

Marrying safety with sustainability in food packaging

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Credits

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Project Partners



Zero Waste Europe is the European network of communities, local leaders, experts, and change agents working towards the elimination of waste in our society. We advocate for sustainable systems and the redesign of our relationship with resources, to accelerate a just transition towards zero waste for the benefit of people and the planet.



The Toxic-Free Food Packaging campaign is a collaboration between Zero Waste Europe and other NGOs with the goal of creating a toxic-free environment where nobody should have to worry about the presence of health-harming chemicals in the products that come into contact with our food.



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Society is striving for waste reduction with a great focus on food packaging. More and more consumers are demanding eco-friendly and sustainable product packaging and recognise the value of extending the life of packaging through reuse. Three quarters of people worldwide believe single-use plastics should be banned as soon as possible and almost two-thirds of global consumers express an interest in refillable packaging. This, as well as an increasing pressure from policy makers to accelerate progress toward a circular economy, is forcing industry to respond to emerging demands. As a result, solutions are being developed toward reuse, recycling, and alternative (mainly non-plastic) materials.

However, the critical aspect of chemical safety is often minimised or even ignored in the considerations and discussions around sustainability of packaging. Unfortunately, the current regulatory approach does not ensure the safety of food packaging and other food contact materials. **Today, hundreds of harmful substances present in food packaging and other food contact articles can end up in human bodies through leaching or migrating into food, with potential long-term health effects on the reproductive, immune and nervous systems.** This creates a substantial threat to public health, and vulnerable populations, such as children and pregnant women, who are particularly at risk.

Many of these chemicals can be found in single-use packaging and common tableware items (particularly those made from plastics, paper and paperboard) that contain a variety of additives added for functionality, such as plasticisers and grease-proofing agents. Equally worrying is that **only a fraction of the chemicals present in food packaging / food contact articles have been adequately assessed for their impacts on health.**

Toxic chemicals migrating from food packaging and other food contact articles create a number of risks to businesses: from potential non-compliance fines and product recalls after closer scrutiny, to loss of consumer satisfaction and trust. Use of untested / poorly tested substances also brings great uncertainty, as research into chemicals that may soon be identified as a cause for concern, and associated increasing calls to implement bans more rapidly, are expanding. Becoming preventive by proactively eliminating hazardous chemicals and choosing safer materials can therefore reduce the risk to industry associated with the current high degree of uncertainty and increasing regulatory burdens that can jeopardise business operations.

Reducing exposure to harmful chemicals contributes to the prevention of associated chronic diseases in the human population, including obesity and infertility. Improving the governance of chemicals in food packaging requires urgent action also due to the accelerating transition to a more circular EU economy. Recycling of packaging waste into new food contact materials presents particular challenges as it may increase both the possible sources of contamination and

the amount of chemicals that can migrate from packaging into foods. **Hazardous chemicals should therefore be eliminated from the start** (via packaging design) in primary articles, so that when the packaging is recycled (or composted), it is safe. Due to decreased risks and costs related to decontamination, harmful chemicals-free packaging might also eventually facilitate companies' investments in closed-loop, high-quality recycling.

Ultimately, it is up to the legislators and the producing companies to make sure we are not exposed to toxic chemicals. While the revision of EU laws on chemicals in food contact materials is yet to be completed, **businesses already have the option to start moving away from toxic chemicals used in their products**, even if this opportunity comes with several challenges, such as a need for choosing safe materials and chemicals in the absence of official guidance as well as difficulty in obtaining adequate supporting information through the entire supply chain.

Fortunately, existing databases and tools, like the [UP Scorecard](#), can help to assess human health and environmental impacts of common foodware and food packaging choices.

'Safety' and 'sustainability' concepts are directly interlinked: in order for food packaging to be truly sustainable, it needs to be safe for both human and environmental health. Zero Waste Europe strongly encourages the adoption of products, including food packaging, that are reusable and free from harmful chemicals. Safer and more sustainable packaging will also create consumer trust and brand reputation for businesses.

Within this briefing we aim to:

- (1) Provide businesses with a better understanding of the health and environmental issues linked to hazardous chemicals in food contact materials (with a focus on food packaging)
- (2) Highlight the opportunity for businesses to adopt circular economy practices using non-toxic and reusable materials that protects human health.

Key messages & recommendations:

- Food packaging and common foodware are only sustainable if they are toxic-free.
- EU legislation should urgently phase out the most hazardous chemicals and ensure packaging and other food contact articles are safe for use, reuse and recycling. As a principle, products that cannot be safely used, reused and recycled at the end of their life should not be produced or placed on the market in the first place.
- Removing toxic chemicals from food packaging and other food contact materials will not only protect human and environmental health, but also can create investor, retailer and consumer confidence while building brand trust.
- Reusable packaging systems are a crucial solution for sustainable packaging and the true enablers of a circular economy.
- Manufacturers can already introduce innovative solutions and/or scale up existing safer solutions for packaging (e.g. by avoiding toxic glues and inks, using inert materials for reusable options).
- Tools like the UP Scorecard can immediately be used to support decision-making strategies for packaging and dialogue with suppliers.

[The full briefing can be found here.](#)