

# PACKAGE FREE RETAIL

RETH!NK  
PLASTiC

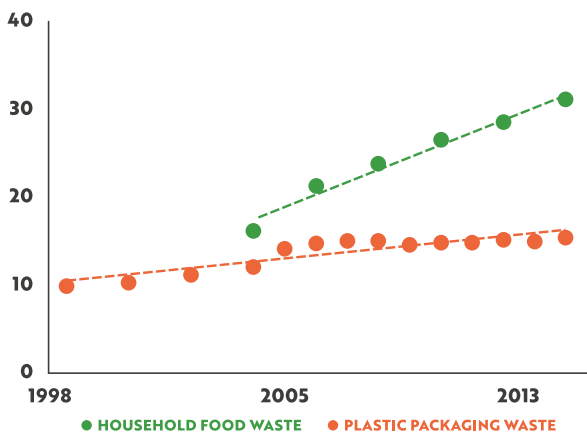


Food retailing remains packaging intensive, driving both food waste and plastic waste at different stages of the value chain. Life Cycle Assessment (LCA) analyses of packaging practices take a limited view of the drivers of food waste, typically omitting reusable or zero packaging alternatives which represent a viable alternative for many products. Traditional markets, together with the growing number of zero waste or package-free retailers, demonstrate that single-use packaging is often unnecessary.

**European supermarkets place millions of tonnes of plastic packaging on the market each year [1]. Plastics are now the most widely used material in European food retail, covering 37% of food sold [2].**

## FOOD AND PLASTIC PACKAGING WASTE IN THE SUPPLY CHAIN

In Europe, food retail is highly concentrated, with five major retailers accounting for 50% of the market [3]. Marketing practices such as grading standards, multipacks, and small format packaging are widespread, and drive waste throughout the value chain [4]. Packaging food in plastic has become the default for many retailers. Since the mid-20th century, packaging and food waste have grown simultaneously, suggesting the need for a more systemic approach to the analysis and management of both packaging and food waste.



## JUSTIFYING PLASTICS? THE LIMITATIONS OF LCA STUDIES

Life Cycle Assessment (LCA) is a methodology applied to assess the environmental impact of different products, and has been widely used to assess food packaging. This study reviewed 21 LCA packaging studies (see separate Life Cycle Assessment analysis document) and found that while LCA represents a scientifically rigorous methodology which can rightly identify food waste as an important factor in packaging design, studies tended to simplify food waste drivers and overstate the benefits of packaging in addressing food waste. Additionally, risks from chemical migration and environmental leakage of plastics are poorly integrated into existing LCAs, which tend to focus on greenhouse gas (GHG) emissions. Very few of the studies reviewed examined alternatives such as reusable packaging or zero packaging. These findings suggest the need for a more comprehensive approach to understanding how packaging can support the sustainability of the food system and the circular economy.

The practice of top-and-tailing French beans grown in Kenya so that they fit uniformly in their packaging results in 30-40% of the beans being wasted before they arrive in store [7].

## PROMOTING ALTERNATIVES – PACKAGE-FREE RETAIL

Increasing numbers of retailers across Europe are renouncing single-use plastic packaging and selling much of their products loose or with refillable containers [8]. Efforts to reduce waste and single-use plastic packaging can be seen in different aspects of food retail:

**Distribution:** a French retailer introduced 1.8 million reusable packing crates for fruit and vegetables. Reverse logistics on these crates is supported by radio-frequency identification (RFID), which allows retailers to track their crates and produce throughout the distribution chain. Cases are rented rather than owned by the retailer, saving 150 tonnes of waste annually and reducing emissions by 30% compared to previous practices [9].

**Traditional markets:** widespread in Europe, these sell produce loose or with minimal packaging. A key challenge is to reduce the prevalence of single-use plastic bags among independent retailers [10].

**Zero waste retail:** a number of innovative retailers have based their business model on renouncing both food and packaging waste, facilitated with reusable packaging solutions [11] [12]. With their strong focus on sustainability, these retailers often source regional and organic produce, supporting short food supply chains (SFSCs) and further lowering the risk of food wastage [13] [14].

## ZERO-WASTE IN BERLIN

Original Unverpackt was the first zero waste shop in Germany, opening in Berlin in 2014. It buys produce in bulk from local suppliers, transports it to store in reusable crates, and sells by weight from dispensers. Customers bring their own containers, such as organic cotton bags and glass jars, or can purchase such containers in the store.

**Supermarkets:** some large retailers recognise that their customers prefer their products unpackaged. Several large retailers across Europe, including Carrefour (France), ICA (Sweden), REWE (Germany) and M&S (UK) have recently piloted laser labelling techniques on some of their fruit and vegetables, removing the need for packaging or stickers [15] [16].

# PACKAGE-FREE RETAIL

AMOUNT OF  
FOOD PACKAGED  
IN PLASTICS | **37**  
PERCENT



BY 2020 WE WILL  
CONSUME MORE THAN  
**900 BILLION ITEMS**  
OF PACKAGED FOOD  
AND DRINK ANNUALLY

## PROMOTING ALTERNATIVES

A FRENCH RETAILER SAVED

150  
TONNES  
OF ANNUAL  
WASTE

AND

30% OF  
EMISSIONS

BY IMPLEMENTING 1.8 MILLION  
REUSABLE PACKAGING CRATES



REDUCING APPLICATION  
OF SINGLE-USE PLASTIC BAGS  
A KEY CHALLENGE



### DISTRIBUTION

### TRADITIONAL MARKETS

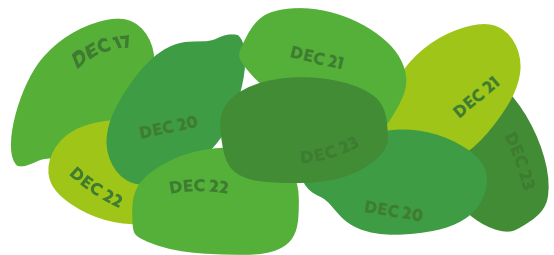


LOCAL ORGANIC PRODUCE  
- SHORT SUPPLY CHAIN

REUSABLE  
PACKAGING SOLUTIONS



### ZERO-WASTE RETAIL



SOME RETAILERS INCLUDING  
CARREFOUR, ICA, REWE AND M&S  
HAVE PILOTED LASER  
LABELLING TECHNIQUES

### SUPERMARKETS

## RECOMMENDATIONS

Policies should seek a better understanding of the interactions between packaging and food waste and promote a food system that is truly circular and sustainable:

- Incentivise food retailers to reduce food waste and packaging waste, including support to scale-up truly circular retailers, such as zero waste and package-free stores.
- Apply market-based instruments, such as modulated extended producer responsibility (EPR) and deposit-refund schemes to prevent unsustainable packaging practices and outdated market responses.
- Regulate packaging practices that drive food waste in the supply chain, including multipacks, unnecessary grading activities and misleading packaging.
- Reduce the use of single-use plastic packaging via targets. Support and promote alternatives for on-the-go food services and retailers.
- Create an EU-wide right for customers to return any plastic packaging to the point of sale, e.g. through a revision of the Packaging and Packaging Waste Directive (PPWD), or promote EPR as a criteria for reduced fees for producers.

Full report available at:

[foeurope.org/unwrapped-throwaway-plastic-food-waste](http://foeurope.org/unwrapped-throwaway-plastic-food-waste)



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## ENDNOTES

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