In this context, established concepts such as **mass balance allocation and chain-of-custody models** provide a viable and already recognised approach. These models are currently being

further developed and applied in EU legislation, including under the Single Use Plastics Directive (SUPD) and the forthcoming Packaging and Packaging Waste Regulation (PPWR).

Applying such approaches would allow for a **technology-neutral and scalable accounting framework**, ensuring that materials derived from end-of-life feedstocks – including circular managed materials (CMM) and early End-of-Waste materials – are properly accounted for. This also requires that **all intermediate treatment and conversion steps**, from end-of-life through processing to the final product, are taken into account in a consistent and transparent manner, thereby enabling a coherent alignment between waste legislation and product-related legislation.

A solution for a harmonized recycling definition is to define ‘recycling’ as any operation by which end-of-life materials are processed into intermediate or final products, materials or substances whether for the original or other purposes. Certain products and applications could be excluded as a final product, material or substance.

Ensure further use

To prevent misuse one fundamental requirement of CMM and early EoW is that further use is ensured.

This has two aspects – transparency and traceability:

- Transparency means that all process steps from end-of-life until the new product must be well described and accessible. This could be done by requiring a permit for each operator where the process has been assessed by relevant authorities.
- Traceability means that the volume streams of CMM but also by-product and waste streams of each process can be monitored by the relevant authorities. Central digital platforms should be established. This will help authorities to identify potential misuse and where inspections might be needed.

Compliance with existing legislation

CMM and EoW materials need to be compliant with all applicable legislation, primarily product legislation. This requires a proper analysis of the output of the different processes depending on the process considering information of the input material. When the digital product passport is implemented and operational it could be also applied here.

With this, VCI provides a concept of circular managed materials and an accelerated End-of-Waste regime provides a concrete pathway to overcome current barriers in the transition from waste to product.

Without a coherent and harmonized End-of-Waste framework, the ambition to establish a Single Market for secondary raw materials will remain unfulfilled.

The Circular Economy Act represents a unique opportunity to address this challenge. A credible and effective framework for End-of-Waste and secondary raw materials will be a key test of its ability to deliver on its objectives.

Establishing legal certainty, enabling cross-border circulation of materials and unlocking investment in circular value chains must therefore be at the core of the upcoming legislative proposal.

ANNEX II

MARKET INCENTIVES IN THE CIRCULAR ECONOMY ACT: VAT AND ECO-MODULATED EPR

Starting point: Market failure despite ambitious regulation

With the Packaging and Packaging Waste Regulation (PPWR), the Single-Use Plastics Directive (SUPD), the End-of-Life Vehicles Regulation (ELVR), as well as further sectoral legal acts such as the Waste Electrical and Electronic Equipment Directive (WEEE) and the Critical Raw Materials Act (CRMA), the EU is deliberately setting demand-side incentives for recyclates. In parallel, the Ecodesign for sustainable Products Regulation (ESPR) and the Digital Product Passport (DPP) are intended to strengthen the information system and increase transparency. At the same time, however, the supply of high-quality secondary raw materials remains limited.

The central bottleneck for scaling the circular economy today lies less in a lack of technology and more in the lack of a viable business case for circularity. Secondary raw materials are often more expensive than primary materials in the European market, are subject to significant price volatility, and compete directly with imports from third countries that are subject to lower environmental, energy, and control standards. Mandatory recycled content quotas are, in principle, a suitable instrument to stimulate demand for secondary raw materials and to create a lead market for circular products.

At the same time, the chemical industry is in a challenging economic situation, while the decline of the European recycling industry is further exacerbating the availability of high-quality secondary raw materials. Industry analyses predict a structural recycle gap of around 30% from 2030 onwards, unless accompanying supply-side and market-stabilising measures are taken.²

Against this background, this position paper outlines concrete entry points for the Circular Economy Act to complement existing regulatory requirements with effective, market-oriented instruments. The focus is on strengthening demand for secondary raw materials through VAT, as well as on the further development of eco-modulated EPR systems into a European investment and steering instrument. The aim is to create a functioning market environment for circular value creation in Europe.

² [Recyclate Gap – BKV Study](#)

Reduction of VAT: Market-based demand-side incentive in the single market

Value-added tax directly influences pricing along the entire value chain and is therefore a particularly effective instrument for strengthening demand and lead markets. A targeted reduction of VAT on secondary raw materials or on products with proven recycled content can mitigate the structural price disadvantage compared to primary materials and cushion market volatility. Unlike project-based funding programmes, such an incentive has a lasting effect, is competitively, and technology-neutral.

The objective is not to selectively favour individual actors, but to further develop existing market conditions in such a way that environmental, climate, and security-of-supply aspects are adequately taken into account. A reduced VAT rate can help to improve the competitiveness of circular products, stabilise demand effects, and facilitate investments in European recycling, sorting, and processing infrastructure.

From a legal perspective, the VAT Directive 2006/112/EC provides the EU-wide framework for this. Under Article 98 in conjunction with Annex III, Member States may apply reduced VAT rates to certain supplies of goods, provided these are harmonised at Union level. Amendments and extensions of this framework are based on Article 113 TFEU and require unanimity in the Council. The CEA itself cannot set tax rates. However, it should include a clear political mandate for the Commission to assess the use of the existing flexibilities under the VAT Directive for circular products and to explicitly identify VAT instruments as a complementary lever to strengthen demand within the single market.

Eco-modulated licence fees and EPR: From fee structures to investment signals

Extended Producer Responsibility (EPR) systems are a central element of the European circular economy, as they play a key role in financing collection, sorting, and recycling. In practice, however, they often appear fragmented, administratively complex, and only limited in their ability to drive investment. In particular, there is still a lack of an EU-wide consistent fee logic, a sufficiently differentiated linkage to the environmental performance characteristics of products, and a reliable reinvestment of funds into infrastructure, innovation, and the market ramp-up of circular solutions.

Eco-modulated licence fees can address these deficits if they are consistently designed as a steering and investment instrument. This requires a material-neutral and technology-neutral approach that appropriately reflects different contributions to the circular economy. In this context, not only recyclability in the narrow sense should be decisive, but also other relevant characteristics such as proven biodegradability/compostability under suitable conditions as well as the use of bio-based, bio-attributed or recycled feedstocks, where these are environmentally meaningful and contribute to reducing fossil resources.

The benchmark should be a holistic assessment of the actual circularity and environmental impact within the respective system. This requires a linkage to real sorting, recovery, and use

pathways as well as to robust standards and verification – not to abstract or purely formal design criteria. Such differentiation makes it possible to reward ecological innovation in a targeted manner without generally favouring or excluding specific materials or solution approaches.

With the EU Packaging Regulation (PPWR), the European Commission has clearly defined the framework for a more circular design of the packaging market. The envisaged eco-modulation of financial contributions within the framework of extended producer responsibility (Article 6(8) PPWR) is a key instrument for consistently aligning incentives with the recyclability of packaging. At the same time, it builds on existing EPR rules of the Waste Framework Directive (WFD, Articles 8 and 8a) as well as sector-specific systems such as those under the Single-Use Plastics Directive (SUPD), the Waste Electrical and Electronic Equipment Directive (WEEE), and other product-related frameworks.

From the industry's perspective, a decisive factor is an ambitious and practical design of this approach based on a material-independent bonus-malus system that, in addition to recyclability, also takes into account the use of recyclates. Only in this way can perverse incentives be avoided and investments in circular design be effectively mobilised. Against the background of existing national models in several Member States and the obligation applicable from 2029 onwards, the Commission should establish guiding principles at an early stage for a harmonised and competitive implementation, particularly with regard to a functioning system in competitively organised EPR markets.

Against this background, further development towards an EU-wide harmonised, eco-modulated EPR approach appears consistent, going beyond individual product streams and coherently integrating existing EPR systems. Revenues should be collected in a material-neutral manner and earmarked for collection, sorting, high-quality recovery, innovation, and market surveillance. Such an approach would systematically link environmental performance, investment incentives, and single market coherence, and support the European Commission's objective of mobilising investments specifically where they are needed to scale circular value creation in Europe.

Common guiding principle: Quality, control, and level playing field

Both VAT incentives and eco-modulated EPR fees require that secondary raw materials used within the single market or counted towards regulatory targets actually comply with applicable European quality, environmental, and safety standards. Without reliable verification and control mechanisms, there is a risk of market distortions, perverse incentives, and an erosion of trust in circular markets.

At the same time, the design of verification and certification systems must not lead to additional bureaucracy or parallel reporting obligations. The goal must instead be a streamlined, risk-based, and largely digital approach that makes use of existing systems and consistently follows the “once-only” principle. Certification and verification should be applied

where they actually add value for market integrity and enforcement – not as a blanket additional burden for all market participants.

A practical approach consists of EU-wide harmonised, but modular verification systems that build on existing standards, certifications, and audit structures. Robust chain-of-custody models can create transparency regarding the origin, processing, and use of secondary raw materials without overloading every product or transaction with individual verification processes. The recognition of existing, quality-assured certification schemes should be a key element to avoid duplicate checks.

Independent audits and controls should be risk-based, with a particular focus on interfaces with a higher potential for misuse or distortion, especially in the import context. Strengthened market and import surveillance can specifically target areas where perverse incentives or misdeclarations lead to competitive disadvantages for compliant companies. In return, companies with demonstrably reliable systems should benefit from simplified procedures and reduced inspection efforts.

Such an approach supports a level playing field in the single market by creating equal competitive conditions for all, without hindering innovation and investment through excessive bureaucracy. Quality assurance, market control, and administrative simplification should not be understood as contradictions, but as complementary elements of a functioning market framework for the circular economy.

Contact: Dr. Wadim Weber

Department of Energy, Climate Protection and Circular Economy
Division for Sustainability, Energy and Climate Protection

T +49 (69) 2556- 1424 | **E** wadim.weber@vci.de

German Chemical Industry Association

Mainzer Landstraße 55
60329 Frankfurt, Germany

Contact: Tim Klieber

European Office Brussels

T +32 (2) 548 069-4 | **E** klieber@vci.de

German Chemical Industry Association

Rue Marie de Bourgogne 58
B-1000 Brüssel

www.vci.de | www.ihre-chemie.de | www.chemiehoch3.de

[LinkedIn](#) | [YouTube](#) | [Instagram](#)

[Data protection rules](#) | [Compliance-Guideline](#) | [Transparenz](#)

- Identification no. in the EU Transparency Register: 15423437054-40
- The VCI is registered with registration no. R000476 in the Lobbying Register for the Representation of Special Interests vis-à-vis the German Bundestag and the Federal Government.

Verband der Chemischen Industrie e. V. (VCI) is Europe's largest association for chemicals and pharmaceuticals. Together with its 22 sector and regional organisations, the VCI represents the interests of around 2,000 member companies –from global players to highly specialised small and medium-sized enterprises. With sales of 240 billion euros in 2024 and over 560,000 staff in Germany, the sector ranks among the major drivers of innovation, prosperity and future. The VCI works in Germany, Europe and worldwide for a strong chemical-pharmaceutical industry of today and tomorrow.