KAUFLAND GUIDE TO FIGHTING FOOD WASTE



Our actions do the talking.







OUR CORE BUSINESS IS PROVIDING PEOPLE WITH THE FOOD THEY NEED ON A DAILY BASIS. MAKING SURE THAT FOOD IS NOT WASTED IS FORE FIRMLY ANCHORED IN OUR IDENTITY.

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"The companies in the Kaufland Group have created these guidelines as a common guide for all Kaufland Group companies. The words ,we,' ,us,' ,our,' etc. each represent the entirety of these companies."

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FIGHTING FOOD WASTE



We are aware that being in the food retail business entails assuming responsibility for humans, animals, and the environment. Responsible conduct is a principle that is firmly entrenched in the strategy jointly developed by the Kaufland Group companies. Kaufland's strategic guiding principle for all sustainability activities states:

"We make it possible for everyone to purchase good, healthy, and sustainable products."

This expresses our policy of sustainable action and also underscores our ambitions in this area.

Our commitment to sustainability is based on our **jointly established CR identity.** These reflect our sustainability policy and align with the sustainability strategy jointly developed by the companies of Schwarz Group. For us as a food retailer, food waste plays an important role. We consider the entire value chain – from cultivation through to production, retail, and households.

OUR CR IDENTITY

We offer our customers compelling quality, premium freshness, and a relevant selection of products. These value propositions must not conflict with our shared ambitions to minimize Food Waste. We achieve this by taking appropriate steps in our business activities and by developing, optimizing, and implementing measures to combat Food Waste, as we have done for many years.

The following describes the challenges in our daily business and provides an insight into our approach and the measures we employ.



FOOD WASTE AS A GLOBAL CHALLENGE

Approximately 1.3 billion metric tons, or around one third of the food produced for human consumption, is wasted each year¹. On the other hand, more than 800 million people worldwide suffer from hunger and just under three billion people do not have adequate access to a balanced and healthy diet².

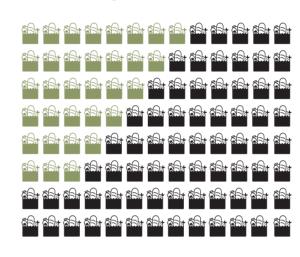
Besides the ethical challenges, Food Waste also has a huge environmental impact. For example, global food production consumes large quantities of the increasingly scarce resource of fresh water – which is wasted with every unconsumed product.

What's more, the wasteful consumption of food is contributing to climate change: Around 4.4 billion metric tons of greenhouse gases – which, according to the Food Waste Index Report published by the United Nations Environment Programme, accounts for eight to ten percent of all greenhouse gases worldwide – are "unnecessarily" released into our atmosphere as a result.

The effects of this global problem, which encompasses all areas of society, are far-reaching and extend to many topics that we need to consider to bring about sustainable change.



Facts and figures



33% OF ALL FOOD PRODUCED EACH YEAR

is wasted before it can be consumed.

4,4 MILLION KM² OF LAND

is used to cultivate food that is lost each year – this is an area larger than the Indian subcontinent.



 $^{^{\}rm 1}$ World Food Programme: 5 facts about Food Waste and hunger, 2020.

² Food and Agriculture Organization of the United Nations: Tackling food loss and waste: A triple win opportunity, 2022

³ UN Environment Programme: Food Waste Index Report, 2021.

 $^{^{\}rm 4}$ World Food Programme: 5 facts about Food Waste and hunger, 2020.

⁵ UN Environment Programme: Food Waste Index Report, 2021.

⁶ WWF-UK: Driven to waste: The global Impact of Food Loss and Waste on Farms, 2021.

CAUSES ALONG THE VALUE CHAIN

Food Waste and losses occur along the entire food value chain: from the cultivation and transport of the goods through to retail, catering, and households.

15.3 percent of all food produced worldwide is already lost in the primary production stage, that is to say in agricultural operations and during harvest. These losses are caused by factors such as a lack of technology and poor agricultural practices. In addition, biological and environmental factors can also damage crops. Food Waste during processing and production is primarily caused by transport damage, incorrect storage, or technical defects such as the failure of refrigeration systems.

Over half of all Food Waste worldwide is generated by private households. The reasons for this are diverse: a short expiration period of the products, poor planning of purchases in terms of actual consumption, limited storage capacities, or incorrect storage – particularly of ultra-fresh products. In addition, consumers often associate the quality of food with its appearance. The result of this is that products that are not visually flawless are discarded. What's more, many consumers interpret best-before dates as expiration dates.

In sales and retail, where 13 percent of all Food Waste worldwide is generated, waste is caused by miscalculations and unsold goods. Another factor is that fruit & vegetables that do not meet specific marketing standards and quality requirements simply never make it to the market.

What happens with the food losses and waste depends on the local waste disposal systems in the individual countries.





⁸ University of California, Davis: Why is one-third of our Food Wasted worldwide?, 2019.



POLITICAL OBJECTIVES AND REGULATIONS

With its Agenda 2030, the United Nations adopted 17 global goals for sustainable development, the 17 Sustainable Development Goals (SDGs). These goals increase the accountability of governments, civil society, private business, science, and every individual worldwide. SDG 12 "Responsible consumption and production" also defines sub-goal 12.3.: By 2030, halve per capita global Food Waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses. The European Commission has also committed itself to this goal.

Other goals and endeavors are defined by the European Union (EU) and the countries. For instance, the EU also included the topic of Food Waste in the Green Deal: the "farm to fork" strategy aims to make the current food system more sustainable. This supports the EU's goal to become climateneutral by 2050.

Best practice

For Germany, the Federal Ministry of Food and Agriculture released a Nationale Strategie zur Reduzierung der Lebensmittelverschwendung (National strategy for the reduction of Food Waste) in 2019. This also aims to halve per capita Food Waste by 2030 and so aligns with the SDGs as well as the goal of the European Commission.

[°] UN environment programme: Food Waste Index Report, 2021.

¹⁰ Szymkowiak, A., Borusiak, B., Pierański, B., Kotyza, P. & Smutka, L.: Household Food Waste: The Meaning of Product's Attributes and Food-Related Lifestyle, 2022.

¹¹ Welthungerhilfe: Lebensmittel retten = Klima schützen, 2019.





OUR APPROACH

At Kaufland we take an integrated approach to fighting Food Waste that covers the entire value chain. It involves all the relevant units – from Purchasing through to Logistics as well as our stores. Only by using this kind of integrated approach can we consider the various aspects of Food Waste and firmly entrench the topic.

ORGANIZATION

We define common goals and conditions, and develop ideas for reducing Food Waste. The operational units as well as the countries translate these into measures in consideration of the applicable national legislation. They are assisted in this regard by supporting units.

This interdisciplinary approach allows us to take a holistic view of the topic. Project coordination is based on defined KPIs. **We also work together with PreZero, the environmental division of the Schwarz Group.**

As it is important to recognize the causes of Food Waste and losses, we have analyzed these first and foremost in our business area.

We want to be intimately familiar with our influencing factors to allow us to take responsibility and reduce Food Waste generated by our business activities in a targeted manner.

Among other things, the "write-offs" KPI plays a key role in recording and analyzing Food Waste in our stores. It records the goods that are no longer fit for sale and is firmly established in our enterprise resource planning systems. We are currently conducting a pilot project that will allow us to determine additional key performance indicators (e.g., information on tonnage) that can be used to more precisely record waste.

The goal is to be able to use our write-off value (in euros) to draw conclusions on the disposed quantity (in kg). This will allow us to record waste more precisely without unnecessarily increasing the time and effort spent by the stores.





OUR GOAL

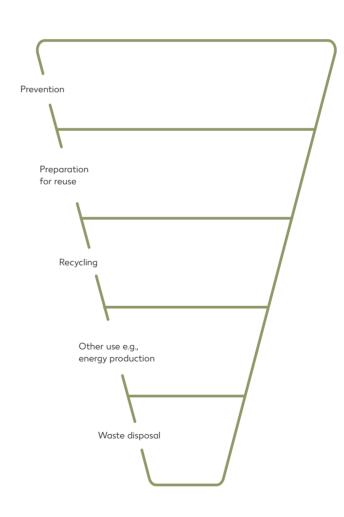
By the end of 2030 we will reduce Food Waste by 50 percent compared to 2018. As part of the Schwarz Group, we are committed to the United Nations Sustainable Development Goals mentioned above. As a result, we have deliberately aligned our jointly developed goal to reduce Food Waste to the SDGs. All of our specific measures target this goal.

The top priority is to prevent Food Waste in the supply chain from the outset and avoid it in our own operation. Where this is not possible, we endeavor to reuse food by collaborating with initiatives and associations or through recycling. As a basis for all areas of activity, we strive to communicate knowledge and so raise awareness amongst our employees and customers. These four focus areas, prevent, avoid, reuse, and communicate, form the basis of our actions.

Kaufland has defined four focus areas to reduce Food Waste and losses. These are guided by the waste hierarchy.

STRATEGIC FOCUS AREAS FOR REDUCING FOOD WASTE

THE WASTE HIERARCHY



Our areas of influence:

4 steps to fighting Food Waste

PREVENT



We prevent Food Waste in the supply chain through close collaboration with our suppliers.

COMMUNICATE



We want to make our customers aware of the problem and communicate our knowledge.

AVOID



We avoid Food Waste in our own operations through concepts and cooperation.

REUSE



We reuse waste that we cannot avoid through recycling or other use.

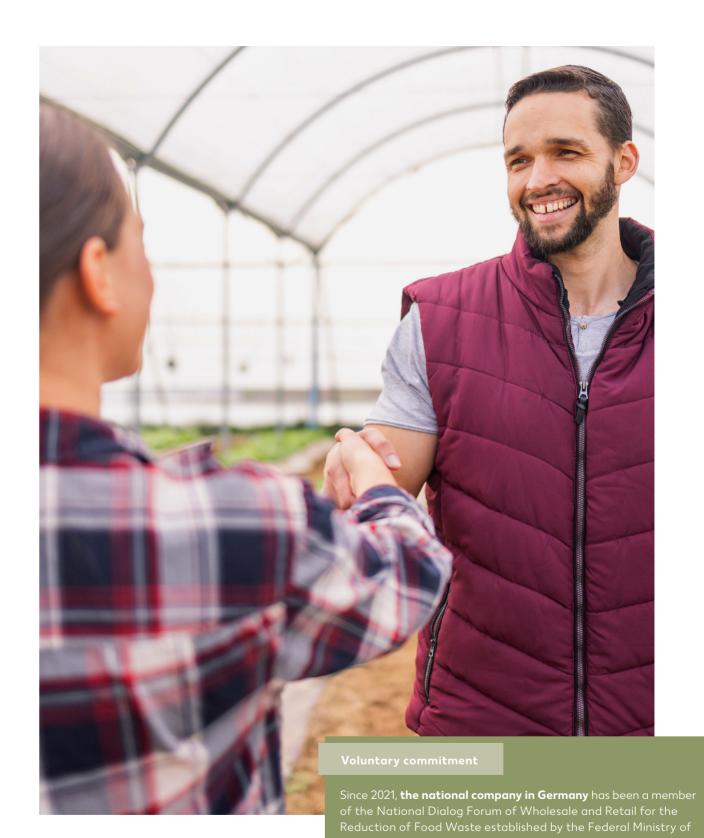


OUR MEASURES

As an international retail group, our measures always have a global and all-encompassing focus. For the sustainable implementation of our measures, it is critical to ensure that they actually and effectively contribute to reducing Food Waste. In particular, the test phase of new measures is therefore especially important in our supply chain and logistics processes with their numerous interfaces. We only implement the relevant measure after the test phase is successfully completed.

Due to the different national legislation in place in some cases, the implementation differs in the individual countries. As a result, the following presents our global measures together with selected project examples.

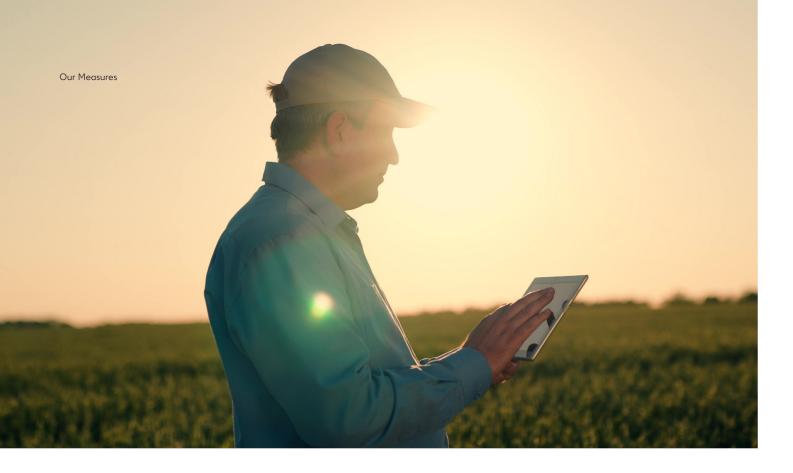




on the Prevention and Reduction of Food Waste." The goal is to ensure the more sustainable use of resources along the supply chair

introduce measures to reduce Food Waste along the value chain.

The national company in Croatia joined the "Voluntary Agreement





To prevent Food Waste, we are primarily focused on measures in our supply chain – that is, in the agricultural operations, in Purchasing, and during the storage and transport of the goods. To do so, we are constantly adapting our existing processes and continue to work closely together with our suppliers.

For example, we have jointly optimized our forecast tools to support more precise quantity planning: Our enterprise resource planning systems and automated processes enable the needs-based ordering of our goods. This allows us to target optimum order quantities and short delivery times. In terms of meat products, a tailored ordering cycle and extended times between the delivery of the products and the best-before date, i.e., the so-called "shelf life," ensures less Food Waste.

Together, we have also established clear processes for product storage, for instance overstock in the warehouse is distributed to other stores so that this can still be sold. For fruit & vegetables, we conduct inspections. This ensures that only high-quality food reaches our stores.

To do so, selected employees receive regular training with a focus on targeted **quality assurance** while avoiding Food Waste. In addition, we are currently launching a new onboarding concept for incoming goods inspectors. The goal here is to ensure correct inspection of the goods in terms of the best-before date and packaging. Temperature control and compliance with the cold chain play a role as well, as this also supports the prevention of Food Waste.

Moreover, we provide support for our employees to ensure that pallets are packed correctly and cases are secured so that food can be transported without becoming damaged. The automatic picking of fruit & vegetables as well as a checklist for our pickers help with the optimum arrangement of the goods.

We are in constant contact with business partners, suppliers, and agricultural operations so that we can work together with them to develop and implement new measures and projects to prevent Food Waste and losses.



Efficient logistics processes are a powerful lever for avoiding Food Waste. With this in mind, we are constantly working together to optimize the quality management system and delivery cycles.

The innovative folding pallets developed by Kaufland reduce damage to food. However, if the outer packaging does get damaged during transport, but the items remain intact, we repack the items and return them to the process. Moreover, we adjust the temperature in the trucks to the product by using multiple cooling zones and check compliance with cold chains. By doing so, we ensure that food stays fresh during transport.

Food from the ultra-fresh area, that is to say fruit & vegetables as well as animal products such as meat or dairy, account for the largest percentage of Food Waste due to their short shelf life. To slow the natural ripening process of fruit & vegetables, different varieties are offered with a coating. In this case an edible, barely visible protective coating is applied that, for example, slows the dehydration of avocados. This means that they are exposed to less oxygen, which noticeably extends the shelf life. In addition, in the fruit & vegetables unit, we plan the quantities of goods together with our suppliers for each season.

This allows products to be grown and harvested based on demand and so avoids excess production. We strive to reduce packaging for environmental reasons – but this packaging also provides protection, particularly for sensitive food, and so

extends its shelf life. We therefore regularly evaluate the products for which packaging material can be saved and provide nets for loose items.

But, where packaging is appropriate with respect to hygiene and a longer shelf life, we always seek out sustainable solutions and packaging innovations. For example, Kaufland in Germany packs the Kaufland organic hot-smoked salmon in a paper manufactured from the silphium plant – the fibers originate from regionally cultivated energy crops.

We make use of the advantages of digitalization when implementing our measures, which enables greater flexibility in price reductions: Certain items are calculated daily so that sufficient quantities are available during the day, but they sell out as completely as possible shortly before closing time. To achieve this, the prices for items may be reduced throughout the day depending on the time of day and sales. Every store individually decides when and the amount by which items are reduced on site depending on stock and the purchasing behavior of customers.



I'm still good

cautiand in Germany is implementing the following measures as part of the "I'm still good" campaign: The price is reduced as soon as the products get close to their best-before date.

n addition, items that are just about to reach their best-before date have a special place in the stores.

price" shelf label have been used as a basis for the uniform appearance of displays and boxes in other Kaufland countries. This aims to increase the visibility and recognizability of the displays across countries.

PREUSE

As a retailer, we have access to a range of opportunities to combat Food Waste through our direct customer contact as well as in cooperation with organizations.

Kaufland in Germany cooperates with the "foodsharing" initiative at over 80 locations, which rescues left-over food from businesses and private individuals that would otherwise

We therefore give food that is no longer fit for sale but is still edible to charitable organizations.

If we identify potential for improvement in the disposal infrastructure within our sphere of influence at Kaufland, we work together to establish new systems.

From their onboarding, qualification, and experience, Kaufland employees know precisely when food is no longer fit for sale and needs to be discarded. To ensure the best possible reuse of this excess food, we have established different waste fractions. For instance, Kaufland in Romania was able to ensure that organic waste generated in the unit is disposed of separately and reused.





COMMUNICATE

Only through education and measures to raise awareness can society band together to combat Food Waste. In light of this, we conduct various training sessions to convey the necessary knowledge on compliance with freshness and hygiene standards to our employees in order to prevent Food Waste. In addition, the approach to sustainability is communicated to all Kaufland employees through the online **"Kaufland** for greater sustainability" training course.

As a food retailer, we also have the opportunity to make consumers aware of the topic of food waste.Customers can regularly find tips on how to rescue or reuse food in our brochure and online magazine. The **Kaufland app** also contains shopping lists as well as recipes that help customers make conscious and needs-based purchasing



vorking together to combat Food Waste

At **Kaufland in Germany**, many stores as well as the distribution centers work together with food banks. The goods are

Household education

In 2021 and 2022, Kaufland in Croatia



In order to live up to our responsibility, we will continue to resolutely work together to effectively reduce Food Waste. To do so, we will advance our current endeavors and constantly develop new measures. In future, we want to place greater emphasis on improving our management systems and expanding the KPI monitoring.

We will also further expand our measures in relation to private households. As we see great potential for reducing Food Waste amongst our customers, we want to continue to raise awareness and educate customers on this topic through targeted communication measures – such as on needs-based shopping or with tips on using leftover food.

In future, **Kaufland in Germany** will work to further improve the level of separation of the organic waste that is generated in stores. For example, this will allow dry bread to be sorted out and made available as animal feed.

Furthermore, we are convinced that Food Waste can only be effectively reduced in collaboration with other stakeholders. As a result, we are in constant dialog with start-ups as well as reviewing ideas and concepts for possible cooperation. Our goal is to establish sustainable cycles to continue to advance in the fight against Food Waste.

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(As at: 07/24/2023)





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