



Zero Waste Europe's feedback on the Farm to Fork Strategy Roadmap

Policy Briefing

March 2020 – Zero Waste Europe

Towards a food system free of chemicals, overpackaging and waste

Our current food system leads to high quantities of food waste¹ and packaging waste² while threatening the health of European citizens due to the large use and presence of hazardous chemicals along the production and distribution system.

The Farm to Strategy presents a great opportunity to profoundly reshape our relation to food and design food waste, hazardous chemicals and overpackaging out of our food system. Addressing such issues specifically requires a holistic vision leading to coordinated actions all along the food supply chain.

1. Reducing Food Waste

Worldwide food waste is responsible for 8 to 10% of the anthropogenic GHG emissions³. Considering that the EU level of food waste is one of the highest around the globe, reaching the EU GHG reduction targets cannot happen without ambitious measures tackling food waste. Additionally, reducing food waste will help save agricultural land, water and help improve food security in Europe⁴. It is therefore a key element of a successful European Green Deal.

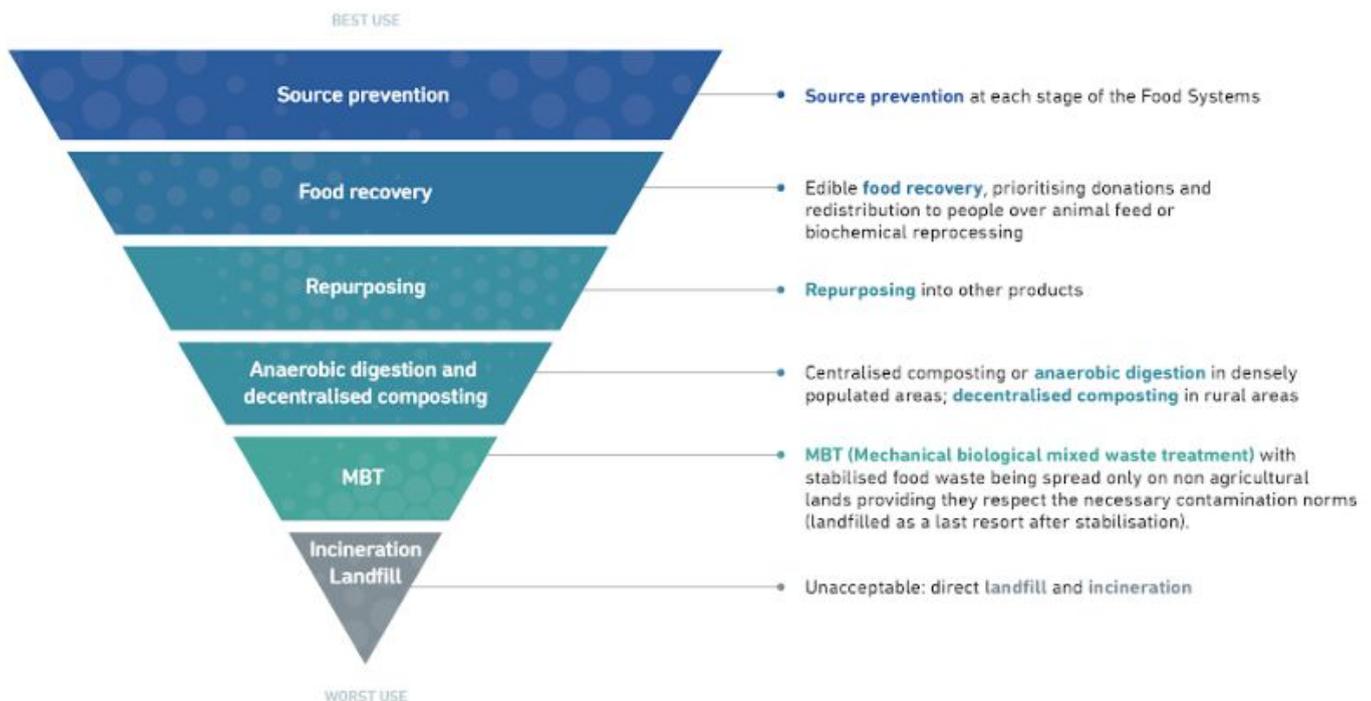


Figure 1: The Food Waste Hierarchy, Sources: zerowasteurope.eu/2019/01/policy-briefing-food-systems/

¹ www.eu-fusions.org/phocadownload/Publications/Estimates%20of%20European%20food%20waste%20levels.pdf

² ec.europa.eu/eurostat/statistics-explained/index.php/Packaging_waste_statistics#Waste_generation_by_packaging_material - Food packaging accounts for a large part of the packaging produced: in 2007, global food packaging constituted 41% of all packaging used (Muncke, J., Exposure to endocrine disrupting compounds via the food chain: Is packaging a relevant source? Science of The Total Environment, 2009. 407(16): p. 4549-4559. Available at: www.ncbi.nlm.nih.gov/pubmed/19482336

³ www.ipcc.ch/srccl/chapter/summary-for-policymakers/

⁴ www.fao.org/3/i3347e/i3347e.pdf

As food waste is by nature different from other waste streams, preventing and managing it requires different actions than for non-organic waste streams, and a specific food waste hierarchy should be adopted. Such hierarchy⁵ should act as a framework guiding the EU action everywhere food waste is addressed. It would ensure better measures regarding food waste thus reducing its impact on the environment and ensuring the best option in case it cannot be avoided.

Zero Waste Europe (ZWE) calls on the European Union to:

- Adopt a binding 50% reduction target of food waste from farm to fork to be achieved by 2030. The newly presented Circular Economy Action Plan⁶ pledges to tackle food waste by adopting binding food waste reduction targets while Article 9.1(g) of Directive 2008/98/EC (Waste Framework Directive) already mentions the Sustainable Development Goal 12.3 target of 50% reduction by 2030. Such a target should be binding per country and based on mandatory food waste measurement from post-harvest food to the consumption stage.
- Ensure reduction targets are expressed as maximum loss or waste per hectare, kg processed food, and capita.
- Adopt a binding food waste hierarchy based on the same model as the waste hierarchy.

2. Addressing health impact linked to migration of chemicals from packaging to the food

A wide array of chemicals are used in food packaging, including known hazardous chemicals such as PFAs and several bisphenols and phthalates. As an example, over 4000 chemicals are potentially present in plastic packaging, and 908 chemicals were identified as likely to be present in plastic packaging; out of those 908, 68 chemicals were identified as being most hazardous for the environment and 64 were identified as being most hazardous for human health⁷.

Many of those hazardous chemicals migrate from the packaging (especially plastic and paper and cardboard packaging) to the food they contain, and that we eat, hence endangering human health. Hazardous chemicals are also used in inks used in food packaging. A group of scientists recently published a peer-review consensus statement on the impacts of food packaging chemicals on human health⁸, which notably highlights that food contact materials are a relevant exposure pathway for known hazardous substances, and that current safety assessment of food contact chemicals is ineffective at protecting human health. Civil society has responded with a Declaration of Concern⁹ signed by more than 160 organisations calling for urgent action from decision-makers.

Although a few EU countries have decided to restrict certain chemicals (e.g. Denmark has decided to ban PFAs from paper and cardboard from 2020¹⁰), the level of protection of citizens remains inconsistent across the EU and largely insufficient.

The current EU legislative framework on food contact materials, including food packaging, is inappropriate and does not protect EU citizens' health, as notably there is no harmonised rules for several materials including paper and cardboard, it does not take into

⁵ zerowasteurope.eu/2019/01/policy-briefing-food-systems/

⁶ ec.europa.eu/environment/circular-economy/pdf/new_circular_economy_action_plan.pdf

⁷ www.foodpackagingforum.org/fpf-2016/wp-content/uploads/2018/09/HCPP-prioritization-report_Sept-2018.pdf

⁸ "Impacts of food contact chemicals on human health: a consensus statement" Muncke et al, Environmental Health (2020) uploadssl.webflow.com/5e5989de7d8ff17dd9d726c9/5e5ec3f0181cf6cf9a71db88_Impacts%20of%20food%20contact%20chemicals%20on%20human%20health-%20a%20consensus%20statement.pdf

⁹ zerowasteurope.eu/library/declaration-of-concern

¹⁰ www.foodpackagingforum.org/news/denmark-to-ban-pfas-in-paper-board-in-2020

account mixture effects of several chemicals and it is not consistent with other EU legislations which means that restricted chemicals under REACH are still allowed in food packaging.

Zero Waste Europe (ZWE) calls on the European Union to:

- To start the process for an ambitious reform the legislative framework on food contact materials, on the basis of [these principles](#);
- Set in place mechanisms to ensure information on chemicals in food contact materials and traceability along the value chain, including to ensure safety of recycled content;
- Ensure the Farm to Fork Strategy is consistent and complementary to the Circular Economy Action Plan and the upcoming Chemicals Strategy for Sustainability, and supports the transition towards safe and reusable food packaging, while preventing regrettable substitutions.

3. Tackling overpackaging, a driver of waste and food waste

Over the past decades, packaging waste and food waste generation have increased simultaneously, thus challenging the myth that the use of plastic packaging is a solution to food waste.

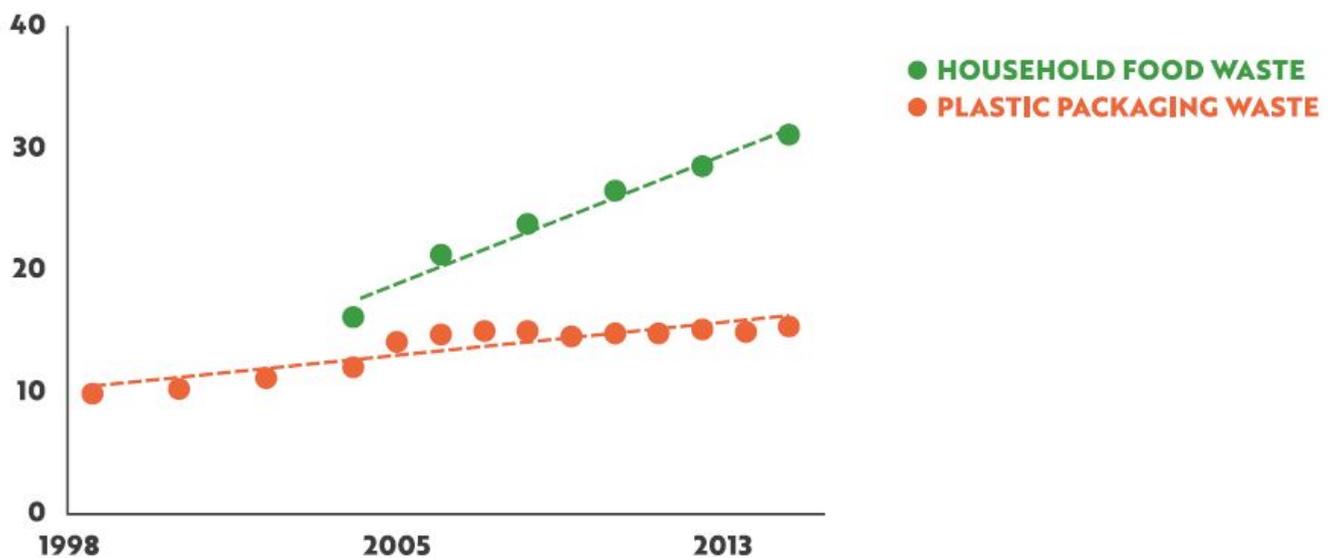


Figure 2: Comparison between household food waste and plastic packaging waste. Source: [Unwrapped: how throwaway plastic is failing to solve Europe's food waste problem and what we need to do instead](#)

While well-designed specific type of packaging can lead to better conservation of specific products like beef whose increased conservation has positive environmental impacts¹¹, this is not a common rule¹². Certain types of packaging

¹¹ Vergheze, K., et al., The role of packaging in minimising food waste in the supply chain of the future. Final Report for CHEP Australia. 2013, RMIT University: Melbourne, Australia.

¹² Ellen MacArthur Foundation, New Plastics Economy - Catalysing Action. 2017, Ellen MacArthur Foundation, Cowes, UK.

may lead to increased food waste level, either in the upper part of the food supply chain – by defining grading standards for producers compelled to adapt their production the packaging – or in the lower part where multipacks¹³, fixed portion sizes or pre-prepared food lead to over-purchasing of product¹⁴ with shorter shelf-lives and dependant on refrigeration¹⁵. As mentioned above, food packaging can also be a major source of exposure of known hazardous chemicals, with impact on human health (through migration into the food) and the environment through leakage.

Life Cycle Assessment studies on packaging waste have proven to overstate the benefits of packaging¹⁶ in addressing food waste by:

- Simplifying food waste drivers;
- Undermining chemical leakage and environmental leakage;
- Not taking reusable packaging or packaging free alternatives into account.

Zero Waste Europe (ZWE) calls on the European Union to:

- Regulate, notably through the revision of the essential requirements, packaging practices driving food waste along the supply chain. This should specifically target multipacks, strict grading activities and misleading packaging;
- Develop a set of indicators that would allow for a holistic assessment of the sustainability of packaging to address the shortcomings mentioned above, and that would include for Life Cycle Assessments based on strong harmonised methodologies.

4. Towards localised safe and zero waste food production and distribution

Conventional food systems, through long food supply chains, lead to overpackaging, large use of chemicals, and creation of food waste. Short food supply chains have the potential to largely address those issues.

Indeed, short distances between production and consumption reduce the risk of food waste during transport, storage or processing. And by reducing the number of intermediaries via direct sale from producers to consumers, it makes the logistics easier for the setup of reusable packaging¹⁷ – with or without deposit – or packaging-free systems.

¹³ UBA, Guideline: Prevention of food waste in the catering sector, Fink, L., Roehl, R. & Strassner, D.C. (Eds.) 2016, Umwelt Bundesamt: Dessau-Roßlau. p. 36..

¹⁴ Chandon, P. and B. Wansink, Does food marketing need to make us fat? A review and solutions. *Nutrition Reviews*, 2012. 70(10): p. 571-593.

¹⁵ Verghese, K., et al., The role of packaging in minimising food waste in the supply chain of the future. 2013, RMIT University: Melbourne

¹⁶ Available at :

zerowasteurope.eu/wp-content/uploads/2019/11/zero_waste_europe_report_justifying_plastic_pollution_the_shortcomings_of_lcas_in_food_packaging_policy.pdf

¹⁷ WRAP, Single Trip or Reusable Packaging – Considering the Right Choice for the Environment, in *Reusable Packaging – Factors to Consider*. 2010: London. p. 68.

Additionally, it should be noted that benefits from short food supply chains go beyond reducing waste and limiting chemicals use and exposure, ranging from socioeconomic benefits for farmers with higher revenue¹⁸ to environmental benefits leading to reduced use of pesticides, fertilisers¹⁹ to the benefits of local and circular nutrient waste management.

Yet, such food supply chains – embodied by farmers markets, community supported agriculture schemes (CSAs) or deliveries from farms – remain minor with only 15% of EU farms selling more than half of their products directly to consumers²⁰. The European food retailing system remains highly concentrated with five major retailers accounting for 50% of the market²¹ and whose packaging (mis)practices are largely contributing to waste generation²².

Zero Waste Europe (ZWE) calls on the European Union to:

- Develop policies specifically supporting the development of short food supply chains by allocating more resources to communities supported agricultural schemes;
- Support better understanding and development of short food supply chains via research funds like Horizon Europe;
- Raise from 15% to 30%, by 2030, the share of farmers selling more than half of their products directly to consumers.

To conclude, ZWE calls on the EU to develop an ambitious Farm to Fork Strategy, that foresees systemic change in the way we produce and consume food, and contributes to the achievement of a circular economy, zero pollution and the climate and biodiversity agenda. The recommendations presented in this short paper would allow the EU to move towards toxic-free and waste-free food production and distribution, and are part of a broader need to achieve sustainable food systems as demanded by the [EU Food Policy Coalition](#).

¹⁸ Kneafsey, M., et al., Short food supply chains and local food systems in the EU. A state of play of their socio-economic characteristics, in JRC Scientific and Policy Reports. 2013, Publications Office of the European Union: Luxembourg.

¹⁹ European Parliament, Short food supply chains and local food systems in the EU, in Members' Research Service, Augère-Granier, M-L. (Ed.) 2016, EPRS - European Parliamentary Research Service: Brussels. p. 10.

²⁰ European Commission, Commission staff working document on various aspects of short food supply chains. 2013, European Commission: Brussels. [Data available for 17 Member States, representing 89 % of all EU farms].

²¹ Consumers International, The relationship between supermarkets and suppliers: What are the implications for consumers? 2013, Consumers International: London. p. 25.

²² Colbert, E., Schein, A. & Douglas, D., Causes of food waste in international supply chains. 2017, A report by Feedback Global funded by the Rockefeller Foundation: London. p. 34.

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Zero Waste Europe, 2020



Zero Waste Europe is the European network of communities, local leaders, businesses, experts, and change agents working towards the same vision: phasing out waste from our society. We empower communities to redesign their relationship with resources, to adopt smarter lifestyles and sustainable consumption patterns, and to think circular.



Zero Waste Europe gratefully acknowledges financial assistance from the European Union. The sole responsibility for the content of this event materials lies with Zero Waste Europe. It does not necessarily reflect the opinion of the funder mentioned above. The funder cannot be held responsible for any use that may be made of the information contained therein.