

Food waste case study

Sector Specific Challenges.

Thanks to the
following
suppliers for their
contribution:

DaiFressh **BRANSTON**
The fruit you deserve

Keeling's **GreenField**
QUALITY EGGS FROM LOCAL FARMS

abp **G's**
NATURALLY FRESH

Country Crest **Azura**
True to nature

Glinwell Marketing **HILTON FOODS**
Est 1977

BERRY GARDENS **brop**
potatoes & vegetables

BAKKAVÖR **NobleFoods**
SINCE 1988

Introduction.

A key theme for Tesco to explore in this year’s supplier food waste reporting is sector-specific challenges and opportunities. The main sectors covered by this case study can be broadly sorted into two main categories; produce, and MFPE (Meat, Fish, Poultry and Eggs).

Produce

Overall, produce suppliers reported a 36% decrease in food waste as a proportion of food handled against their baseline values. Losses within the produce sector occur for a variety of reasons, ranging from variable harvest yields, harvesting practices, grading, and preparation. Specifications are set to ensure consistency, value for money, transport through the supply chain, flavor, and for the removal of products with quality imperfections linked to pest or disease.

External Factors

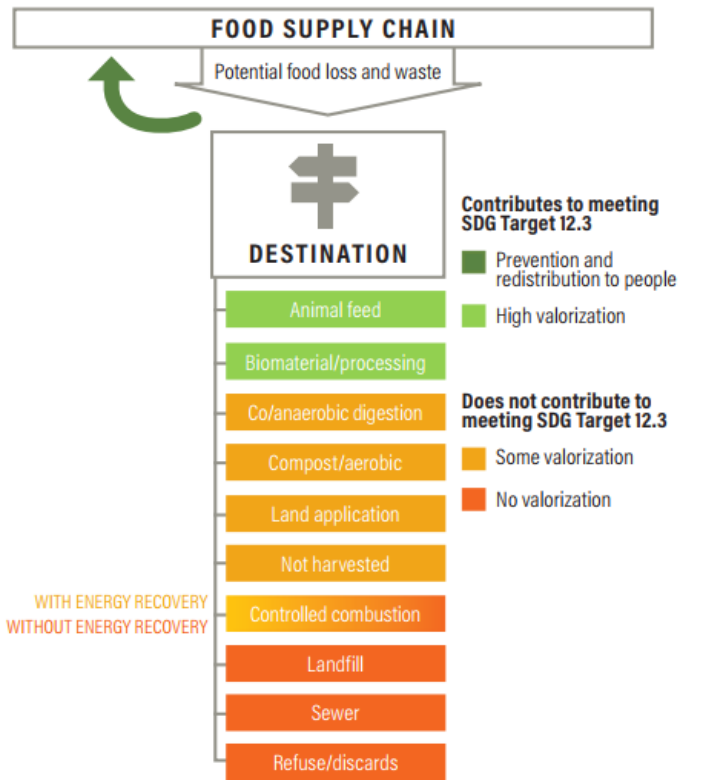


A range of external factors affect produce suppliers, demonstrating that there are times when growers have a reduced ability to control their food waste. Fluctuations in the demand for whole fruits, and the costs of packaging, caused issues for Berry Gardens, an own-label produce supplier.



For Glinwell, also an own-label produce supplier, one of their Spanish growers found that food waste was primarily due to lower grade production systems and growing against nature (from summer through winter back into summer), which has negative effects on the crop but is necessary to keep the continuity of supply through the winter.

Other external factors that influence loss rates were felt by Keelings, a produce supplier from the Republic of Ireland, who were negatively impacted by the delays at ports due to challenges caused by Brexit and Covid-19.



Product Specifications

Whilst some food is wasted as it falls outside of the agreed quality and safety parameters of the specification, some suppliers have seen this as an opportunity to innovate their value chains and reduce food waste further up the supply chain. There is a strong correlation between supplier innovation and the front-runners in reducing food waste intensity of their operations against baseline values.



Daifresh, a Central European produce supplier, and Country Crest, a Tesco Ireland produce supplier, invested into consistently preventing lesser quality food from entering warehouses. Daifresh's approach focused on "guaranteeing that their technical team is present in over 60% of the order preparations intended for delivery" Country Crest invested in eye graders, which grade out deficiencies in potatoes.



BROP, a Central European produce supplier, heavily considered the food utilisation hierarchy in their efforts to reduce food waste. Rather than simply ploughing back in the non-specification crops, or sending them to compost or anerobic digestion, they set up secondary markets to ensure the highest level of valorisation possible.



Tesco: 'Perfectly Imperfect' Apples

Tesco supported their ambitions through their own-label line of 'Perfectly Imperfect' products, allowing BROP to maximise the amount of fresh produce available to customers at low prices while also helping to increase customer awareness of the importance of tackling food waste.

Moreover, BROP were able to salvage their potatoes that did not meet size requirements by launching a range of 'baby potatoes' in the Czech Republic and Slovakia. BROP faced difficulty when trying to sell baby potatoes in Hungary, "as there is a legal requirement for the minimum size of a product" However, this shows the importance of suppliers and retailers working together to advocate for wider change to ensure less food is wasted. Brop has achieve a 20% reduction in food waste intensity against baseline.



Azura Disma, a global grower, reduced crop waste by utilising the location of their farms by redistributing their tomatoes to local goat and sheep farmers for free. Recognising that this isn't always viable, Azura launched a compost project in June 2022, as well as planning new ways to process excess tomatoes into other products such as tomato paste and ketchup.

Husbandry Practices & Food Safety Concerns



Food safety concerns can often be managed – for example, Greenfield, a Tesco Ireland MFPE (egg) supplier, explained that their food waste occurs when flocks are nearing depopulation as the “eggshell quality of hens generally deteriorates from age 70 weeks onwards”. This leads to increased breakages during the grading process. However, they tackled this by working with suppliers to maximise the potential to produce more Class A eggs than Class B eggs through investing in better monitoring and feeding, as well as raising awareness with suppliers through quarterly newsletters focused on managing their sheds to minimise floor/system eggs, cracks/dirties, and pests such as red mite and flies.



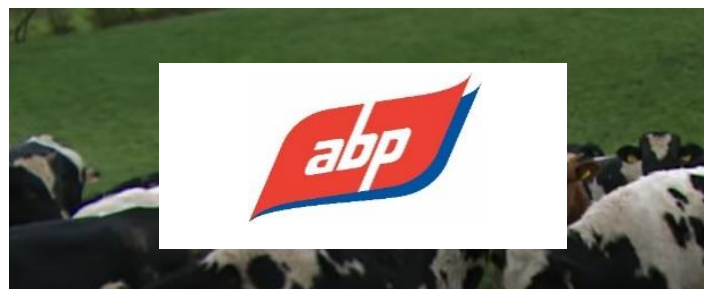
Greenfield: Dava Farms site



Greenfield: 12-pack barn eggs product



However, food safety concerns can be unexpected and have a large impact on food waste in one reporting year. An outbreak of Avian Flu in 2021, meant Noble Foods, an own-label MFPE supplier, had to dispose of significant quantities of egg product. This was further compounded by the availability of alternative solutions at the time. Consequently, food waste increased for the first time in many successive years of reporting reductions.



Many of Tesco's MFPE suppliers worked to valorise their food waste. ABP, a Tesco Ireland MFPE and dairy supplier, safely diverted more material to Category 3 rendering (not food waste) after the risk status in relation.

Processing

Processing produce often leads to food waste.



Bakkavor, an own-brand prepared foods supplier, experienced a fall in demand for surplus fruit and vegetable peelings, cores and trimmings previously sent to animal feed in specific regions, impacting their ability to make the best possible use of this surplus. Bakkavor has worked to find alternative solutions, including a collaborative project with a rum producer to use surplus pineapple and mango trimmings to make flavoured drinks



G's Fresh, an own-label produce supplier, cited large amounts of celery waste arising due to the processing required for stick packs.



Branston, an own-label produce supplier, also had large amounts of processing waste from their potatoes and were able to send this to anaerobic digestion to extract some value from this waste.

MFPE

Food waste intensity within the MFPE sector fell by 19% against baseline and related to preparation and food safety concerns and husbandry practices. This reduction has been achieved despite last year being a particularly challenging for the sector due to Covid-19 and labour-related supply chain issues.

Preparation



For Hilton Foods, an own-label MFPE and dairy supplier, the largest cause of waste in both their Central European and Republic of Ireland operations came from floor and machine waste, leading to products with excess fat, gristle, or bruised meat. However, investment in these hotspots contributed to Hilton's (ROI) reduction of 31 tonnes of waste against baseline, allowing them to "reduce the percentage of waste vs product produced, despite an increase in the volume produced". They have reduced food waste intensity by 29% since 2020.



Espersen, an own-label seafood supplier, implemented a new processing method with a thinner saw blade, allowing for the collection of 60% more fish saw dust from the blocks used to make Filet-O-Fish. This meant that 100 tonnes of fish were saved, corresponding to approximately 500,000 extra fish servings. The project has expanded to one of their Polish plants, saving 40 tonnes of fish in 2021.



Espersen: Close-up view of seafood sawing blades, selected to reduce saw dust food loss and waste