# A Circular Economy for Europe's Chemical Industry

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*The chemical industry is a cornerstone of Europe's economy and positioned at the heart of its transition to circularity. Our industry is committed to playing its part in moving towards climate neutrality. However, European industry faces major structural challenges that hinder its move to a circular economy and threaten its competitive position on a global scale. A clear, stable, and enabling regulatory framework is urgently needed to support industry efforts.*

Shifting to a circular economy is necessary to protect the planet and ensure a sustained economic model. This shift requires new skills, sustained innovation, investments, and the ability to translate technological capabilities into industrial ecosystems. High energy prices and cost of raw materials, financial uncertainty, and complex and fragmented regulatory frameworks weaken Europe's industrial base and its global competitiveness, and hamper investments into the circular transition. Unless these barriers are broken down, Europe risks losing its competitive edge and failing to meet its circularity objectives. We welcome the Commission's commitments to address these challenges, outlined in the Clean Industrial Deal and Chemicals Action Plan, as well as the upcoming Circular Economy Act. These commitments must now be translated into tangible and short-term action.

## 1. Promote Ambitious and Evidence-Based Circularity Requirements

The EU requires ambitious, feasible and evidence-based circularity targets, grounded in robust impact assessments that consider the entire value chain and all available technologies. Framework conditions required for their implementation must be in place. Such targets should generate a strong demand signal to foster investment in circular feedstocks and technologies, enabling a business case for investments in Europe.

**Chemical recycling & Mass Balance Accounting:** Chemical recycling has the unique ability to break down polymeric waste into its basic molecular components, providing a useful complementary recycling technique in parallel to other circularity and recycling efforts. Feasible recycled content targets and harmonised rules for end-of-waste and secondary raw materials are key to create an enabling regulatory framework for recycling.

1. *Develop an enabling policy framework that promotes the acceptance of chemical recycling as contributing to waste recycling-rate calculations across all Member States.*
2. *Promote a "technology neutrality" principle to ensure all circularity efforts are recognised, including mechanical and chemical recycling, waste to monomers, waste to feedstock, CCU/S, etc.*
3. *Provide clarity on the calculation rules for chemical recycling, incorporating a mass balance chain-of-custody, as a key enabler to contribute to recycled content targets.*

**Requirements for imported products:** Circular content requirements must be applied to imported products to prevent competitive distortions. A credible and enforceable verification system and surveillance at EU borders must be established to ensure compliance with these targets, thereby maintaining the integrity of the European market.

1. *Ensure circularity standards are upheld equally for EU-produced and imported products, for example through the use of Digital Product Passports (DPPs) at end product level.*

**Broad scope of alternative feedstocks:** There is no single solution to substitute fossil feedstock for carbon-based materials. Biobased and recycled raw materials as well as fossil feedstock in combination with Carbon Capture and Storage (CCS) will all be required for green transformation of the industry and the respective value chains.

1. *Whilst the CEA aim to increase the use of circular feedstock, all types of sustainable biobased feedstock (first-, second-, third-generation) as well as all biomass derived solutions (bio-based and bio-attributed) that meet the upcoming EU legal criteria should be considered.*
2. *Besides, separate collection and valorization of the biowaste across Europe should be enforced.*

## 2. Ensure a Targeted Approach to Legislation

Legislation should avoid a one-size-fits-all approach. Circularity requirements should reflect the diverse performance needs of different materials and products. Instead of imposing uniform obligations, circularity standards should be tailored to individual products, considering their design, application, and technical requirements. Requirements should be set at the level of final products rather than intermediate materials, allowing the upstream value chain to adapt.

### Eco-design for Sustainable Products Regulation

1. *In the upcoming Delegated Acts for the identified priority products, feasible design-for-recycling criteria and recycled content targets should create a demand pull for secondary raw materials.*
2. *Set targets at the end product to mobilize the whole downstream value chain and create a market pull to de-risk investments to scale up recycling infrastructures. The specificities of targets should be decided on a product-by-product basis, considering all recycling technologies, and open and closed loop quotas, depending on the product and availability of recyclates.*
3. *Leverage DPPs at end product level to incentivize the uptake of low carbon solutions, including circular technologies like recycled content and bio-based.*

### Waste Framework Directive

1. *Introduce a “technology neutrality” principle to ensure all circularity related efforts are recognised.*
2. *Develop an efficient, simple and EU wide harmonized decision process for End-of-Waste of material streams, including all stakeholders.*
3. *Develop trainings and guidelines to support decision makers in the declarations of End-of-Waste to ensure a level playing field.*
4. *Introduce mutual recognition of End-of-Waste declarations among EU Member States to avoid hurdles to the intra-EU transboundary shipment of waste.*
5. *Set harmonized End-of-Waste of plastics in the secondary use process where it provides the most support for circular economy.*

### Extended Producer Responsibility (EPR) schemes in the Waste Framework Directive

1. *Adjust EPR requirements to act as overarching requirements for all products and introduce mandatory eco-modulation for the fees. Eco-modulation should consider ‘design for recycling’ and recycled content. This should align with ecodesign requirements under the ESPR to avoid a disconnect between supply and demand. This promotes a harmonization of EPR schemes across the EU to improve quality of waste and incentivise sustainable solutions. This would not apply if there are EPR schemes already set in product specific legislation.*

**Waste Shipment Regulation**

1. *Develop a simple process for shipping waste within the EU, for example by introducing a more efficient PIC procedure ('PIC Light') for non-hazardous mixed plastic waste (EU48), or remove the PIC requirement entirely.*
2. *Enable green-listing of sorted plastic waste streams that have undergone pre-treatment or sorting processes, even where contamination levels exceed current 94% purity thresholds, and establish dedicated waste codes for polyurethane-rich waste from durable goods applications (mattresses, automotive components, furniture). Contamination in these streams often consists of components from the original product design rather than external pollutants, and advanced recycling technologies can efficiently process these materials while maintaining environmental standards. This approach would unlock significant volumes of valuable polyurethane waste currently directed to incineration or landfill, supporting specialized recycling infrastructure development and contributing to raw material security for the European polyurethane industry.*

**EU Emissions Trading System**

1. *Amend Annex I to include municipal waste incineration in scope of EU ETS (currently, a review with inclusion is an option for 2028). Today, around 70% of plastics waste collected in the EU ends in landfills or is used for energy recovery [1]. This is an opportunity for EU economy growth reducing their dependence on fossil raw materials imports.*
2. *Prioritise the review scheduled in 2026 to reward Carbon Capture and Utilisation under the EU ETS*.

## 3. Facilitate Investment in the Circular Economy

Many sustainable projects lack a solid business case due to high costs, regulatory uncertainty, limited public funding, and a lack of clear demand commitments. These challenges slow investment and delay the scale-up of circular solutions. Transitioning to circular practices requires substantial upfront investment. Scaling up new technologies typically takes years of time, including proof of economic and technical feasibility [2]. As highlighted in the Antwerp Declaration and the Letta and Draghi reports, many investments essential for decarbonisation and circularity still lack clear financial viability. Europe needs to mobilise an additional EUR 750 - 800 billion each year to support the twin transitions [3]. To achieve this, the EU should take targeted steps to de-risk investments, prioritise pilot plant infrastructure, and support co-location facilities to speed up industrial deployment.

**Legal certainty and access to capital:** Companies need legal certainty to create an investable case for circularity. Lack of clarity on the legal strength of binding targets via escape clauses, restrictive calculation methods, and weak enforcement to imports, make investments in recycling risky and capital expensive.

1. *Simplify rules and provide predictability to reduce investment risks to give businesses confidence about the pay-off of innovation and investment.*
2. *Embed a dedicated fund for circular technologies in the 2027–2034 Multiannual Financial Framework.*

**Enforcement:** It is vital to strengthen enforcement mechanisms to ensure compliance with EU rules in a transparent way, both for products manufactured locally and those from third countries.

1. *Set mandatory third-party verification requirements where mandatory recycled content targets exist.*
2. *Introduce "equivalency clauses" to ensure a level playing field between local and imported products.*

**Market pull measures:** Strong market pull measures are needed to improve the competitiveness of circular products.

1. *Reduce value-added tax rates for products with verified circular content, "designed for recycling products", and European recyclers and introduce tax exemptions for players in the circular value chain according to the volume produced of non-virgin plastic products.*
2. *Expand of green public procurement criteria that prioritise circular and sustainable materials.*
3. *Introduce binding eco-modulation criteria in EPR schemes to incentivise the uptake of secondary raw materials and design for recycling solutions. Reinvest EPR fees into the value chain for circularity purposes.*
4. *Potential biobased targets (that includes bio-attribution) for bio-based feedstocks should aim to increase the use of biomass as a feedstock and be distinguished from those set for recycled content.*

**Cutting red tape:** The EU regulatory system must allow for the timely implementation of innovative solutions, particularly in production facilities operating under long-term permits that were not designed with circularity in mind.

1. *Streamline approval processes for new industrial projects and infrastructure that support circularity and remove regulatory bottlenecks at local, regional, and national levels to ensure investments are not delayed or abandoned.*

The chemical industry is central to Europe's climate ambitions. Achieving this vision requires a coherent, predictable, and targeted policy framework that supports investment and incentivises innovation. By aligning EU policies, enabling the use of circular feedstocks, and promoting financial and regulatory incentives for innovation, the EU can strengthen its industrial base and establish itself as a global leader on circularity. The time to act is now.

[1] Plastics Europe (2024) *The Circular Economy for Plastics – A European Analysis*.
[2] Cefic – UNITY (2025) *Accelerating the circular transformation: Insights, challenges, and pathways for the chemical industry and beyond*.
[3] Draghi (2024) *The future of European competitiveness*. European Commission, Brussels.

**ISOPA** represents the major European manufacturers of aromatic diisocyanates and polyols, the main raw materials used to make polyurethanes. More information on diisocyanates, their applications and ISOPA's product stewardship initiatives can be found on the www.isopa.org.