

THE STORY OF Unverpackt

ZERO WASTE CONSUMPTION & PRODUCTION

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Since opening in February 2014, Germany's first packaging-free store Unverpackt in Kiel has been pursuing a drastic reduction of packaging waste and the promotion of short delivery routes while motivating customers to rethink their consumer behavior in terms of sustainability. More than 100 stores in Germany are already following this example, the zero waste retail movement has only just begun.



UNVERPACKT: THAT'S HOW IT WORKS

Unverpackt is a different kind of grocery store. Here the goods are sold in bulk or with a deposit-return scheme¹. For bulk items, customers bring empty containers with them, weigh them out, fill in the desired product, deduct the empty weight "tara" at the checkout and thus avoid packaging and food waste while buying only as much as one needs. Sensitive products such as milk and cream are available in deposit jars and bottles, under a deposit-return scheme.

The product range covers staple foods such as cereals, pasta, baking ingredients, spices, fresh fruit and vegetables as well as cleaning and hygiene products and accessories for a waste-free lifestyle. The majority of products are also regional, organic or fairtrade.

Unverpackt in Kiel has become the pioneer of a movement in Germany.

Through consulting and seminar services, talks and media coverage, "Unverpackt" has become an important part of the German lifestyle. At this point there are more than 100 similar stores in the country, which organise themselves as a network through social media and recently created a professional association.

Supermarket chains have also recognised the concept's potential and are developing their own unpackaged areas. Numerous producers and suppliers are rethinking the packaging and transport costs of their supply chains and are motivated to change as a result of the economic and environmental advantages.

¹. Small deposit charged to consumers when purchasing goods and services, which is refunded upon return of item (for reuse or refill) to receiving station.



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THE PROBLEM:

The amount of packaging waste generated per capita is constantly increasing. According to the latest figures (2016) **every German citizen generates 220.5kg of packaging waste per year¹**.

Despite waste sorting and collection, only ~15.6% of plastic waste is processed in such a way that new plastic products can be made from it². However, these are mostly of inferior quality, so ultimately only ~2.8% of the plastics produced in Germany are made of recycled material³.

The majority of all plastic waste in Germany (~85%) is incinerated or exported abroad⁴.

The thermal energy generated during incineration is not proportional to the energy previously invested in the production, transport and disposal of plastics, making this a highly unsustainable process⁵. On the other hand, exported waste ends up under less stringent regulations in nature, where it decomposes slowly (if at all) while emitting other pollutants.

The example of plastic waste makes it clear that we should focus on avoiding packaging waste altogether, rather than recycling it. After all, the best waste is the one we don't produce in the first place!

1. German environmental authority: Produced and recycled packaging waste in Germany in 2016.
2. Heinrich-Böll-Foundation & BUND (Friends of the earth Germany): Plastikatlas 2019, S. 36f.
3. Plastikatlas 2019, p. 37.
4. Plastikatlas 2019, p. 36.
5. Plastikatlas 2019, p. 36.



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GERMANY'S FIRST UNPACKAGED SHOP

Faced with this challenge and the desire to reduce her own waste, Marie Delaperrière, founder of Zero Waste Kiel e.V, developed Unverpackt's business model. She was inspired by Béa Johnson¹, who coined through her lifestyle the term zero waste in the USA, and the London store 'Unpackaged', created by Catherine Conway. Finally, in February 2014, Marie Delaperrière opened Germany's first unpackaged store.

Initially, 250 products were offered in a small shop. Local acclaim and the number of customers increased rapidly, while the novel concept attracted the attention of the media. After relocating twice, the store now has more than

800 products on offer and over 15 employees.

At the same time, the experience gained was passed on to future store founders who are supported and advised in their plans. More than 250 people attended seminars in Kiel and operate the majority of those 100 unpackaged shops in Germany. Various awards and studies continue to underline interest in the concept.

1. zerowastehome.com/about/speaking/



Photo credits: Berit Ladewig for Unverpackt, unverpackt-kiel.de



5 YEARS OF SUCCESS IN REDUCING PACKAGING WASTE

The growing number of unpackaged shops and their subsequent economic success show the feasibility of the concept in the context of established food markets. "Unverpackt – lose, nachhaltig, gut" has five years of experience and demonstrates how much packaging and food waste has been avoided in the shop and among customers.

Products can be divided into three categories, depending on the packaging in which they are delivered. Thanks to thoughtful initiatives, there should be no disposable packaging used in the delivery process of the following groups of products: loose fruit and vegetables are delivered in returnable crates; sensitive products such as wine, milk or yoghurt are delivered in returnable jars, and the shortest possible transport routes are favoured in order to fully exploit the advantages of deposit-return schemes over disposable packaging. These two categories generate little to no packaging waste in the shop.

The bulk products are supplied in units from 1kg (spices, tea) to 25kg (cereals, muesli) in disposable packaging. The resulting packaging waste within the store is roughly equal to the amount of waste that an average private household generates in Germany. Further packaging material is saved along the supply chain by purchasing unprocessed and regional food as much as possible. This means that intermediate stations, such as for finishing or portioning products in

packages, and the associated secondary packaging are skipped.

This way, Unverpackt saves packaging both in the B2C sector (Business to Consumer) as well as along the entire supply chain, including B2B (Business to Business). Even more packaging waste could be saved if further suppliers were to open up to the concept of reusable and deposit return schemes and deliver the bulk products in reusable containers.

AVOIDING FOOD WASTE

Food waste can be successfully avoided, too. The product range mainly includes staple foods with a long shelf life, such as cereals, rice and pasta. In addition, regional and seasonal products are preferred, which stay fresh longer thanks to the short transport distance to the store.

The easily manageable product range makes it possible to react quickly to changes in quality and save food from being spoiled. Food approaching its sell-by date, or fruit and vegetables partially damaged are sold at a lower price, given away for free, or used in the shop bistro.

These measures almost entirely eliminate food waste in the shop and strengthen the sustainable behaviour of customers. By filling bulk goods into their containers themselves, customers also have the opportunity to buy only as much as needed so nothing is wasted at home.



TRANSFERABILITY & CHALLENGES

Successful unpackaged stores already exist in several countries. Specialist shops such as butchers and bakeries can easily motivate their customers to bring their own containers with them, for example by offering discounts. The food retail trade is following the development closely. Some large cooperatives and organic and conventional supermarket chains are experimenting with their own implementation of the concept. Will the concept be able to go mainstream?

A business like Unverpackt requires more time and commitment compared to conventional businesses, where modern technologies are used to optimise internal processes. At Unverpackt delivery, storage and refilling

the bulk bins is managed manually. All the customers containers are weighed manually at the cash register.

Nevertheless, the concept is most suitable for a frame of 100 to 200m², where special logistics and processes can be implemented more easily. Nevertheless, it would be desirable to scale up the concept in whole or in part to conventional food suppliers, as long as it is correctly implemented.

The fundamental goal of reducing disposable packaging and changing the mentality of our throw-away society to a zero waste model should be followed through consistently.



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LOOKING FORWARD

Unverpackt is possible! It can be further developed and improved. The supply chain can be optimised by standardising and increasing the use of deposit-return schemes. The remaining one-way packaging could be replaced by easily recyclable materials. And the supply chain could be supplemented by professional and fully integrated warehouse and cash register systems (e.g. automatic data transfer).

Legislation plays an important role in supporting packaging-free shops, such as Unverpackt to grow. There are a range of policy measures that can enable the transition from single-use packaging towards reusables, refilling systems, or ideally no packaging at all. For instance:

- Market restrictions (ban) of certain types of packaging (e.g. non-recyclable);
- Legally binding consumption reduction and reuse targets;
- Economic incentives, such as taxation and levies that

adjusts cost modelling by businesses or consumers to shift usage patterns; as well as extended producer responsibility (EPR) schemes with fee modulation¹.

Effective eco-modulation of EPR costs could ensure that businesses supply more environmentally friendly products and packaging, for example, reusables could either pay less or be exempted from the fee.

Another issue is the promotion of zero waste lifestyle, which could change consumer habits on the whole, Unverpackt could then become a multiplier for environmentally friendly life-styles.

Ultimately, an Unverpackt 2.0 vision must be developed in which processes are designed more efficiently, allowing the concept to be implemented on a larger scale. This will make it easier for unpackaged goods to be integrated into the everyday lives of customers and reached by more people.

¹. zerowasteurope.eu/downloads/reusable-solutions-how-governments-can-help-stop-single-use-plastic-production/

For more information visit:
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zerowaste-kiel.de

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Sources:
unverpackt-kiel.de

Plastikatlas 2019: www.boell.de/de/2019/05/14/plastikatlas

Möglichkeiten zur Abfallvermeidung von Verpackungen und Lebensmitteln im Einzelhandel ("Waste prevention options for packaging and food in the retail sector"), Marie Delaperrière, Marc Delaperrière and Lena Braun on behalf of MELUND (Ministry for Energy Transition, Agriculture, Environment, Nature and Digitalization), Schleswig Holstein, Germany

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Zero Waste Europe is the European network of communities, local leaders, businesses, experts, and change agents working towards the elimination of waste in our society.

We empower communities to redesign their relationship with resources, and to adopt smarter lifestyles and sustainable consumption patterns in line with a circular economy.

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