



# Building a healthy circular economy

Integrating chemicals, products, and waste under the Circular Economy Act

Executive summary

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Our health is shaped not only by lifestyle choices, such as diet and physical exercise, but also by environmental exposures we often cannot choose. It is precisely this lack of choice that matters. Society is continuously, and often unknowingly, exposed to a low-level mixture of harmful chemicals – a problem that remains both underestimated and largely unaddressed. Documented adverse health effects include, but are not limited to, altered neurological and sexual development, reduced fertility, as well as increased risks of asthma, obesity, diabetes, cardiovascular disease, neurologic impairment, and cancer.

The most recent and comprehensive report on Europe's environment, climate and sustainability by the European Environment Agency clearly concluded that **pollution and environmental degradation puts our health and wellbeing at risk, as well as our economic security and future prosperity.**

It is undeniable that **chemical exposure has significant costs.** Diseases caused by toxic chemical exposures can lead to massive economic losses, including health care expenditures and lifelong productivity losses resulting from reduced cognitive function, physical disabilities, and premature death, amongst others.

Both health impacts and economic costs provide a compelling rationale for the strong integration of health and safety considerations into any new circular economy policies, including within the design, implementation, and monitoring stages. As pollution is preventable, **we have a unique opportunity to use circularity and competitiveness to prevent a future public health crisis.**

**In a clean and safe circular economy, all materials and products should be free from harmful chemicals** in order to ensure their safety for both primary and secondary uses. This measure has already been confirmed in the EU Chemicals Strategy for Sustainability. The upcoming Circular Economy Act (CEA) should therefore align with the endorsed chemical strategy and incentivise adequate actions.

## Recommendations

Achieving a healthy circular economy is complex but possible. It requires coordinated action across diverse pieces of legislation, supported by a holistic approach that addresses the entire lifecycle; from raw material extraction and manufacturing through to recycling and end-of-life disposal. Our paper provides the following recommendations for policy-makers and authorities:

- Include in the Circular Economy Act (CEA) the recitals that refer to key principles of the EU Chemicals Strategy for Sustainability, most notably:
  - A clean circular economy requires a combination of actions upstream, to ensure that products are safe and sustainable-by-design (including design-for-recycling), and downstream, to increase safety and trust in recycled materials and products.
  - The creation of a well-functioning market for secondary raw materials requires adequate information on the chemical content of products being available to consumers, value chain actors, as well as waste operators.
  - Recognise the increasing importance of decontaminating materials containing hazardous chemicals and/or substances of concern.
- Include binding requirements for traceability of chemicals and materials along the value chain. At a minimum, information about substances of very high concern should become mandatory in the Digital Product Passport (DPP).
- Develop a specific decision-making methodology to support decisions on the recyclability of waste, with particular attention to substances of concern.
- Include a requirement for communication of substances of very high concern in articles above a threshold at 0.01%, in the revised REACH regulation (Article 33).
- Support the development of EU-wide End-of-Waste (EoW) criteria following the prioritisation list established in 2022, while seeking to support mutual recognition principle between Member States in the meantime. In parallel, uphold the full consideration of the fourth criterion of the EoW criteria defined in Article 6 of the Waste Framework Directive (WFD) related to the adverse effects on human health and the environment to ensure that recycled materials are safe, traceable, and used within a closed regulatory loop.
- Introduce ecomodulation fees in the reformed European Extended Producer Responsibility (EPR) system, and incentivise the use of safe chemicals and design of toxic-free products via the polluter-pays principle.
- Support funding and de-risk innovation across the value chain, through public-private partnerships that support small and medium-sized enterprises (SMEs) and start-ups working on safe chemicals and sustainable materials.
- Support EU-made safe products via updated green criteria in the revised EU's Public Procurement Directive, and their mandatory use, including via public investments.
- Propose ambitious measures in the "European Product Act" to update rules for better product safety and stronger market surveillance. The revision of the Market Surveillance Regulation should strengthen legal liability, provide more enforcement resources, enhance pan-EU coordination and update rules for digital trade.



Zero Waste Europe (ZWE) is the European network of communities, local leaders, experts, and change agents working towards a better use of resources and the elimination of waste in our society. We advocate for sustainable systems; for the redesign of our relationship with resources; and for a global shift towards environmental justice, accelerating a just transition towards zero waste for the benefit of people and the planet.

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