

# Environmental responsibility: Good packaging prevents food waste from being created

Material efficiency and recycling are essential parts of HKScan’s environmental responsibility. Eco-efficient packaging design, recyclability and properties for quality and safety are imperative. We will continue to develop packaging in a sustainable way.

## Packaging preserves product quality and safety

The most important function of packaging is to protect the food. The right packaging ensures high product quality and safety from HKScan to the consumer. As meat products are easily perishable, oxidation of fat (grease) and growth of bacteria is slowed down by using vacuum packaging or modified atmosphere packaging with content of oxygen, nitrogen and CO<sub>2</sub>. Correct storage temperature and following consuming instructions throughout the chain is also important.

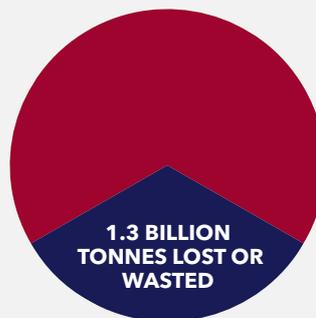
Packaging comprises only a very small part of the whole meat product carbon footprint. When only a couple of ham cold cuts from a package go to waste, the negative environmental impact comes mainly from the waste of environmental resources in animal production than from the production and recycling of the packaging. Reducing food waste is the easiest way to influence negative environmental impact of food.

<b>Essentials of packaging</b>	* ENSURE PRODUCT PRESERVATION	* MINIMIZE FOOD WASTE	* CONVEY INFORMATION	* ENSURE SAFE DELIVERY FROM PRODUCTION TO CONSUMPTION
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### SUSTAINABLE PACKAGING PRINCIPLES

#### CONVENIENCE AND TRUST

- 1 Guaranteed safety of contents and product quality
- 2 Appropriate product information: ingredients, allergens, shelf life, storage and use, recyclability
- 3 Convenience like easy to open & reseal
- 4 Various sizes for different households, less food waste
- 5 Safe and tested materials suitable for food packing



Roughly one third of the food produced in the world for human consumption every year - approximately 1.3 billion tonnes - gets lost or wasted.

#### LOWER ENVIRONMENTAL IMPACT

- 1 Protect from contamination and minimize food waste
- 2 Optimal use of material
- 3 Solutions compatible with recycling schemes
- 4 Recycled and/or renewable material when applicable
- 5 Logistic optimization to ensure effective and safe delivery



The most important part of packaging is to ensure food safety. However, as important is to work actively to enhance circular economy. We do this by develop packaging that not only reduce food going to waste, but reduce the usage and also recycle and reuse packaging material. I believe the food industry can be more progressive and take more ambitious steps towards responsible material usage throughout the value chain.

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HKScan Sweden



### Moving towards more sustainable packaging at HKScan

We are continuously working to find packaging solutions with optimal material choices and qualities that can reduce food waste. In packaging design, we use recycled materials when appropriate, and design packaging to be recyclable or suitable for energy production. The use of renewable packaging materials will increase.

We optimize material use in packaging to ensure low weight, but without compromising efficiency and durability during delivery. We strive to find packaging innovations that prolong products' shelf life. Our aim is to be progressive in each part of our process and continue develop packaging in a sustainable way.

#### HKScan Innovations: We have introduced a number of packaging technologies that improve product usability and eco-efficiency

##### From buckets to bags - a new packaging line in Estonia

The bag reduce material use by 71%, prevent food waste by prolonging shelf-life and reduce packaging waste generated by households. In addition to positive environmental impacts, the new packaging line works 50% more efficiently, reduces factory storage space needs by 96% and cuts down carbon dioxide emissions from transportation.



##### From plastic tray pack to chub pack in Sweden

The roll extended the shelf life of the product to 16 days compared to 9 days in the plastic tray pack. In addition, environmental impact was reduced by 39%.



##### The end of black plastics in packages

Black plastics are not recyclable because the optical sorting system used in recycling plants cannot detect the black carbon pigment used to colour the plastic. Due to this, in Finland and in Sweden, HKScan has decided to remove black plastics from packages by the end of 2019 and replace them with other colours or materials.

##### PET tray from recycled materials in Sweden

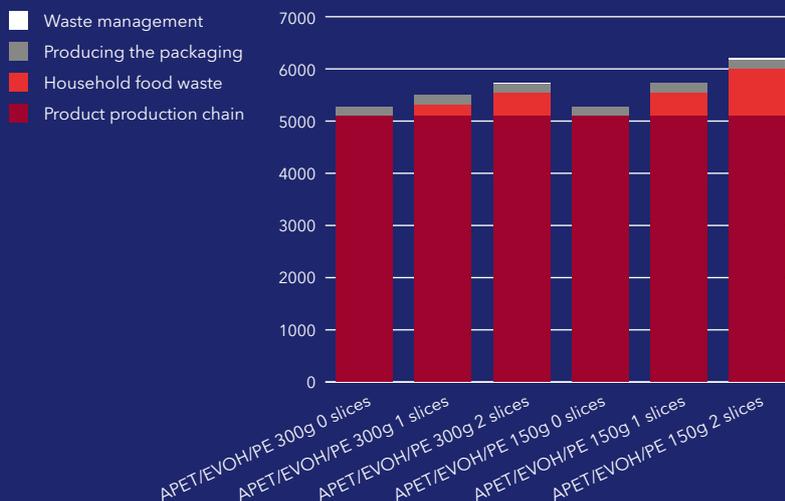
In Sweden, minced meat tray packaging has been made of recycled PET material since 2015. Greenhouse gas emissions are less than half compared to other plastic materials.

##### Less material used in minced meat trays in Finland

During recent years, minced meat trays have been lightened by some 40%. Modification of packaging sizes, thinner materials and new construction solutions improve packaging eco-efficiency.

#### PACKAGING REPRESENTING THE ENVIRONMENTAL IMPACT OF THE MEAT PRODUCT

kgCO<sub>2</sub>-ekv/t cold cut consumed



Source: Luke, Natural Resources Institute Finland - The Role of Household Food Waste in Comparing Environmental Impacts of Packaging Alternatives



A packaging of just the right size for consumption is crucial for the environment. Packaging comprises only 2-5% of the meat product's whole carbon footprint. Food waste has a much larger impact. One wasted slice of cold cut has a bigger carbon footprint than producing the packaging. Each single step in sustainable production and consumption is important to reduce the overall impact of climate change.