AN INDUSTRY COMMITTED TO FOOD LOSS AND WASTE REDUCTION

Food loss and waste is an enormous environmental, social and economic problem. A third of food calories produced are never eaten. It represents an economic cost to the global economy of $940 billion per year and, if food waste were a country, its carbon footprint would be third only to China and the US. Food waste is also responsible for adding 3.3 billion tonnes of greenhouse gases into the planet’s atmosphere per year.

In a world of rising population, increasing cost of food, concerns about inequality and growing food insecurity, food waste is therefore one of the greatest challenges of our time. Given the magnitude of this issue, the consumer goods industry is committed to food waste reduction.

In mid-2015, The Consumer Goods Forum (CGF) Board approved a resolution to halve food waste within the individual operations of its 400 retailer and manufacturers members by 2025 and to support wider UN Goals on the issue. Central to the Food Waste Resolution was the aim to set a clear benchmark for food waste arising today and set measurable goals to reduce food waste in the future.

One year later, in June 2016, the first-ever global standard to measure food loss and waste, the Food Loss and Waste (FLW) Standard, was introduced. The FLW Standard was developed by the Food Loss and Waste Protocol, a multi-stakeholder partnership convened by World Resources Institute. The standard is a set of global definitions and reporting requirements for companies, countries and others to consistently and credibly measure, report on and manage food loss and waste.

Another example of a recent cross-sectoral initiative is the establishment of Champions 12.3, a coalition of leaders from governments, businesses, farmer groups and civil society organisations dedicated to inspire ambition, mobilise action, and accelerate progress toward achieving Sustainable Development Goal (SDG) Target 12.3 by 2030. The CGF is also a member of Champions 12.3.

While these accomplishments and milestones are great frameworks to use in our collective journey to reduce food waste, what concrete actions have been done to achieve these ambitious targets? This case study booklet showcases an array of different examples from companies across the consumer goods industry of how they reduce food waste in their operations and supply chains.

We hope you enjoy learning more about their various approaches and solutions, and please do not hesitate to reach out should you have more questions.

IGNACIO GAVILAN
Director, Environmental Sustainability,
The Consumer Goods Forum
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OUR POSITION

Addressing food waste is an opportunity for us to address societal challenges (loss of resources, hunger, climate change) and create a better business. Reducing food waste in our operations reduces costs and is part of how we meet our promise to be a better neighbour.

A long-standing priority of our business has been to manage effectively the food that we put out for sale. And long ago, we began partnering with local communities to redistribute safe, unsold food to reduce hunger. These actions were driven by real business needs, and real community needs – addressing them has made our business stronger. More recently, we expanded our view up and down the value chain, finding new innovations with suppliers that reduce food waste and creating new business opportunities from food that would otherwise have been wasted.

Dick Boer, CEO, Ahold Delhaize

REDUCING FOOD LOSS AND WASTE

“Food waste is a challenge in which we all have a role to play. As a sustainable retailer we facilitate food waste prevention and reduction, sharing best practices, creating awareness and supporting innovative initiatives. I believe this has a positive impact on the communities we serve.”
OUR ACTIONS

Measuring our food waste

In 2015, we joined in the work to develop the Food Loss & Waste Protocol, a multi-stakeholder approach to account and report food waste along the food supply chain. Delhaize America pilot tested it to help our full company prepare for how we can get a more consistent baseline across our business.

Creating new businesses

Following an initiative started by four employees, Albert Heijn launched a partnership with a completely new business based on food waste: Instock Restaurants. Starting with one location in Amsterdam and now operating three, Instock uses unsold food from Albert Heijn stores to build creative, fresh and delicious meals.

Local partnerships

In 2009, the Giant Carlisle division of Ahold USA began work with the Central Pennsylvania Food Bank and the US Department of Agriculture to develop a programme to redirect unsold meat to vulnerable families. This innovative programme – Meat the Need – helps local hunger relief efforts and removes food from the waste stream.

OUR RESULTS

All those actions have:

- Financial benefits – reduced costs from waste disposal; tax benefits for donation in some markets; and, with onsite anaerobic digestion, reduced energy costs.
- Engaged associates – the associates who launched Instock, who partnered with suppliers on the Brussels Beer Project, and who are involved in daily donations of unsold food to the communities we serve are proud to be involved and to make a difference on food waste.
- Built trust with suppliers, more and more looking at reducing food waste to minimise both environmental impact and their costs.

Partnering with governments

In some markets, local legislation prohibited unsold food from being donated to hunger relief organisations. In others, taxes are applied to food donated. We have then worked with governments to clarify laws and regulations, enabling an increase in the food rescued.

Product innovation & circular economy

Only about 10% of food waste happens at the retail level – which means we need to involve our suppliers as well. One of our most innovative solutions is a partnership with the Brussels Beer Project to use our unsold bread to produce local beer, which is then sold in our Brussels Delhaize stores.

Consumer education

In most of our markets, around half of food waste happens at consumer-level. We have thus focused communication campaigns with tips encouraging customers to reduce food waste at home. This includes extending some food products’ shelf life by storing them outside the fridge (e.g. eggs, tomatoes and bananas), giving recipes to cook with leftovers.

• Increased product innovation – using the concepts of a circular economy, we are beginning to drive product innovation that meets customers’ needs and drives down food waste.
• Benefited customers – saving money through mark-downs and/or tips to reduce food waste at home
• Supported communities – reducing hunger from programmes to redistribute unsold food from our stores.
• Appealed shareholders, who are interested in responsible investing.
REDUCING FOOD LOSS AND WASTE

As a responsible retailer, A.S. Watson Group is committed to embedding Corporate Social Responsibility into its business practices where it operates. Our food retail division PARKnSHOP ensures edible surplus food is safely reused to provide free meals to underprivileged people in Hong Kong.

OUR POSITION

In Hong Kong, about 3,600 tonnes of food waste is disposed to landfills every day, accounting for nearly 40% of all municipal solid waste disposal in the city. At the same time, poverty has been a looming problem in Hong Kong. It is estimated that around one million people out of the total population of seven million in the city are living in poverty, many of which are elderly or deprived children who struggle to meet basic nutritional needs.

It is inevitable that PARKnSHOP, as a leading supermarket that operates 280 outlets in Hong Kong, produces some food waste in its daily operations. PARKnSHOP had been finding ways to reduce its food waste and make it valuable to society.

In this regard, while reducing food waste at source, PARKnSHOP started its partnership with local NGO Food Angel in July 2012 to launch the “Food Rescue for the Needy” programme which turns edible surplus food into nutritious hot meals to serve the underprivileged communities in Hong Kong. In addition, PARKnSHOP also supports various non-edible foods recycling programmes launched by the government and various organisations to play its part in reducing food waste.
OUR ACTIONS

Waste Reduction at Source

PARKnSHOP is committed to reduce food waste at source by strict internal procedures, including accurate forecasting of trade volume of food items and marking down price of food items that are approaching the best before or expiry date.

Partnership with Food Angel – Edible Surplus Food

In 2012, PARKnSHOP pioneered among Hong Kong supermarket chains to reduce food waste by donating surplus edible vegetable, fruit, bread, meat and packaged food to Food Angel. Since then, PARKnSHOP has donated over 840 tonnes of food, which has helped Food Angel make more than 2.3 million hot meal boxes and 250,000 food packs for the needy. PARKnSHOP has also expanded the edible surplus food donation programme to 150 stores around the city and its Fresh Food Distribution Centre.

Riding on the success of the edible food donation programme, PARKnSHOP also partner with Food Angel to launch City Food Drive, a citywide food donation campaign that collected food donations from the public at all the 280 PARKnSHOP outlets in Hong Kong. PARKnSHOP also matched public donations and helps Food Angel raise funds at stores. The donated food items and proceeds collected are used to support Food Angel’s operations to produce hot meals for the needy.

Non-edible Food Waste

PARKnSHOP supports various non-edible foods recycling programmes launched by the government and various organisations. For example, some stores donate non-edible food items, which are then turned into animal feed or fertilizer to be supplied to local farms.

OUR RESULTS

Since 2012, PARKnSHOP has donated over 840 tonnes of food, which has helped Food Angel make more than 2.3 million meal boxes and 250,000 food packs for the needy. To successfully implement the programme, we need to seek support from our store staff as the programme involves extra work, such as properly handling the surplus food and marking records of the donated food items.

Before we launched the programme, we established detailed food handling guidelines and organised briefings for store staff to allow them to understand the background of the programme. To facilitate their understanding of Food Angel, we also organised volunteer activities for our staff to serve the central kitchen and community centre of Food Angel. In addition, we give our staff the latest programme updates through our internal communication channels. We are glad have gained much support from our staff and most of them are very happy to support and play a part in this meaningful cause.
REDUCING FOOD LOSS AND WASTE

“Every day, all of us are careful not to waste what we attribute value to, and yet, we waste a lot of food. This is not only due to logistics problems. The reason should be sought in a cultural change that has relegated a primary good, as food, to the role of a generic commodity.”

OUR POSITION

Food waste is one of the most vital social, economic, and environmental issues facing our planet. At a time in history where nearly one billion people are still dying of hunger or have to settle for inadequate nutrition every year, it is unacceptable that over a third of the world’s food remains abandoned in fields or ends up in landfills.

Food waste has serious environmental impacts. Today, we know that every product not only generates CO2 throughout its life cycle but, also has a water footprint that weighs heavily on climate change. Producing food that will never end up on a table means unnecessarily aggravating the health of our planet.

Besides the moral and environmental effects, food waste has also resulted in the decreased social value of food. After years of agricultural industrialisation, the decline in food prices has been unstoppable and this phenomenon has fuelled the hopes of those who believe it would be possible to feed everyone on the planet. Unfortunately, the main result instead has been the loss of people`s perception of the real value of food, that is to say the effort it takes to produce, cultivate and harvest food.

GUIDO BARILLA, CHAIRMAN, BARILLA GROUP AND BARILLA CENTER FOR FOOD AND NUTRITION FOUNDATION
OUR ACTIONS

BARILLA CENTER FOR FOOD AND NUTRITION FOUNDATION

The Barilla Centre for Food & Nutrition Foundation (BCFN) is a multidisciplinary foundation that produces scientific content about food and nutrition, health and sustainability. In relation to food waste BCFN has promoted:

- **BCFN INTERNATIONAL FORUM**: During this yearly international forum, keynote speeches and roundtables on food waste took place. www.barillacfn.com/en/forum/.

- **MILAN PROTOCOL**: This protocol was the result of BCFN research with the contribution of more than 500 international experts, over 100 institutions and 15,000 supporters from civil society. www.barillacfn.com/en/dissemination/#milan_protocol.

- **BCFN PUBLICATIONS ON FOOD WASTE**: Two scientific papers on food waste have been produced and are available at www.barillacfn.com.

- **BCFN YES! CONTEST**: An international yearly competition for PhD and post-doctoral researchers to present their projects on food and sustainability topics, among them projects focused on “food waste”. www.bcfnyes.com.


OUR RESULTS

Thanks to the BCFN work, the following positive results on food loss and waste awareness have arisen:

- Almost 150,000 individuals attended the six editions of the BCFN International Forum.

- 50 out of roughly 600 applications for the BCFN Yes! initiative were on food waste.

- Almost 7,000 individuals visit the BCFN website each month, again increasing exposure to the food waste issue.

BARILLA GROUP

Aware of the urgency emerging from the BCFN Foundation studies and in line with its purpose “Good for You, Good for the Planet” (www.goodforyougoodfortheplanet.org), Barilla, as food company, has started to analyse three of its supply chains (pasta, tomato sauce and bread) in collaboration with Last Minute Market (LMM), a spin-off from the University of Bologna. Their goal was monitoring the food losses and wastage all along the value chains, identifying the causes and the measures to reduce them. The reference standard used for this analysis was the global Food Loss and Waste Accounting and Reporting Standard (FLW Standard).

HOW IS BARILLA WORKING TO MEET THE CGF RESOLUTION?

In alignment with the The Consumer Goods Forum (CGF) Resolution and in response to the Sustainable Development Goals of the United Nations, in the coming years Barilla and the BCFN Foundation will work to:

- Further strengthen the spreading of healthy lifestyles and sustainable diets among stakeholders and consumers.

- Promote the recovery of traditional recipes that enhance the use of leftovers.

- Promote food education courses for children that also raise awareness concerning reducing waste.

- Optimise manufacturing processes to further reduce wastage in the pasta production phase according to the WRI Food Loss & Waste Protocol.

Barilla, as global leader in the pasta market, analysed the entire life cycle - from field to table - of the pasta that it produces in Italy. It was found that this supply chain is an example of a true circular economy, where nearly nothing is lost. Food losses in the field are very limited (less than 2%). Moreover, the loss generated during the grinding of the grain and the pasta production also amounted to under 2%. However, the work carried out has shown that the highest level of waste is concentrated in the consumption phase. In fact, according to a research by LMM, the product “wasted” the most by Italian families is precisely cooked pasta, which amounted to 12% of what had been cooked.
REDUCING FOOD LOSS AND WASTE

“Food waste is one of the key challenges of our time. As a company committed to our purpose, Real food that matters for life’s moments, we realise we can play an important role in finding a solution. While we have more work to do, we continue to make progress in reducing food loss in all aspects of our supply chain, from how we source ingredients to how we make our foods and run our plants.”

DENISE MORRISON, PRESIDENT AND CHIEF EXECUTIVE OFFICER, THE CAMPBELL SOUP COMPANY

OUR POSITION

Reducing and diverting food waste has long been a practice of Campbell Soup Company. We have strong relationships with farmers in our plant communities who help us divert food waste from our production process to animal feed and compost for their operations. We also have a close connection with local food banks to donate as much final product as possible.

While we have been tracking food waste for many years and have strategies in place to source reduce and divert it, we look forward to using the Food Loss and Waste Accounting and Reporting Standard to evaluate food waste by type and destination to identify additional opportunities to reduce and divert.

Denise Morrison also recently joined Champions 12.3, a unique coalition of executives from governments, businesses, international organizations, research institutions, and civil society dedicated to inspiring ambition, mobilizing action, and accelerating progress toward achieving SDG Target 12.3 – cutting food waste and loss by 50% by 2030.

We recognise the importance of reducing food waste associated with our production processes for our company, the planet and the people we serve.
OUR ACTIONS

For the last 10 years, we have internally tracked the food waste we are generating in our facilities and have worked to implement a food recovery hierarchy including source reduction, donation, animal feed, energy production and composting. This has led us to divert a large portion of our food waste and helped us to identify opportunities to reduce it at the source.

More broadly speaking, we set a corporate wide target in 2010 to increase our recycle rate to 95 percent across our plant portfolio by 2020. This goal has driven employees to find alternatives to landfilled waste and to implement source reduction strategies. So far we have achieved a recycle rate of 84 percent. Employees at our Maxton, N.C., plant stepped up to the challenge and contributed to progress on this goal. They completed waste audits that identified opportunities to improve their practices and resulted in reducing waste at the plant by 89 percent compared with the 2008 goal base year. In 2015, Maxton began using equipment to separate soup ingredients from metal cans during the tasting and quality check process: the can is recycled and the food waste goes to animal feed.

This year we will be implementing the new Food Loss and Waste Accounting and Reporting Standard to more precisely measure the types of food waste we are generating and the destinations of those waste streams. This will establish our baseline by which we will measure and report on our efforts to achieve The Consumer Goods Forum Resolution to halve food waste by 2025 in our facilities.

OUR RESULTS

Our focus on food waste reduction and efficient use of the ingredients we process have resulted in innovations both at our plants and in our hometown communities.

A great example of source reduction can be found in our Bolthouse Farms operations. Their process is designed to make use of the entire carrot. From tip to greens, they make sure each inch of the carrot reaches its full potential. Carrots are juiced into fresh beverages, cut and peeled into baby carrots or carrot time savers like Chips and Matchstix. Even the leftover carrot tops are used as fertiliser in the fields.

In addition to the innovative ways that Bolthouse Farms is using the entire carrot in its production processes, we are equally proud of the utilisation of the whole tomato in our tomato operations in California. Unripe tomatoes, stems and other plant material during harvest are returned to the soil to improve soil health. At our facilities, stems and damaged fruit are sorted out and sent to nearby cattle farms for animal feed or to compost. Tomato peels and seeds become an ingredient for pet food. And finally, fruit that doesn’t match the size needed to make diced tomatoes is rerouted to another production line to make tomato concentrate. Every bit of the tomato is utilised so nothing goes to waste.

At our World Headquarters in Camden, NJ, we have worked with the Food Bank of South Jersey for the past four years to produce and distribute Just Peachy salsa to local retailers. The salsa is made from peaches that would otherwise be sent to landfill due to bruising or being undersized. All proceeds generated from the sale of the salsa benefit the Food Bank and their nine hunger relief programmes. This project has generated approximately $250,000 since its inception.

KEY FIGURES

Campbell has a long history of reducing, recycling and repurposing, we:

- Recycle 84 percent of waste produced, with a goal to recycle 95 percent by 2020
- Divert food waste from landfill through donation, animal feed, compost and waste to energy
- Donate more than $50 million in in-kind product annually through direct agency donations and reclamation
REDUCING FOOD LOSS AND WASTE

“Just as important as the energy transition, the food transition is one of the major challenges of this century. We are faced with the structural transformation of production and consumption trends. Carrefour must be exemplary at each stage of its activities, upstream and downstream, where actions are already underway to preserve natural resources, improve our packaging sustainability and reduce food waste. We intend to go further and Carrefour, both today and in the future, will lead the food transition for all.”

OUR POSITION

Consume responsibly, waste less

To conserve natural resources, to reduce its impact on the environment and to ensure the continuity of its business, Carrefour operates sustainably and has a comprehensive plan to tackle all forms of waste.

Because sources of food waste are varied and sometimes complex, Carrefour takes action at every stage of the product lifecycle. Collective and individual solutions do exist and Carrefour implements them upstream with our agricultural and industrial partners, in its store network, and by informing consumers.

Commitment

In accordance with the United Nations goals, Carrefour, along with other members of The Consumer Goods Forum (CGF), committed in 2015 to cutting food waste in half by 2025. This represents a new step in the consumer goods sector’s commitment to environmental leadership and governance.

This plan to tackle waste aims to mobilise teams to maximise efficiency and thereby create value. It is led by a corporate Anti-Waste Committee and managed by country-level executive directors: each country is responsible for implementing the necessary governance for a local roll-out of the plan by identifying synergies and mobilising the relevant divisions.
A COLLECTIVE CHALLENGE

The challenge of reducing food waste is collective and Carrefour’s role is to encourage a comprehensive approach.

1. With suppliers a 2nd worldwide event: Major Suppliers Challenge

After a first edition focusing on climate change, the second Major Suppliers Challenge organised by Carrefour is dedicated to food waste. The most innovative initiatives implemented by suppliers across the globe will be recognised as part of this challenge. Whether it’s a new production method, new recipes, or the development of new distribution channels, the goal is to provide Carrefour’s partners with support and to turn this partnership into a driving force for progress.

2. With customers: An inaugural Food waste event that crosses borders

As part of World Food Day, Carrefour invited customers to discover innovative solutions which have been tested in the various countries in which Carrefour operates. This “Food Waste experience” was held over several days in a Carrefour supermarket.

OUR ACTIONS

I. Mobilising stores

For Carrefour, tackling waste is first and foremost an issue for stores which have the direct means to make improvements. This challenge to make our retail business more efficient naturally pushes us to adjust our organisation and put in place effective measures.

• **Teams:** Training, information on frequently marked-down products, daily reminders, support from waste prevention coaches, etc.

• **Management:** Implement precise inventories, assist ordering though data analysis tools, adapt merchandising to meet customer demand, creation of a repackaging area, etc.

• **Products:** Sales of single units instead of packs, managing donations (optimised daily collection), sale of products with visible defects, reusing fresh produce (fruit juices, etc.), sale of products with short expiry dates, focus on seasonal produce, etc.

• **Recycling waste:** Transformation of organic waste into biogas and then biomethane to fuel the lorries which resupply stores.

II. Supporting upstream suppliers

Carrefour takes into account the various stages of the agricultural and industrial production process, and works with its suppliers on a daily basis to tackle food waste.

• **Delivery:** Optimisation of delivery schedules to maximise the duration of consumption periods for consumers, etc.

• **Products:** Extend expiration dates and best-by dates on Carrefour brand products, sell products with minor flaws in appearance at discounted prices, etc.

• **Joint action plans:** Identify probable sources of waste all along the value chain, analyse waste to ensure ongoing improvement, etc.

III. Customer awareness

Consumers are key stakeholders in tackling waste. Carrefour encourages its customers to improve and implement better consumption habits.

• **Awareness-raising campaigns:** Host informative in-store activities (on grading fruit by color, handling produce, etc.), suggest recipes, provide advice and tips on dedicated websites, etc.

• **Products:** Promote seasonal produce and special offers depending on inventory, sell reusable bags and Vegetabags to conserve produce longer, etc.

• **Services:** Partner with start-ups to implement innovative solutions such as geolocation of promotions on products with short use-by dates and optimisation of donations to charities.

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KEY FIGURES

• 66.6% (more than 412 600 tonnes) of waste produced in our stores was recovered in 2015
• More than 495 Carrefour-brand items have had their Use By Date or MDDs extended
• In 2015, the equivalent of over 100 million meals were donated by Carrefour to food aid associations
REReducing food loss and waste

“With 1/3 of food wasted each year, we must transform together the current food system. As a company committed to nourishing the health of people and planet, Danone is working with partners across its value chain towards halving food waste by 2025.”

Our position

Our mission is to bring health through food to as many people as possible. As healthy food comes from a healthy environment, Danone strives to protect and preserve the planet’s resources. Preventing food waste and maximizing its recovery is an important part of this effort.

This is why, in 2016, we signed the CGF commitment to halving non-recovered food waste by 2025. For us, this commitment is a matter of common sense: food waste reduction generates a triple win along the value chain, with positive impacts on business costs, on the planet and on society.

Avoiding waste helps us lower our CO2 footprint, while reducing costs for all stakeholders, from farmers to households. It also allows us to strengthen our support for vulnerable communities.

To achieve our food waste commitment, we are focusing on building partnerships upstream and downstream, to maximize our impact, create and share sustainable value.
OUR RESULTS

By measuring waste levels, we increased awareness of the impact of waste, sparking the first actions to reduce it. Between 2016 and 2017, Danone reduced non-recovered food waste by 10.7%.

Zero Waste Mindset

We work to instill circular economy principles in our operations, focused on three strategic resources (milk, packaging and water). This ‘cycles’ system helps us transform unavoidable residual waste from one factory into a resource for another, respecting the food recovery hierarchy.

In addition, Danone has created dedicated teams to identify the best local recovery solutions for every kind of waste. When food cannot be safely eaten by humans, we look to animal feeding (representing more than half our recovered food waste).

OUR ACTIONS

Starting in 2016, Danone was among the first companies to measure food waste according to the Food Loss and Waste Protocol of the Food and Agriculture Organization (FAO), following a CGF requirement. In line with the idea that “what gets measured gets managed”, the first step for us was to understand the amount of waste in our value chain and identify its root causes. Food is lost farm to fork, and initiatives are necessary across all sectors to become more resource-efficient.

Responsible sourcing upstream

Reducing upstream losses is part of Danone's global sustainable agriculture initiative. Milk being Danone’s top raw material and among the most perishable, our teams have been supporting dairy farmers, providing training and evaluation programs to improve milk quality and reduce losses.

Reducing waste in operations

Danone runs a waste reduction program across its operations. The program involves ensuring staff are trained and committed, sharing best practices, leading cross functional workshops and instituting specific action plans.

Engaging partners downstream

Danone is working towards a holistic approach to food waste reduction by engaging partners such as retailers, consumers and charities.

To preserve fresh products and avoid waste, Danone works with retailers to optimize transit, in-store packaging systems and product restocking, as well as demand forecasting, including for promotions, inventory management and pricing initiatives.

To support vulnerable communities, Danone has developed structured food donation programs, including agreements with dedicated charity organizations such as food banks. For instance, Danone France partnered with the French Federation of Foodbanks in order to optimize safety and traceability for distribution to consumers in need.

Shared value partnerships

By increasing supply chain transparency, we reduced our own waste levels, but also prevented waste for our value chain partners.

The CGF commitment serves as the main guide for Danone’s continuous efforts toward reducing waste and its impact on our planet and health.

KEY FIGURES

- 7,500 tons of food donated in 2017, representing approximately 60 million yogurt pots and serving 150,000 beneficiaries
- -10.7% of food waste globally between 2016 and 2017 (LFL), including 3.4% in Africa overall (17% in South Africa)
- 77.1% of global waste recovered in 2017
REDUCING FOOD LOSS AND WASTE

At Grupo Éxito, we are aware of the great commitment we have as retail leaders in South America, and we understand we have to make the most of food throughout its process, from harvest to sale and its final disposal. Within the framework of our Sustainability Strategy, we work on different fronts that allow us to have positive results.

OUR POSITION

Since its inception, Grupo Éxito has been committed to the well-being of Colombians and the Country. From the beginning of our company, led by its founder, Gustavo Toro Quintero, we have worked to contribute to the nutrition of the most needy populations, especially children.

In Colombia, 13.2% of children suffer from chronic malnutrition, a condition that can be prevented in the first thousand days of life. Grupo Éxito, through Fundación Éxito, works for a major objective called “Gen Cero” which seeks to eradicate chronic malnutrition in children under 5 years of age by 2030.

According to statistics from the Department of Social Prosperity, 328,600 tons of food are produced in Colombia, of which more than 49,000 tons are discarded either at the production stage (more than 16,000 tons) or in the processes of distribution, exhibition and consumption (approximately 33,500 tons). Grupo Éxito works from several fronts to contribute to the reduction of these indicators through different core objectives:
OUR ACTIONS

We have a management system in the Company that allows for the maximum use of food through different actions on several fronts: logistics, exhibition and handling at points of sale, delivery of products fit for consumption to food banks in the country, donations to zoos and zoo breeding grounds and use for composting.

Consequently, from the origin of the product, the Company, through Fundación Éxito, co-finance the REAGRO program of the Fundación Saciar, which recovers agricultural surpluses that are generated at the place of harvest or during transport and/or distribution of food. In 2016, more than 3,100 tons of food from surplus agricultural crops were recovered in 29 municipalities of the regions of Antioquia and Chocó, benefiting more than 43,100 families.

From the treatment of food at the points of sale, the people who work in the Company's stores are trained in the handling of the products to minimize damage and, if packages are damaged, they are repaired without affecting product quality and safety. Likewise, we permanently report waste reduction figures, commit our staff and make timely decisions to reduce waste.

Another strategy, through Fundación Éxito, in partnership with the Colombian Food Banks Association (ABACO, in Spanish), is the delivery to food banks. For example, during 2016, the Company delivered a total of 1,916 tons of food in good condition from its stores to 19 food banks in the country. This action alone benefited 482,890 people and 29 institutions in 22 departments.

Finally, 136 tons of meat, chicken and fish were donated in 2016 to zoo breeding grounds and 13,842 tons of organic compounds were delivered for composting. With this initiative, we meet the goal proposed by our “Mi Planeta” challenge, which seeks to reduce the ordinary waste that goes to landfills by 10%, thus reducing the cleaning rate of each store.

OUR RESULTS

At Grupo Éxito we recognize our role in preventing losses and making better use of food. For the past 10 years, we have developed initiatives to contribute to this goal.

We support the REAGRO initiative, a sum of wills that reaches the heart of the farmer so that he/she is aware of the importance of the food that he/she grows, that if, for some reason this food is not sold, it can help the people who need it. Farmers receive support and economic contributions for the food delivered.

In addition, we deliver more than 1,900 tons of foods suitable for consumption and other products from our stores to 19 food banks in the country, which benefits 29 institutions.

We work hard to control food decline through training our work teams and raising awareness of the consequences of food handling. As a result, we seek to improve the P&L statements, the use of the products and to obtain increased competitiveness. With this, we had a 6% cost decrease depletion inventory of the stores in 2016.

We have contributed to the care of the environment by avoiding food disposal in landfills. We strongly avoid soil contamination, since food, by its organic nature, generates a large volume of leachate that contaminates water sources.

KEY FIGURES

Some of our most relevant figures in reducing food waste during 2016 are as follows:

- We delivered over 1,900 tons of products, between food and non-food, to food banks located in different regions of the country through Fundación Éxito. With this donation, we contributed so more than 482,000 people received food and we also contributed to the care of the environment by mitigating more than 41,500 tons of CO₂.
- We recovered more than 3,100 tons of food grown by some farmers in the country through the Agricultural Surplus Recovery Program REAGRO, which prevents the loss of food at the place of harvest or during transportation and/or distribution.
- We took advantage of more than 13,000 tons of organic waste that were transformed into organic fertilizers.
- We delivered 136 tons of meat, poultry and fish not suitable for human consumption to zoo breeding grounds.
- Measurement and standards are crucial for the success of this type of initiatives.
As part of being a responsible retailer, ICA Sweden is committed to reducing food waste. We continuously work to reduce food waste in our business, and we also try to help consumers reduce food waste in their homes.

ICA Sweden, with our 1,300 independent retailers, provide high quality food to Swedish customers every day with more than 11.5 million store visits each week. The nature of our business means that we are faced with the issue of food surplus and food waste on a daily basis, and a reduction in food waste is therefore one of the main objectives in our sustainability work.

Throughout the supply chain, from primary production and processing, to selling the products and consumers' handling of food in their homes, food has a large impact on the environment. We also see that working towards reducing food waste is a key driver that will have positive effects on both the environment, as well as the individual consumer’s personal finances. Swedish households throw away a total of more than 440,000 tonnes of perfectly edible food per year, equivalent to an average of 45 kg unnecessary food waste per person. A family with two children wastes an equivalent of roughly 6,000 SEK of food per year. Hence, food waste has a negative impact on the private economy, but above all it results in unnecessary environmental impacts through the waste of resources. We believe that helping our customers make healthy sustainable choices, combined with actions toward reducing food waste is the way forward.
OUR ACTIONS

At ICA Sweden we work towards a reduction in food waste in all parts of our operations.

The 1,300 independent ICA retailers each own and operate their own store, which makes it possible for them to tailor their operations; including the ways in which they reduce food waste. Some examples include: creating meals from food that is close to its expiry date, the donation of food to charity organisations, the use of social media to sell ‘ugly’ fruits and vegetables and more. Moreover, most ICA stores have installed lids and doors on refrigerators to maximise efficiency and minimise waste (these lids and doors also minimise the use of electricity, a double win).

ICA uses an automatic ordering system in its stores so that food orders are not made manually, since manual orders usually increases food waste since it is difficult to foresee how much is needed to keep the shelves fully stocked.

Food waste that occurs in spite of our logistical preventive measures is donated to charity organisations and other non-profit organisations (e.g. animal feed for the Stockholm open-air museum). Within our private ICA label, actions are also taken to reduce food waste, for example we work with packaging and try to optimise packaging to minimise waste as much as possible. ICA recently started to collect ugly fruits and vegetables from the warehouse in Helsingborg to make “ICA Rescued Fruits” - marmalade and drinks from fruits and vegetables that would have otherwise gone to waste. These are sold in ICA stores as a private label product. From May to September over 10,000 kg of fruit has been rescued. That is about 2,000 kg per month and three times more than expected. ICA also reaches out to its consumers to encourage that they practice food waste reduction in their homes. We have a dedicated site on our website ica.se: http://www.ica.se/recept/klimatguide/ where we inform our customers on how to eat “climate-right-food” and how to minimise food waste in households by, for example, cooking food from leftovers.

From a public engagement perspective, ICA has been involved in many food waste reduction initiatives like for example the Swedish Food Waste Reduction Project and the Hållbar Livsmmedelskedja initiative - a Swedish initiative between producers, suppliers and retailers to ensure a sustainable food chain for production and consumption in Sweden by 2030. ICA was also partner of the EAT Food Forum in 2015 and 2016 and participated in the workstream on reducing food waste.

OUR RESULTS

At ICA we strive towards minimising waste and maintaining high recycling rates. We see that all our actions and efforts are contributing to our ambition of reducing food waste, both at the central level and in ICA stores, as well as in the homes of our consumers.

From our own operations (e.g. logistics) nearly 100 percent is recycled. Less than 1 percent goes to landfills which means that almost all our waste is either recycled/reused (4.638 tonnes 2015), composted (4.819 tonnes 2015) or incinerated (1.821 tonnes 2015).

In accordance to our business model, each Swedish ICA retailer measures and manages their own waste. The measures taken by the retailers shows reduced levels of food waste as a positive effect of their work and the actions that take place in ICA stores reduces levels of actual waste.

We know that the environmental impact of food in general is greater than the environmental impact of the packaging that contains it. Therefore, we focus on both optimising the packaging material and the packaging sizes. Success comes when showing that a reduction in food waste not only has a positive effect on the environment, but also on finances, both for businesses and consumer’s personal finances, as well as on the societal side. A quadruple win.

KEY FIGURES

- With 350 Albert Heijn stores already running on hybrid CO2 systems and almost 50 stores using CO2 fully, it is clear that using CO2 as a refrigerant reaps both environmental and financial benefits.

- In 2014 leakage of refrigerant substances at Albert Heijn decreased with 34% compared to 2010 to a total of 5.5% of total install base.
REDUCING FOOD LOSS AND WASTE

"Of the estimated 100 million tonnes of food waste generated annually in the EU, fresh produce is one of the categories with the highest risk of loss. By focusing on produce and other fresh products, we can significantly impact food waste in the retail supply chain."

WOLFGANG ORGELDINGER, CHIEF EXECUTIVE OFFICER, IFCO

OUR POSITION

Brambles, a leading logistics solutions company operating in more than 60 countries primarily through the CHEP and IFCO brands, is committed to reducing food waste, one of the company’s strategic focus areas. As IFCO’s business focuses on perishables, the objectives of product protection and waste reduction have always been at the core of our business model and the design of our reusable plastic containers. As food waste is rapidly reaching a level of criticality for our retailer and producer customers once held by economic and later environmental waste, we now turn our attention to this issue and how our products can help. Our customers have asked us for packaging which addresses two causes of food waste in the retail supply chain: temperature damage and mechanical damage. These factors drive our product innovation, and we also the best practices gleaned from our customers around the world with other customers.
OUR ACTIONS

Our customers have asked us to help them address the issue of food waste by developing packaging which better protects fresh products during distribution. To address these needs, IFCO has developed solutions for fresh produce, meat, and eggs, which address the different causes of damage impacting these products during distribution.

For fresh produce, damage is caused by temperature abuse and mechanical damage, so our research and development process focuses on optimising ventilation and reducing physical damage during handling.

For eggs, damage is mainly caused by vibration and physical impact during transport and handling, so our design process looks for ways to minimise touch points and better protect eggs from impact. This resulted in a shelf-ready container which eliminated the need for box cutters and additional handling to place the egg cartons directly on the shelf.

For case-ready meat, waste occurs often when the modified atmosphere "mother" bag surrounding meat is punctured, causing premature aging. IFCO’s solutions for meat were designed to provide a rigid enclosure for the bag, all but eliminating opportunity for puncture.

OUR RESULTS

To assess the physical damage reduction possible with RPCs for fresh produce, IFCO facilitated independent research with two institutions. The first study, *Evaluation of Waste Levels of Fresh Fruit and Vegetables Depending on the Type of Packaging*, was conducted in 2013 by the Fraunhofer Institute for Material Flow and Logistics on behalf of Stiftung Initiative Mehrweg. The second study, *Analysis of the Impact of Packaging on Indirect Costs in the Retail Fresh Produce Supply Chain*, was conducted in 2015 by California Polytechnic State University.

Interestingly, both studies found the overall damage rate in the supply chain to be approximately 4% lower in RPCs than in cardboard. Details regarding the causes of damage and recommendations to mitigate these causes were also provided in the reports.

To assess the temperature damage reduction, cooling, and ventilation properties of RPCs, IFCO has conducted various product-specific studies throughout the years:

- **Apples** – RPC case temperatures on average cool 23.5% faster and pulp temperatures on average were reached 30% faster than corrugated containers.
- **Peaches** – case temperatures are reached 5% faster and pulp temperatures are reached 4% faster than in corrugate containers.
- **Red Grapes** – on average were cooled 11.5% faster in RPCs than corrugate containers.
- **Green Grapes** – RPCs on average reduced precooling time by 25%.
- **Tomatoes** – RPCs cooled on average 19% faster than corrugate containers.
- **Banana** – RPCs can cool bananas 33% faster and 41% more consistently than corrugate.
- **Berries** – RPCs improved airflow and reduces cooling time by 25% compared to corrugate.
- **Squash** – Post harvest temperatures were on average 28% lower in RPCs than in corrugate containers.

To assess the physical damage reductions possible with RPCs for eggs, IFCO studied a variety of shipments through the retail supply chain. Results showed RPCs reduced unsaleable eggs (“chex” or cracked/broken eggs) by 57% (reduced from 1.54% of eggs in cardboard to 0.66% in RPCs).
Our passion for the food business and the role we play to democratise the access to healthy, quality and safe food to the 5 million customers that visit our stores every day make fighting food waste on all fronts a quest that shapes our business in many dimensions.

By engaging with all the links of the supply chain, from farmers to the community, we strive to contribute to reducing waste in our operations, while meeting the goals set by the UN regarding hunger, food security and nutrition.

Each day over 350,000 people starve in Portugal and an estimated 1 million tonnes of food goes to waste. Since 2014, the European Year Against Food Waste, we became more assertive in this quest and, last year, we pledged to halve food waste generated by our operations by 2025, with 2016 as the baseline year. We truly believe that such a goal represents our commitment to contribute towards some of the challenges identified by the Sustainable Development Goals.
OUR ACTIONS

We address our fight against food waste mainly through the efficient management of raw materials when conducting our businesses, across all the five pillars of our Corporate Responsibility strategy:

• **Promoting Good Health through Food**: by supplying ready-made soups and ready-to-eat salads that incorporate non-standardised products. Since 2014, our central kitchens and soup factories have been incorporating “ugly” vegetables from producers that used to leave those to rot in the fields, because no retailer would buy them;

• **Respecting the Environment**: endeavouring to reduce and recover the waste generated, both up and down-stream of our value chain. We also help our customers to manage their own waste, collecting and sending it to valorisation.

• **Sourcing Responsibly**: by strengthening partnerships with suppliers and purchasing “ugly” fruit and vegetables, which had little or no economic value, either for our food solutions or even to be sold at discount prices at Recheio Cash and Carry stores;

• **Supporting Surrounding Communities**: by donating food surpluses to charities and other social institutions reaching hundreds of people in need and low-income families while helping charities to correctly preserve food, through training and equipment.

• **Being a Benchmark Employer**: by training thousands of employees on food safety standards and food donation processes while increasing their sense of pride and raising their awareness towards this issue as they belong to wider communities in society.

Consumers also play an important role as some studies show they waste more than 30% of the food they buy. That’s why we launched an integrated awareness campaign around food waste, which included magnets for fridges teaching customers the best way to store different products to extend their life-cycle, and also leaflets, in-store charts, magazines, videos, and the participation in conferences and events with keynote speakers and show-cooking workshops for creative recipes made out of surplus food.

OUR RESULTS

The so-called “ugly” vegetables used in the soups we make were transformed into convenience food solutions such as pre-cut and washed vegetables and sold at reduced prices at Recheio stores (where “ugly” fruit is also sold), totaling 13,600 tonnes in an increase of over 2% compared to 2016. These represented a cost reduction of these ingredients as raw materials, an increase of suppliers’ turnover and a decrease in food waste.

Food surpluses meeting food security standards but that cannot be sold are donated to social institutions in Portugal, Poland and Colombia which, in turn, distribute them to people living in vulnerable conditions. Around 10,000 tonnes were donated in 2017.

Making the most of our geographic distribution – over 3,850 stores covering 3 countries – we favour charities working with vulnerable groups: the elderly, disadvantaged children and young people. Over 95% of the Group’s stores in Portugal are actively engaged in the programme.

In 2017, Pingo Doce in Portugal donated food equivalent to over 9.6 thousand tonnes, while 437 Biedronka stores in Poland totalled approximately 670 tonnes of surplus food, estimated to have reached nearly 11,000 people. Ara, in Colombia, donated over 116 tonnes of food reaching 1,544 families.

KEY FIGURES

- In 2017 alone, our Group has incorporated around 14,000 tonnes of “ugly” fruits and vegetables in ready-to-eat soups, salads, and discount bundles. In the last 3 years, 37,500 tonnes of those products were reintroduced in the market;

- Over 30,000 tonnes of food, an equivalent of more than 57 million euros at purchase cost, were offered to around 1,000 charities, between 2015 and 2017;

- Every year, thousands of employees are trained on food safety standards. In 2017, training in Food Hygiene and Safety was given to 31,937 employees, totaling more than 112 thousand hours.

- In 2017, our total waste recovery rate was of 85% and in the last three years we collected from customers and sent to valorisation more than 1,900 tons of waste.
REDCING FOOD LOSS AND WASTE

Food loss and waste is a significant social, environmental and economic issue given the fact that over a third of food grown or produced is never eaten. At Kellogg, we are committed to effectively reducing food waste across all areas of our business.

JOHN BRYANT, CHAIRMAN & CEO, KELLOGG COMPANY

OUR POSITION

As a global food company, we believe we have a significant role to play in helping to end hunger, achieve food security, improve nutrition and promote sustainable agriculture. We take a holistic view to help secure a supply for our ingredients while minimising food loss throughout our value chain. As a member of the Consumer Goods Forum, we have committed to doing our part to halve per capita global food waste at the retail and consumer level, and to reduce food losses along the production and supply chains, including post-harvest loss. Kellogg was one of the first U.S. based companies to join Champions 12.3 and to become a U.S. Food Loss and Waste 2030 Champion. Kellogg also co-leads the climate-smart agriculture project of the World Business Council for Sustainable Business (WBCSD) and supports its Statement of Ambition which includes making 50% more food available and strengthens the climate resilience of food communities.

OUR ACTIONS

FROM FARM TO PRODUCTION: Kellogg works with partners through Kellogg’s Postharvest Loss Reduction Program to reduce food loss on farms by developing sustainable agriculture programs with smallholder farmers in India, Bangladesh, South Africa, Thailand, Philippines, and other countries. Through the program, we work to understand the effect of weather conditions on crop yield and quality and identify gaps in harvest practices to reduce...
food loss from seed planting to food production. Kellogg then uses data to implement hands-on training and measure continuous improvement.

**FOOD LABELING COMPLIANCE:** Kellogg was an early supporter and adopter of the Grocery Manufacturers Association (GMA) and the Food Marketing Institute’s (FMI) voluntary food labeling standards. In 2016, Kellogg began implementing the “BEST If Used By” label to help reduce consumer confusion that after the specified date the product is safe to consume, but may have exceeded the threshold of its optimal taste or performance with the goal of reducing food waste in homes.

**PACKAGING ENHANCEMENTS:** Kellogg is increasing the use of resealable packaging on some of our cereals and granolas, snacks, and frozen foods to help further reduce consumer-level food waste. In 2016, we launched Special K® Nourish Bites and Raisin Bran® Granola in a unique, stand-up, resealable bag that locks in flavor and freshness. MorningStar Farms® also changed its packaging from a bag-in-a-box to a resealable pouch to better protect the food and manage freezer storage.

**REPORTING TOTAL FOOD LOSS & WASTE:** We are committed to reducing total waste in our manufacturing facilities by 15% (per metric tonne of food produced) by 2020 from a 2015 baseline, with a particular focus on food waste. Kellogg reported food waste from our global manufacturing operations in our 2016 Corporate Responsibility Report, one of the first companies to publicly disclose this information. This data is measured against the Food Loss and Waste (FLW) Standard and will serve as the baseline for ongoing reporting. Please see our Food Loss and Waste Reporting Methodology for more information. Kellogg has been recognized by USEPA and USDA as a 2030 Food Loss and Waste Champion as a result of our commitment.

**OUR RESULTS**

**Concrete results**

Kellogg is committed to reducing total waste in our manufacturing facilities by 15% per metric tonne of food produced by 2020. Within this commitment is a focus on food waste and increasing our efforts towards elimination and reuse. Our goal is to eliminate food waste in our processes, capturing it instead to feed people in need, and when that use is not appropriate, ensuring it is used for animal feed.

We set our total waste target after achieving a 68 per cent waste-to-landfill reduction from 2005 to 2016. Twenty-five per cent of our plants sent zero waste to landfill. And in 2016 alone, we reduced our total waste to landfill by 6.1 per cent (per metric tonne of food produced).

**Supporting Communities**

As a global food company, we play a key role in helping end hunger and improving nutrition. That’s why we are committed to providing hunger relief to children and families around the world. With our Breakfasts for Better Days™ signature cause, we are committed to improving access to food and improving nutrition for the most vulnerable in our communities. We are doing so by providing 2.5 billion servings of cereal and snacks to children and families in need and reaching 2 million children with our breakfast programmes in more than 25 countries around the world.
REDUCING FOOD LOSS AND WASTE

"We’re working extremely hard across our stores and supply chain on the shared goal of reducing food waste and I’m delighted that all of our owned stores are now donating to local food projects through our unsold food redistribution scheme."

STEVE ROWE, CHIEF EXECUTIVE, MARKS & SPENCER

OUR POSITION

Food waste is a hot topic across the industry, in the media and with the public. Although retail accounts for a low proportion of the UK’s food waste total (1-2%), we know that we have a major part to play in influencing and working with the whole value chain. We know we need to reduce the amount of unsold food and maximise the amount that is put to good use. The retail sector is the front line in tackling food waste and retailers have an influence both with suppliers and with consumers.

Our key priority at M&S is to reduce food waste occurring in the first place whilst ensuring that, where there is food surplus, we put it to the best possible use. Marks & Spencer has now launched a first in industry, nationwide food redistribution programme with Neighbourly.com enabling all our owned stores to donate surplus food to local charities.
OUR ACTIONS

The objective of the programme is to redistribute the maximum amount of unsold food remaining in our stores to charity. Our main business objective is to reduce the amount of surplus that exists in the first place and then doing best with what remains. Therefore, we are not aiming to exponentially grow the tonnage we redistribute, but rather the proportion of what remains unsold.

A number of trials were conducted with a variety of charitable partners including Company Shop, Fareshare & FoodCycle to look at how to scale & increase the amount of unsold food we distribute from our stores whilst maintaining visibility & traceability.

The trials were a success and, as a result, we launched the nationwide charitable redistribution scheme working with our partner Neighbourly, an online platform that connects local charities with businesses.

Through Neighbourly, our stores work with foodbanks, community centres, community cafés and hospices.

Neighbourly connects the charities with our stores, handles the necessary administration and then hands over to the store to manage the day-to-day relationship. We are able to support with fruit, vegetables, bakery items and groceries including pasta, cereal and sauces. All are either approaching their use-by date or are past their best before date but still fit for consumption.

Managing the nationwide scheme through a single platform removes some of the logistical barriers to redistribution, including ensuring that all those registered have the correct charity and food hygiene credentials in place. We are the only retailer to have a nationwide, measurable scheme of this scale and are also the first major retailer to provide live updates on the number of tonnes of surplus food redistributed. In addition to the live totaliser of food redistributed across the business, internally this can be analysed by region and by store; by week and by day of the week, to ascertain further opportunities to reduce the surplus occurring in the first place.

OUR RESULTS

Marks & Spencer learnt that trialling various initiatives was crucial to finding the one that could be scaled. One major finding was the importance of minimising logistics as this not only adds cost, but is problematic with products with very short life. The biggest learning has been the importance of local. Utilising a digital platform has been key to the success of the programme and has facilitated the local whilst allowing central management and transparency. Working with Neighbourly allows us to go beyond providing food. It is another way to build local relationships and connections with the communities around our stores.

All our employees have been on board with the project from the outset, with many going above and beyond as they are passionate about minimising food waste. Many of the charities we support had a personal connection to the store and the impact that has on the programme has been incredible.

Since its launch, the programme has brought on board all our owned stores in the UK. This year, M&S has trebled the amount of food it redistributed. Our stores are currently connected to over 600 charities who collect food from our stores across the days of the week. To date we have donated over 371 tonnes of food providing over 500,000 meals to a variety of charity partners.

KEY FIGURES

- 603 charities connected
- 530 stores active on Neighbourly
- 513,893 people fed
- 11,475 fewer bins needed
OUR POSITION

The global food system of our time is characterised by the fact that a third of all produced food turns into waste and at the same time 800 million people struggle with hunger annually. This world’s dilemma is the challenge of our business as it is based on trading with resources, e.g. food products.

Taking actions to primary prevent and reduce food loss and food waste is not just an obligation due to ecological, ethical and social reasons. We also see it as an opportunity we can benefit of economically by making our trading process smarter, more efficient and by enabling our customers to run their business mores responsible as well.

For the purpose of reducing food waste we generally follow a holistic approach being active along the entire value chain, from the field over logistics and own operations of warehouses and stores up to our professional customers. The starting point for reduction initiatives at the respective stage differs and depends on whether data is available or not.
OUR ACTIONS

Through the example of three projects we would like to show how we follow our holistic approach along the value chain by reducing post-harvest loss from farm to warehouse, food waste at our regional warehouses and how we support our professional customers to save food waste:

METRO Cash & Carry Turkey collaborated with the Scientific and Technological Research Council of Turkey to measure and mitigate food loss rates of lettuce, which is known to be lost at high rates in Turkey, by encouraging good practices. For this purpose, “poor condition” practices impacting the preserving of product quality negatively and “favourable condition” practices impacting it positively were identified. To measure the impact of “favourable” & “poor” conditions on food loss accordingly seven supply chain stages, such as harvest, pre-transport, sorting, and packaging, were defined.

METRO International Supply operates a network of regional warehouses in Italy and Netherlands in order to optimise the flow of about 3,000 articles from the supplier to the local country warehouses. At this stage food waste appears whenever goods are no longer sellable to our customers for different reasons. Based on the shrinkage data collected in trading business, it was already possible to measure food waste share and identify the potential to reduce food waste as well as destruction costs. Unsellable goods are now donated instead of destroyed. In order to get there, internal guidelines and procedures were adjusted and relationships with local Food banks were created.

Raising our wholesale customers’ awareness of the value of food is also an important concern of ours. Accordingly, to reduce the amount of food that goes uneaten, Italy, France and Germany have collaborated with various project partners to design a doggy bag for restaurants and caterers.

Moreover in Germany, we are a member of the cross-sector initiative United Against Waste to offer with the waste analysis tool a practical solution for our HoReCa customers, for decreasing food waste while at the same time saving costs.

OUR RESULTS

We have learned that our efforts to contribute to the reduction of food waste provide fast payback and that business can benefit as expected. For all three projects we experienced once again that a single company can’t tackle the issue alone. Rather it is important to cooperate with partners along the value chain, whether it is from science, other businesses or social organisations.

Equally important is to build cross divisional teams, recognising the added value of broad expertise to generate sustainable solutions for us and our customers.

The project in Turkey showed that total weight loss rates of lettuces across all stages could be reduced by switching from poor to favorable conditions by 13.4% to 6.6%. The conclusions for Turkey show that a significant amount of food loss can be prevented if necessary investments for good supply chain practices are made.

Through better stock management and donating instead of destroying goods METRO International Supply was able to reduce destruction cost by 64% and food waste by almost 90% within one fiscal year. These figures show clearly that efforts pay off. We also learned that expected burdens resulting from existing guidelines and the need for changing working habits of people shouldn’t be one.
OUR POSITION

Our journey to measure and reduce food waste started in the early 2000s and was further refined with our 2010-2015 Sustainability goals to:

- reduce net waste per tonne in our factories by 15% by 2015
- make at least 60% of our production volume in factories that send Zero Waste To Landfill by the end of 2015

When we set our new Sustainability 2020 goals we switched our focus from net waste to total solid waste generated in our factories. This was important to ensure we focus not just on how we handle and dispose of waste, but also on reducing waste at the source. Therefore, our waste measure now includes any solid material not used in our finished products, including any organic materials sent to animal feed rather than for human consumption.

Food waste forms a significant part of our total waste and so we support the CGF resolution on food waste because it fits very well with our aspiration to reduce all solid waste generated by our factories, not just to avoid landfilling or incineration.

IRENE ROSENFELD, CHAIRMAN & CEO, MONDELEŽ INTERNATIONAL

REDDUCING FOOD LOSS AND WASTE

Reducing waste is a key part of our Sustainability 2020 goals. Cutting waste reduces our environmental footprint while driving down costs and creating efficiencies to accelerate our growth.
OUR ACTIONS

We have recorded for a number of years the main types of total waste generated in our factories by waste type, including overall organic waste. We're currently refining how we record organic waste to enable us to define and measure our 2016 food waste baseline.

We’re also using Integrated Lean Six Sigma tools to help us develop new ways to identify waste sources and enable us to plan to reduce total waste generated:

- A Current Best Approach for total waste reduction has been developed by our environmental experts to measure, improve, and share waste reduction practices between our factories.
- A Loss Analysis methodology for waste.

These approaches have been validated with our factories to ensure they reflect best practices. Key manufacturing sites, such as Curitiba in Brazil and Gebze in Turkey, have successfully adopted these tools and are showcasing benefits to the rest of our manufacturing network.

Our approach drives a key change in mind-set to move away from a focus on how waste is disposed of (avoiding landfill) to avoiding the creation of waste at its source.

Beyond this, waste reduction is an important way to drive more efficient use of all resources - when we reduce waste, we also reduce the amount of energy, water and packaging materials we use and, therefore, cut our environmental footprint. And by using raw materials more efficiently, we reduce our end-to-end environmental footprint by cutting water use and carbon emissions in agriculture.

OUR RESULTS

Our manufacturing waste programme has been successful and we exceeded our 2010-2015 after goals:

- Net waste: 70% per tonne reduction, nearly 5X our original goal of 15%*.
- Zero Waste To Landfill: 68% of production from ZWTL factories, ahead of our goal of 60%*.

*vs. 2010 baseline

Specific targets were set by Region and a number of innovative solutions and partnerships were developed and shared where appropriate to divert more solid waste from landfill. The result was that by 2015, over 90% of our total waste was being diverted from landfill.

In 2015, we updated our environmental sustainability targets, including our goal to reduce total manufacturing waste by 20% by 2020, vs a 2013 baseline (corresponding to the start of Mondelēz International). Our journey towards our 2020 waste goal has started with a 3% reduction in total absolute waste in 2015 versus our 2013 baseline.

The new CGF food waste resolution of reducing 50% versus a 2016 baseline by 2025 will give us added focus to our total waste reduction programme between now and 2020, as well as providing a longer-term trajectory specifically for food waste. We see both as important challenges in order to better use food ingredients and other resources in our operations.

KEY FIGURES

- As of 2015, Mondelēz has reduced its total waste by 3% compared to our 2013 base line as part of our 2020 goal of 20% total waste reduction in manufacturing
- Surpassing its 2015 goal of reaching 60% production from Zero Waste to Landfill sites, Mondelēz reached a level of 68% of its production coming from Zero Waste to Landfill sites
- As of 2015, Mondelēz has reduced its net waste in manufacturing by 70% vs its 2010 baseline
REDUCING FOOD LOSS AND WASTE

"The global impact of food waste is enormous. It results in billions of dollars of economic losses; impacts food security; deprives people of nutrition and accounts for around 8% of global GHG emissions. Success in tackling this challenge requires action at every level, but starts with each of us as individuals taking responsibility for eliminating waste."

CHRIS MARTIN, CEO, MUSGRAVE GROUP

OUR POSITION

Founded in 1876, Musgrave is Ireland’s largest food retailer; feeding 1 in 3 people and operating a network of over 1,400 company owned and franchised retail stores and wholesale facilities across the island of Ireland as well as in the province of Alicante in SE Spain.

We employ more than 45,000 people across the island of Ireland and are the largest private sector employer in the Republic of Ireland, employing 35,000 people.

We are proud to be a family business supporting thousands of family businesses in the heart of local communities and are also committed to supporting local producers.

Food waste is a significant sustainability issue. Apart from the unacceptable loss of the food itself; it represents a waste of valuable resource inputs such as water, energy and labour whilst also creating greenhouse gas emissions. As a business that is committed to operating to the highest standards, we recognise the importance of eliminating food waste.
OUR ACTIONS

We believe that food should always be used to feed people as a priority and although there are a number of downstream solutions that prevent the disposal of food, we believe that the food surplus hierarchy dictates that the focus should always be on the prevention of food surpluses at source before re-distribution to people. Only then should other recycling or recovery solutions be employed in preference to disposal. For this reason, our focus is first and foremost on prevention.

Musgrave has operated a zero food waste to landfill policy for over 10 years. We began our focus on waste prevention by conducting waste characterisation studies in order to identify and quantify all of the different waste streams in our operations. In the case of food surplus, once we had begun measuring the quantities arising, we set about identifying, through root cause analysis, the reasons for these surpluses. With this information, we were able to develop standard operating procedures and practices that focused, first, on prevention, followed by re-distribution to charitable causes and, thereafter, identifying solutions to use the remainder in the manufacture of pet food or as feedstock in anaerobic digestion or composting.

We also developed training programmes for our store staff that focused on eliminating waste from within every store department through guidance on topics such as ordering, stock management, goods handling and storage. Along with this, we produced a ‘Best Practice Guide to Waste Management for Retailers’ to help our retail partners to train their staff on better instore practices focusing on minimising waste in the first instance, but also ensuring that the correct treatment solutions are employed for every waste stream. This forms part of on-going training for member of each department within stores.

Data has been key to the understanding and management of food surplus. By measuring at granular level, we have been able to identify hotspots, such as in fresh food or deli departments, and to focus on tackling specific root causes. Another factor in the success of our minimisation strategy has been our distribution ‘pull’ model for stock sent to stores. Orders are initiated at store level based on real-time demand rather than being ‘pushed’ to store from central distribution. This allows stores to maintain stock levels, but avoids excess stock, which would lead to waste.

In order to manage surpluses, we have partnered with FoodCloud, a food redistribution operation that takes surplus food from businesses and redistributes it to other charitable agencies feeding people in all parts of Ireland. We have also partnered with an organisation called FSM, which takes surplus, unsuitable for re-distribution, and uses it to create pet food or directs it to feedstock for anaerobic digestion or as compost.

OUR RESULTS

During 2016, Musgrave donated over 160 tonnes of food to FoodCloud, which went on to create 335,000 meals for people in need. During the same period, FSM processed 973 tonnes of material into pet food and feedstock for anaerobic digestion.

Together with our prevention strategies, this programmes enabled us to avoid over 1,600 tonnes of food ending up as waste in landfill, saving 6,300 tonnes of CO2e emissions.

When we began our programme in 2006, over 80% of our food surplus ended up in landfill; today this stands at almost zero and despite an increase of over 50% in the size of our business in the intervening period, our total food surplus has declined by almost 25% in the same period. We are pleased with this progress, but recognise that we still have a lot to do to completely eradicate food surplus from within our operations.

Food waste is a key global sustainability issue throughout the supply chain. There are complex causes and effects at every stage from ‘farm to fork’ and each of us must take ownership and do their utmost to prevent food waste. As well as adopting a continuous improvement approach to the prevention of food waste within our operations, we are also actively supporting our customers to minimise food waste in their own homes through improved packaging design; through the provision of guidance on better food storage, portion control and by developing meal ideas and recipes for food left-overs.
OUR POSITION

Ever since Nestlé’s foundation in 1866, Nestlé has contributed to reducing food loss and waste by transforming perishable raw materials such as milk, coffee beans and cocoa into safe, tastier and healthier value-adding food products.

Nestlé is committed to further playing its part in helping to reduce food loss and waste. Not only will this help Nestlé secure supplies of the agricultural raw materials it sources, but it will also have a positive impact on society by supporting rural development, water conservation and food security. This is in line with Nestlé’s Creating Shared Value approach to doing business.

In 2015, Nestlé launched The Nestlé Commitment to reduce food loss and waste. This public commitment serves to guide and align Nestlé’s efforts to address food loss and waste.

PAUL BULCKE,
CHIEF EXECUTIVE OFFICER,
NESTLÉ
OUR ACTIONS

Prevention, minimisation and valorisation

Nestlé is continuously making efforts to improve the environmental performance of its operations in order to preserve natural resources and to be successful in the long term. Nestlé also looks to the beginning of its supply chain on environmental issues, supporting farming communities where it sources agricultural raw materials to help them avoid pre-harvest losses through yield improvement and reduce post-harvest losses through optimising delivery of raw materials up to the factory.

Information and education

At the end of the supply chain, Nestlé helps to raise awareness among consumers on the issue of food waste. Nestlé wants to help consumers make informed choices through credible, substantiated communication and by providing tips and recipes that can help them reduce food waste. For example, Nestlé has also been developing creative solutions that can help consumers make the most of leftovers. These include a range of different doughs that can be filled with leftover food from the fridge while in France, Maggi has brought out a smartphone app full of recipes and ideas to use leftovers.

Stakeholder engagement and partnerships

Moreover, Nestlé is committed to proactive long-term engagement and partnerships – directly and through industry – with stakeholders, including regulators, scientists, customers, business partners, civil society organisations and the community, in order to define, implement and evaluate solutions to food loss and waste. For example, Nestlé has steered on behalf of the CGF and together with the World Resources Institute, United Nations Environment Programme, Food and Agriculture Organization, World Business Council for Sustainable Development, European Commission, Waste & Resources Action Programme, the development of the Food Loss and Waste Accounting and Reporting Standard, which was launched in June 2016 and will become the global standard for quantifying food loss and waste.

OUR RESULTS

Since 2005, Nestlé has reduced total waste for disposal from its factories by 62%. With 105 Nestlé factories achieving zero waste for disposal at the end of 2015, now Nestlé is working towards zero waste for disposal in its sites by 2020.

In alignment with its support of farming communities where it sources agricultural raw materials to help them avoid pre-harvest losses, in 2015, Nestlé distributed 26.8 million high-yield, disease-resistant coffee plantlets to farmers, taking its cumulative total to 100.7 million.

To further reduce food losses and waste occurring in its supply chain, Nestlé analysed all potential causes of milk wastage in its dairy supply chain in Pakistan, applying the Food Loss and Waste Accounting Reporting Standard. The total milk loss in the company’s supply chain was estimated to be only 1.4%, significantly lower than average country estimates. Indeed, approximately 15% to 19% of milk sold by Pakistani farmers is wasted in route to the market, according to a 2004 Asian Development Bank report. Nestlé found that sharing best practices among farmers contributes to an increase in milk production and less milk being rejected by chilling centres, while improved management at the retail stage could further reduce product losses.

These actions and concrete results contribute to ensuring that Nestlé products are not only tastier and healthier but also better for the environment along the entire value chain.

KEY FIGURES

- 62% reduction of total waste for disposal from our factories since 2005
- 105 Nestlé factories (22%) achieved zero waste for disposal
- 400,000: number of farmers trained through capacity-building programmes
- 1/3 reduction in food waste at Nestlé Headquarters
- Zero waste for disposal in its sites by 2020
- 22 Nescafé factories use spent coffee grounds as a source of renewable energy saving
OUR POSITION

At the heart of PepsiCo is Performance with Purpose – our fundamental belief that business success is inextricably linked to the sustainability of the world around us. PepsiCo relies on high-quality raw materials for our products so we continuously look for innovative ways both to minimise the company’s impact on the environment and to lower costs.

In pursuit of this goal, we are committed to reducing the generation of waste in all forms in our company’s operations. With nearly one third of all food produced globally never consumed each year, continuing to explore new ways of reducing food waste across our value chain is an important part of this commitment.

PepsiCo recognises the Sustainable Development Goal Target 12.3 to halve global food waste and to reduce food losses at supply chain level. In line with The Consumer Goods Forum’s resolution on food waste reduction, we are working to further reduce the food waste we generate and apply innovative recovery options for all remaining food waste. The Food Loss & Waste Standard will be a helpful tool in these efforts.

INDRA NOOYI, CHAIRMAN & CEO, PEPSICO

REDUCING FOOD LOSS AND WASTE

“Companies like ours have an important role to play in helping meet the challenges of the communities we serve, including cutting food waste in our operations and finding innovative new ways to put more nutritious food in the hands of those who are hungry and undernourished.”
OUR ACTIONS

We employ our Resource Conservation programme (ReCon) to identify and eliminate sources of waste generation and to conserve raw materials. In 2015, 94% of the total waste generated in our operations was put to beneficial use; only approximately 6% were disposed of through more traditional methods, such as landfills.

Essential steps in measuring waste are a detailed evaluation of the manufacturing processes, the definition of different waste categories at a very granular level, and the development of appropriate reporting mechanisms. Such systems help highlight the greatest reduction opportunities.

For any waste that cannot be avoided despite all efforts, we continue to explore new beneficial use and recovery options. In a world of a growing population, increasing cost of food, concerns about inequality and food insecurity, diverting food waste from landfills and finding innovative ways of putting it to beneficial use are particularly important. Reducing food waste is also an important lever for reducing GHG emissions and tackling climate change.

Opportunities for putting food waste to beneficial use may lie within our own operations, or they may present opportunities for collaboration across our entire value chain. Oftentimes, it takes the collaboration of different departments to implement programmes designed to reduce or recover waste.

For example, by using left-over peelings from our potato chip production, we have developed a new fertiliser, Naturalis, that provides a more sustainable way of increasing the harvest for our potato growers.

Oat hulls, a by-product of oat processing, have been converted to biomass for renewable energy production at several of our sites. Oat hulls are also diverted to the dietary fiber, livestock feed and bedding, and fuel markets. Oat hull sales have become an important business for Quaker.

Our Frito-Lay and Walkers operations have developed appropriate systems to recover millions of pounds of potato starch lost in the slicing and peeling process of manufacturing potato chips at plants in Canada, the United Kingdom and the United States. The recovered starch is processed into food grade starch for use in our own operations or into beneficial products for sale to other industries.

PepsiCo also donates products nearing the end of their shelf life in many markets.

OUR RESULTS

These different efforts help PepsiCo reduce our environmental impact by conserving valuable resources such as raw materials, water, or energy, thereby lowering GHG emissions. They also make good business sense as they help reduce operational costs associated with purchasing of raw materials as well as disposing of organic waste.

Finding ways of putting organic waste to beneficial use opens up opportunities for PepsiCo to strengthen relations within the communities we operate. For example, our Tropicana plant in Ft Pierce, Florida, works closely with St. Lucie County by purchasing landfill methane gas produced from decaying organic household waste at the county landfill facility. Tropicana uses the methane, which would otherwise be flared off, to generate electricity and steam while creating revenue for the county. Similarly, our Quaker business in Iowa partners with the University of Iowa by providing oat hulls as a fuel source, supporting renewable energy production on campus.

To increase the impact of such actions and to speed up the reduction of food waste across the entire value chain, strengthened collaboration amongst all stakeholders - from mapping supply chain waste areas over developing breakthrough technology solutions to sharing best practices - is needed to drive future success.

KEY FIGURES

- 94% of total waste, including food waste, generated in PepsiCo’s operations has been put to beneficial use
- More than 60 million pounds of potato starch recovered, equalling more than 90% of starch produced, in our snacks manufacturing facilities in the United States and Canada
- Almost 3,000 tonnes of fertiliser produced from organic waste of PepsiCo plant used by our potato growers in Turkey
- PepsiCo is a founding member of the International Food Waste Coalition
OUR POSITION

Pick n Pay has a long and remarkable history of sustainability and progressive social action. This may in part have reflected the particular challenges facing South Africa in the early decades of the business. But at its core were the vision and values of Pick n Pay’s founder, Mr Raymond Ackerman, his belief in the consumer, and his commitment to the principle that doing good is good business.

Our sustainability strategy responds to a range of societal needs that interface with business risks and opportunities. The need for reliable access to a sufficient quantity of affordable and nutritious food is a core consumer and social need. It is equally an opportunity to drive the delivery of a more efficient and competitive business.

Food security is a complex issue which can be impacted by politics, economics and climate change. Whether in buying locally, supporting small suppliers, sourcing sustainable products, helping consumers make healthy food choices, working towards carbon reduction or creating food gardens, our sustainability efforts ultimately aim towards a more food secure society and a more efficient business.

REDUCING FOOD LOSS AND WASTE

“Food waste is an immense problem globally as well as in South Africa. It is estimated that ten million tonnes of food is wasted each year in South Africa, a country in which millions of people still go hungry. For this reason, we’ve committed to reducing the amount of food that we waste by 20% by 2020, as we continue to work toward the CGF commitment of halving food waste by 2025.”

GARETH ACKERMAN, CHAIRMAN PICK N PAY
OUR ACTIONS

In July 2015, Pick n Pay announced a broad campaign aimed at combating waste, including reductions in energy and carbon and food waste, while increasing the number of jobs created.

Pick n Pay’s ‘War on Waste’ is a set of stretch goals that will deliver significant shifts by 2020. We have developed a comprehensive three tiered waste reduction strategy. The strategy is centered on the following three focus areas:

1. Prevention of waste being created

In terms of prevention, our objective is to ensure that our in-store processes are efficient and effective. Reducing food wastage at store level involves accurate demand planning, increased focus on maintaining the cold chain, improved product layout in stores, and selling products close to sell-by date at a reduced price.

2. Supporting communities in need through food donation

Pick n Pay is committed to ensure that any food that is still safe for human consumption is distributed to those in need. Pick n Pay is Food Forward SA’s largest retail partner in South Africa. Over the past financial year, we donated more than 2,000 tonnes of excess food to the organisation, which was used to create more than 20,000 meals every day.

3. Diversion from landfill

We are committed to reducing the amount of excess food that is not fit for donation being sent to landfill. To this end, rather than for example only sending excess food to an Anaerobic Digestion Plant, we set up a cross-sectorial partnership to develop a composting project, which can process up to 4 tonnes of food waste every day. Food waste is rich in energy and nutrients that can be used to produce high quality vermi-compost – and ultimately, wholesome fresh food.

The ambitious composting project has taken five years to develop and is based on three hectares in Philippi, Cape Town. Food waste from Pick n Pay is converted through in-vessel composting as well as vermi-composting. High quality organic compost products will be ready for Pick n Pay to sell in the second half of 2017. A quarter of a hectare of greenhouses has been established on site for seedling and vegetable production, as part of the PEDI Urban Agriculture Academy. Full-scale crop production on the farming area is expected in August 2017 and these crops will also be sold in Pick n Pay stores.

The model enables PEDI to provide training to young, aspiring farmers, to promote small sustainable commercial farmers, business entrepreneurship and job creation. A further programme will aim to ensure that those trained, in turn transfer their skills. Our aim is to achieve our 20% food waste diversion target through this three-tiered strategic framework. Achieving our food waste target would mean that approximately 4 000 tonnes of food waste is diverted from landfill every year.

OUR RESULTS

In a developing country where large scale infrastructural solutions such as AD plants are not readily available and landfill costs are still so low they deter investment in newer waste disposal technologies, finding alternative financially viable solutions to sending excess food to landfill is very challenging.

This multi million-rand investment in an urban agricultural precinct is set to not only reduce the amount of excess food Pick n Pay sends to landfill, it will also provide an economic boost to the Philippi farming community in Cape Town. The investment has only been possible due to the developed of long-term partnerships between retail, local and national government, an NGO representing the local community and a waste disposal company and highlights the growing importance and potential of developing and using cross sectorial partnerships, to address many societal issues.

KEY POINTS

- Compost made from our excess food is used on site to both grow produce and bagged for resale.
- Pick n Pay is converting its excess food into a valuable resource that can be resold in our stores, while creating employment in an impoverished community
OUR POSITION

Food waste has long been on our agenda at Sainsbury’s. No business wants to see waste because not only does it mean that food isn’t being put to its best use, but it doesn’t make commercial sense either. Our approach is twofold: firstly to cut down on waste, and secondly to ensure any surplus that does occur is put to good use. As such, we’ve been working for nearly two decades to redistribute surplus food from our operations to charities across the UK.

Whilst reducing our own food waste has long been a priority, as of 2015 we also set out to help our customers do the same. We regularly consult with customers to find the issues important to them, and recently reducing domestic food waste has become a priority. Not only is it costing customers money but – given that households account for nearly half of all UK food waste – we know it’s an important area to tackle if we’re going to meet targets such as those laid out by Courtauld 2025.
OUR ACTIONS

We've taken various steps to cut operational waste, which collectively are having a big impact. They include working collaboratively with suppliers, enabling us to prolong shelf life by speeding up ‘farm to fork’ process, and tailoring our distribution process to better suit individual stores. Elsewhere we've established waste targets across all areas of the business to ensure that all colleagues know the role they play.

As a co-founder of FareShare in 1994, we've redistributed surplus from our supply chain for over two decades. We expanded this to stores in 1998, building up a network of local charity partners that can collect surplus items. To encourage new partnerships and ensure existing relationships are sustainable in the long-term, we now recommend a flexible approach tailored to each local charity partner, based on strong communication to best understand their needs. In short, we’re putting the focus on getting food to the charities rather than requiring them to report back on what they’ve received, as we know that it makes it much easier for charities. This helps us distribute even more surplus to good causes.

We've also taken big steps to help customers cut their food waste, including the introduction of Waste less, Save more; a £10 million plan to cut domestic food waste. Beginning with a 12 month trial in the town of Swadlincote, South Derbyshire, we’re running a variety of trials to establish which have the best impact on cutting waste. They include technology like smart fridges and kitchen gadgets, through to community engagement and work with local schools. To establish a baseline we worked with WRAP ahead of the trial, who ran a compositional analysis from a sample of the population. Following the trial we’ll roll out successful tactics across the UK, while also making the results public so they can be used as a blueprint for others. Outside of Waste less, Save more, we were also the first retailer to remove multi-buy offers, replacing them with consistently low prices to help our customers buy only what they need.

OUR RESULTS

We’ve continued to see good results in reducing operational food waste, with our latest figures showing a 9.4% reduction year on year. What’s more by cutting waste in the business, while also on improving our distribution of surplus to charity, we’ve been able to meet a commitment to send zero operational waste to landfill since 2013.

As a result of our charity-focused approach, along with the investment in a dedicated team, we’ve been able to grow our number of partnerships by more than 460% since October 2015 alone, with around 1,100 partnerships allowing for local charities to collect surplus items. It’s our aim that by 2020 all our stores will have a partner, and we’ll continue to work closely with charities to ensure the programme’s as beneficial for them as possible.

Though Waste less, Save more is still in the trial phase, we've already seen promising results. The audit of the first local school involved showed a reduction in food waste of 37%, while elsewhere the trial of food sharing app, Olio, has already seen more than 2,000 items successfully shared between local households. Meanwhile, our trial of fridge thermometers proved so successful that we’ve already rolled out the initiative nationwide, giving away 1 million thermometers to customers.

KEY FIGURES

- 9.4% reduction in operational food waste year on year
- £10m invested to help customers cut their own food waste
- Over 1,080 charity partnerships to redistribute surplus food from stores
- Co-founder of FareShare, working to distribute surplus food since 1994
- Separate system from back of store to divert surplus bread to animal feed
In meeting the challenges the world faces, there is no room for food waste. As a company, we are passionately focused on helping to create a world where people have better access to a safe, plentiful food supply and less food is wasted.

— KARL DEILY, SEALED AIR PRESIDENT OF FOOD CARE

OUR POSITION

As a leader in the food packaging industry, we recognise our responsibility in influencing food waste reduction for the future of our planet. Our packaging helps protect the industry’s investment to grow, process, and transport food products from farm to fork.

It’s estimated that 1 out of every 3 calories that is produced for human consumption is wasted—enough to feed three billion people. We’re motivated to change this story. Our employees are resolute in combining knowledge and advances in technology and science to reduce food waste and impact challenges like climate change and food security.

We know that in order to tackle food loss and food waste, it is critical that processors, retailers, and consumers work together. That’s why we not only set ambitious sustainability goals as a company, but we also help our customers meet their own sustainability commitments. By doing so, we can identify waste reduction opportunities and enhance value at every step in the supply chain.
OUR ACTIONS

We are working to address the challenge of food waste with a focus on:

Collaboration: We are tackling food waste through collaboration in global communities such as our collaboration with World Wildlife Fund (WWF) to study and recommend solutions to decrease food waste in the poultry supply chain in China. This project is working to curb waste in the poultry supply chain by defining and recommending global best practices for production, packaging, storing, and retail distribution of fresh poultry products across China.

Innovation: We know that waste comes in many forms. It’s not just what is bought or consumed, but the resources used to produce it and deliver it to the table. From new packaging designs that minimise transportation and warehouse demands, to new food processing and packaging technologies that leverage knowledge-based systems to reduce food waste, we look at the impact to the entire carbon footprint. Our revolutionary vacuum-packaging method has forever changed the availability and quality of food around the world. More than 75 years ago, Sealed Air pioneered portion-control packaging, putting control in the hands of butchers, chefs and consumers.

Today, we continue to drive innovation to reduce food waste and improve distribution efficiency. Innovations like Darfresh® on Tray, a vacuum skin package for meat, poultry and fish, can dramatically extend shelf life from days to weeks while significantly reducing scrap going to landfills.

Education: Changing consumer behaviour is a critical step to taking action against food waste. Our Food for Thought programme focuses on educating our more than 23,000 employees who serve customers in 169 countries about ways to prevent food waste. Educating processors, retailers and consumers about the benefits of packaging helps all participants in the supply chain take action to reduce food waste. New packaging designs with clear date labeling, about proper food storage and food safety provide consumer education that further reduces waste in households.

OUR RESULTS

There are unlimited opportunities to add value, reduce food waste and preserve resources when we work together. Sealed Air’s 2020 Sustainability Goals aim to create shared value for our company, our customers, our suppliers, investors and communities.

Sustainability is at the heart of everything we do, and it begins within our own operations. As we continue working to address food waste and food loss, we are mindful of our company’s impact in the communities we operate and serve.

Sealed Air is making progress on our ambitious 2020 Sustainability Goals to reduce energy, water and greenhouse gas intensity by 25% each and divert 100% of landfill waste. In 2015, Sealed Air made progress toward those goals by achieving:

- 3.8% reduction in energy intensity,
- 14.3% reduction in greenhouse gases, and
- 71.6% diversion of landfill waste.

As a result of our efforts to reduce greenhouse gas emissions, we were once again named to CDP’s Climate A List, an honour achieved by only 9% of companies.

In 2050, there will be 2 billion more people to feed. We’re committed to helping our customers connect farmers and producers to consumers with safe, nutritious food products and making the world a safer and healthier environment for a growing global population.

KEY FIGURES

- In research conducted by Sealed Air, reducing food waste was cited as the top concern by retail respondents in these regions with 69% of U.S. retailers, 76% of Australian and New Zealand retailers and a full 99% of Latin American retailers confirming its importance (ratings of “extremely important” varied by region).
- When implemented with a national food retailer, packaging technology, Sealed Air’s Darfresh on Tray extended the shelf life of fresh red meat and resulted in more than 350,000 kg reduction of food and package waste, 8 million kg reduction of CO2 emissions and $1 million increase in operational efficiency with a total annual value of $19 million.
OUR POSITION

Reducing food waste is good for business and good for the environment which is why S Group started the journey of more systematic food waste reduction in 2014 and ended up setting a public target for food waste reduction for 2020.

In two years, the relative food loss and waste has decreased by nine percent. Nowadays S Group grocery stores are selling around 50 million items with reduced prices in the evenings annually which also contributes to a lower rate for food loss. Leftover food is also being donated to 400 charity partners in Finland who distribute the food to those in need.
**OUR ACTIONS**

In S Group’s grocery stores, food loss is managed by means of systematic operations and cooperation – throughout the supply chain. Loss is managed through systematic management of orders, deliveries, transports and inventories. This ensures the freshness of products and just-in-time, synchronised supplementing orders as well as deliveries to stores. Good packaging design also plays a significant role in reducing food waste. Packaging protects products, and the quality of the products must remain good throughout the chain, despite long transportation distances and handling in warehouses and stores.

The stores have an important role in minimising loss. Daily activities include receipt inspections of goods arriving at the store, shelving, verification of the freshness and date labels of products, as well as marking products reaching their ‘Sell by’ date with discount stickers – both -30 % and -60 % which are used towards the last few opening hours of the day. In 2015, S Group stores implemented a special tool to better monitor loss at the store and the causes of loss. Work carried out at the warehouse also contributes to the minimisation of loss. When goods are delivered from the warehouse to the store on time, the store will have more time to sell them. With these measures, it has been possible to reduce losses generated in stores. In 2016, the ratio of food loss to food sales was 1.63 per cent in S Group’s grocery stores. The corresponding figure was 1.67 per cent in 2015 and 1.79 per cent in 2014. Thus, food loss is a declining trend, slowly but surely. The reported percentage also includes food items donated to charity through cooperation partners.

**OUR RESULTS**

In 2015, S Group set the target to reduce food waste from its own operations by 15% by 2020 from the 2014 baseline. In 2016, the ratio of food wastage to food sales was 1.63% in S Group’s grocery stores. The corresponding figure was 1.79% in 2014. Thus, food loss is a declining trend and slowly but surely moving towards the target with 9% reduction already achieved. The reported percentage also includes food items donated to charity through cooperation partners. At the end of 2016, S Group’s stores had a total of nearly 400 cooperation partners specialised in food aid, which receive donations directly from stores or S Group’s logistics centres.

S Group customers have received the products with reduced prices due to closing “Sell by” dates well. In some stores the customers are even expecting the products to go on sale in the evening. Reduced prices together with optimised ordering and warehousing operations have resulted in overall food waste reductions up to 45% at some individual stores.

**KEY FIGURES**

- Group has set a target to reduce food loss from own operations by 15% by 2020 from 2014 baseline
- At the end of 2016, food loss reduction was 9%
- S Group collaborates with 400 charity partners in donating food to those in need
- No food goes to landfill from S Group – remaining food waste is used for bioethanol or biogas production or composted
REDUCING FOOD LOSS AND WASTE

"We’re thinking boldly about how we can leverage our size and scale to address global problems, including reducing food waste. We’re striving to eliminate waste by donating food to local communities, enhancing store data and encouraging our teams and guests to join our efforts.

BRIAN CORNELL, BOARD CHAIRMAN AND CHIEF EXECUTIVE OFFICER

OUR POSITION

At Target, we are focused on leveraging our size, scale and reach to positively impact the communities in which we serve and operate. We know that in the U.S., 40% of food produced goes uneaten, and reducing food waste by 15% could feed 25 million people every year.

In 2015, Target made a commitment to divert 70% of retail waste from landfills by 2020. In 2016, we surpassed the goal by diverting 72.3% of our retail waste, and our progress in reducing food waste contributed to these efforts. We are currently evaluating our next diversion goal, which will be more aggressive and aim to contribute to a waste-free world.

Historically, our Waste Minimization team performs Waste Stream audits to understand what is being sent to landfills and sets annual diversion targets. Target uses these audits and other data to raise awareness and drive improvements through donations, organics, recycling and trash programs – including developing analytics, improving processes and resources and introducing innovations to drive execution and awareness. We continue to audit locations on an ongoing basis to measure progress in line with our waste minimization goals.
OUR ACTIONS

In 2016, Target exceeded our goal to divert 70% of retail waste, including food waste, from landfills through reuse or recycle programs by 2020. This achievement was due to Target’s Waste Minimization team’s efforts in managing the donation, organics, recycling and trash programs for U.S. headquarters, distribution centers and Target store properties.

Organics: At the end of 2016, there were 31 stores with an organics recycling program in place. In 2017, Target launched an organics program to stores and distribution centers in California. Once this rollout is complete, it will bring the total number of participating locations to more than 300, with more to come as we expand the program to other properties. Program accomplishments include RFID tracking – helping us understand our waste stream on a store-by-store level – and a program that does not require de-packaging at the store level.

Food Donations: In 2016, Target donated 61.8 million pounds of food to Feeding America. This not only kept food out of landfills, but also resulted in 51.5 million meals donated to those in need. In 2017, the Waste Minimization team provided donation reporting at the store level to drive stronger participation, and is planning to expand the scope of donatable items. Program accomplishments include a donation application pilot that allows stores’ team members to mark donatable items out of stock and provides real-time, store-level tracking.

Store-Level Reporting: In 2017, the Waste Minimization team introduced the RRR (Reduce, Reuse, Recycle) data report and analysis for our field locations. This report gives store-level visibility to donation volumes and trash expense and provides a holistic picture of where we can drive improvements and impact.

Waste Innovations: The majority of Target store compactors are monitored. This monitor gives visibility to the status of the compactor, PSI settings, days between services, full percentages, previous haul weights and the current number of cycles. In 2017, the Compactor Monitor webclip app was introduced to all Property Management stores’ team members and field leaders. Having visibility to the Compactor Monitor Portal equips the team with asset-performance visibility.

The Waste Minimization team continues to analyze data to support our Organics and Donations programs. This includes pounds of food donated to Feeding America and vendor-provided data on Organics recycling. The team also conducts on-site visits, engages with headquarters, distribution centers and stores’ team members, and conducts waste stream audits every one to two years to track an estimated percentage of food waste in our compactor load. Their hands-on efforts support our improvements learnings across the chain.

OUR RESULTS

Partnering with our national food charities and local disaster or power outage. For example, in 2016, massive floods hit Louisiana. Knowing that this would close stores in the impacted area as well as damage perishables, team members took immediate action and donated more than $100,000 worth of food to food banks across South Louisiana.

We are moving forward in our management and reporting of food waste focused on prevention, including partnering with World Wildlife Fund (WWF) to address issues of food waste through measurement, setting ambitious goals and developing pilot programs aimed at diverting waste from landfill.

KEY FIGURES

- Target committed to diverting 70% of retail waste from landfills by 2020. In 2016, we surpassed the goal by diverting 72.3% of our retail waste.
- In 2016, Target donated 61.8 million pounds of food to Feeding America. This not only kept food out of landfills, but also resulted in 51.5 million meals donated to those in need.
- At the end of 2016, there were 31 Target stores with an organics recycling program in place. In 2017, we launched an organics program to stores and distribution centers in California. Once this rollout is complete, it will bring the total number of participating locations (stores and distribution centers) to more than 300, with more to come as we expand the program to other properties throughout the chain.
OUR POSITION

In 2013 Tesco became the first UK retail company to publish its waste food data.

Publishing our data has been instrumental in showing where we need to focus our efforts. Once we highlighted the problem areas we knew where to act. We think it’s incredibly important for every company in the food chain to be clear about waste within their own operations so we can find ways of reducing waste together.

Tackling food waste is important to Tesco for four big reasons. First and foremost, our customers care about it. Research by the UK Waste Reduction Action Programme (WRAP) suggests that the average British family with children throws away £700 worth of food each year.

Second, food waste adds significant costs to our business, so it is important that we drive down waste in our own operations.

Third, at a time when many people are suffering from food poverty it is unacceptable for any business to be wasting food unnecessarily.

Finally, food waste puts unnecessary pressure on land and natural resources, and results in additional greenhouse gas emissions. Our actions can reduce our environmental impact.

"Our Target is that no food safe for human consumption will go to waste in the UK Tesco operation."

DAVE LEWIS, GROUP CEO, TESCO

REDUCING FOOD LOSS AND WASTE
Our Actions

We have a responsibility to fight food waste in our operations and a shared responsibility to do this from farm to fork. We’re making lots of changes, working with suppliers, helping customers to reduce food waste and helping feed people in need by donating surplus food.

Having identified the problem areas, we’re working to redistribute surplus food through Community Food Connection. In 2016 we launched the programme in partnership with the charity FareShare and social entrepreneurs FoodCloud, which links Tesco stores to local charities and community groups such as to The Bethel Christian Centre in Dagenham which serves over a hundred hot meals a week to people in need using surplus food.

Our stores use the FareShare FoodCloud technology to let groups know how much surplus food they expect to have for donation at the end of the day. Charities respond to a text message to confirm they will collect the food.

In March 2016 we broadened our specifications and introduced our Perfectly Imperfect range which includes apples, pears, potatoes, parsnips, cucumbers, courgettes, strawberries and frozen mixed berries. This allows us to take more of the crop from our suppliers and reduce waste in the supply chain. For example, we are now able to utilise up to 95% of our suppliers’ strawberries and 97% of our British apple growers’ crops.

We have also donated 18 million meals directly to FareShare through surplus food in our distribution centres. We have redistributed over 38 million meals in total.

Our other international markets share the same ambition of no food safe for human consumption going to waste and food redistribution programmes are now in all stores in the Republic of Ireland and all hypermarkets in Bangkok and Malaysia. In Central Europe over 600 stores (out of a total 961) are already donating surplus food and all remaining stores will be donating by 2020.

Our Perfectly Imperfect range has allowed us to take more of the crop from our suppliers and reduce waste in the supply chain. We have also introduced Perfectly Imperfect in our Central European markets which has helped save over 6,000 tonnes of wonky fruit and vegetable going to waste.

In 2014 we stopped ‘buy one get one free’ promotions on all fruit and vegetables.

More recently, we have made a series of changes to give extra days of freshness to our customers. Whether it’s removing a packing stage in the journey from tree to table for citrus fruit or changing the way we package the final product altogether, the end result is helping customers to reduce food waste in the home.

In 2013 we removed ‘Display Until’ and moving to a single date code (either ‘Best Before’ or ‘Use By’) across fresh produce, meat and dairy. In May 2018 we removed ‘Best Before’ dates from nearly 69 fruit and vegetable lines to help customer reduce food waste in the home.

By continuing to introduce and improve initiatives to reduce food waste in our operations we are in line with the CGF commitment of its 400 retailer and manufacturer members to halve food waste by 2025.

Our Results

Community Food Connection has been rolled out to all Tesco stores. We are working with around 7,000 charity partners and have donated the equivalent of 20 million meals to people in need. Furthermore, as the platform is available for others to use and smart phone compatible we believe this is a solution that can be used by the whole industry with the potential to change the face of food redistribution.

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Colleagues in our African Hub highlighted that our specifications for fine beans were resulting in waste on farms in Kenya. As a result we have widened our specification and stopped trimming the beans, meaning on average 15% of the bean will no longer go to waste.
OUR POSITION

As one of the largest food companies in the world, we believe we have a responsibility to address food loss and waste across our operations. Our global reach also means we have the scale and network to collaborate with others to make systemic interventions to address the food loss and waste challenge, which contributes to the double burden of climate change and food insecurity.

At Unilever, we have a clear purpose – to make sustainable living commonplace. The Unilever Sustainable Living Plan sets out our ambition to grow our business whilst reducing our environmental footprint and increasing our positive social impact. Launched in 2010, the Plan sets out three key pillars including improving health and wellbeing, reducing our environmental impact and enhancing livelihoods. Within each pillar are several ambitious targets spanning our entire value chain; from farm to fork.

As part of our environmental pillar, we have a goal to halve the environmental footprint in the making and use of our products by 2020. More specifically, we want to halve the waste associated with the disposal of our products, including that of our food brands.

REDUCING FOOD LOSS AND WASTE

“With 1 in 9 people across the world going to bed hungry and a third of all food produced wasted, we need to take action to reduce food loss and waste across the value chain. Not only will this help tackle global hunger, it will also contribute to the fight against climate change.”

PAUL POLMAN, CHIEF EXECUTIVE OFFICER, UNILEVER
OUR ACTIONS

What we’re doing across our value chain:
We work to deliver food waste initiatives which are locally relevant to the countries in which we operate, this includes everything from establishing anaerobic digesters in our factories, inspiring our employees to take action or redistributing any surplus food to address food poverty.

Our approach to tackling food waste spans all stages in our value chain from farmers to consumers:

• **Supporting our farmers:** We’ve been supporting our farmers for the past 15 years to take action with our Sustainable Agriculture Code which urges suppliers to minimise waste by using the principles of ‘reduce, reuse, recycle’. To ensure we monitor progress, our agricultural suppliers are expected to assess their operations at every crop cycle. We then check these self-assessments through an independent verifier.

• **Collaborating with our suppliers and retail customers:** Together with our suppliers and retail customers we look for opportunities to partner and collaborate on food waste initiatives to maximise our reach.

• **Minimising waste in manufacturing:** We are embedding a ‘zero waste mind-set’ across our manufacturing sites. In January 2015, we sent zero waste to landfill across all of our factory network, and by the end of 2015 we had expanded this achievement to an additional 600 sites, including warehouses, distribution centres and offices.

• **Inspiring our consumers:** We believe a critical part of the food loss solution lies in preventing avoidable food waste at a household level. This is why we are committed to helping our consumers value their food more and make the most of their leftovers. We are delivering this through our brands and with strategic partnerships. For instance, this year in the UK, we have launched a Joint Ambition for a Zero Food Waste Britain. A long-term, nationwide campaign aimed at raising awareness of food waste at a household level.

Driving transformational change:
To help us meet our Sustainable Living Plan targets and progress towards wider systemic change on food waste, we have committed to The Consumer Goods Forum resolution to halve food waste in our operations by 2025. In addition, our CEO, Paul Polman is one of the Champions of Champions 12.3 which is a global coalition of leaders from governments, businesses, international organisations, research institutions, and civil society who are looking to inspire and mobilise action towards achieving target 12.3 of the Sustainable Development Goals.

OUR RESULTS

Partnering to prevent food poverty
In 2014, we signed a three-year partnership with the European Federation of Food Banks to tackle food waste and hunger by enhancing in-kind donations across Europe and providing volunteering opportunities to Unilever employees. In 2015, we expanded our efforts across all our markets by partnering with the Global Food Banking Network. By the end of the year, over 4 million people benefitted from our food bank partnerships across the world.

**Unilever Food Solutions**

Through UK foodservice business, Unilever Food Solutions (UFS), we are helping UK chefs and caterers to cut their food waste and see how much money they can save in the process. In partnership with the UK facilities services provider, ISS Food & Hospitality (F&H), UFS launched the Wise Up on Waste app in 2013. This is an industry-first mobile app that allows chefs to track food waste. The app highlights the average volume of each type of waste (spoilage, preparation or customer plate waste) generated throughout the day. It gives week-by-week comparisons to help identify the indicative cost savings for a business. It also contains case study videos, waste action tips, recipes and spoilage prevention advice. By the end of 2015, the UFS UK team supported ISS to reduce waste by over 10 per cent and cut over 16 tonnes of food waste. Last year, the app was rolled out in Belgium, France, the Netherlands, UK, Spain and Australia and has been used over 15,000 times.

**Kissan ketchup: Preventing food waste whilst protecting smallholder farmers**

India businesswoman Manisha Dhatrak set up a processing plant to stop local crops being wasted. The smallholder farmers she works with provide 100% of the tomatoes we use to make our Kissan ketchup.

Three years ago, Manisha noticed farmers in Nasik, India, throwing away crops by the side of the road. While these rotted, the same produce was being imported. So she set up a plant to process the local crops and approached Unilever. Manisha sources from many smallholder farmers, training them – with our help – in sustainable agriculture practices to increase their yields and improve their crop. Her company, Varun Agro, is now one of our key strategic suppliers.

The programme works with 3,000 farmers, giving them access to ongoing contracts, better quality materials, training and tools such as drip irrigation. This helps them significantly increase their yields.

The initiative contributes to our USLP targets to improve the livelihoods of smallholder farmers, expanding opportunities for women, while at the same time providing a reliable supply of high-quality, sustainably sourced ingredients for our ketchup production lines.
REDUCING FOOD LOSS AND WASTE

As the world’s largest grocer, we are concerned with reducing food waste from farm to fork. We have made significant progress in our own operations and have broadened our efforts to working with suppliers and customers to reduce food waste at every stage of the supply chain.

DOUG MCMILLON, PRESIDENT & CEO, WAL-MART STORES, INC.

OUR POSITION

According to the World Economic Forum the global population will reach 9.5 billion people by 2050, which will increase global demand for food by 60 percent. To meet this demand in a sustainable way, the world will require substantial improvements in food production and distribution, as well as significant reductions in food waste. So in addition to working within our own operations to sell affordable, sustainable and healthier food and eliminate waste, over the last decade, Walmart has worked upstream with suppliers to prevent food waste from occurring in the first place and downstream with customers to help them maximise the value of the food they buy. More than ever, we see that food waste creates unnecessary costs within our own operations and poses a risk to the world’s ability to feed a growing global population. Therefore, we continue to pursue our food waste reduction targets and address this problem in a systemic way.
OUR ACTIONS

We measure food waste prevention through our internal systems as a per cent of food unsold versus sales in each food department. In order to understand the amount of the food waste going to the landfill we perform waste studies in the US and globally.

The Walmart approach is to prevent food from being wasted at every step of our operations through optimised forecasting and ordering, improved product packaging and enhancements in the process of food handling in our distribution centres, in transit and at store level.

When food goes unpurchased by consumers, Walmart works to maximise its use and get food that is still edible to people and places that need it. Through our food donation programme in US, food banks and agencies pick-up food that can’t be sold from Walmart stores, Sam’s Clubs and distribution centres. Those organisations then distribute this recovered food to people in need of food assistance.

If the food is no longer edible, we redirect it according to the US Environmental Protection Agency’s Food Recovery Hierarchy by turning it into animal feed, compost it or recovering it as energy through anaerobic digestion. In 2008, estimating that food accounted for around 35% of our total compactor waste in US, we began looking for a recycling solution. At that time, food waste recycling infrastructure didn’t exist across the US. Walmart recognised this was an opportunity to encourage development of a recycling network that could help drive food waste recycling for our own sustainability initiatives, while also providing the catalyst for other businesses.

In an effort to reduce food waste at the customer level, in 2015 both the Walmart and Sam’s U.S. private brand teams asked suppliers to start converting to a “Best If Used By” date label terminology. As of February 2016, 92 per cent of Walmart qualifying private brand products have adopted this new label, or have started to transition to its use.

Another example of food waste prevention effort in the US was a new egg crate idea in 2015. When our team worked with suppliers to move eggs to reusable plastic containers (RPCs) from cardboard containers, damage rates decreased, saving 39 million eggs and 500,000 labor hours last year alone.

In 2015, Walmart US donated more than 600 million pounds of food to organisations that distribute it to people in need in the United States.

OUR RESULTS

We have seen results both in the US and in many of our international markets.

In our emerging market stores – located in Argentina, Brazil, Central America, Chile and Mexico – we have reported a 15.3 percent of food waste reduction in 2015 compared to the 2009 baseline. For this specific goal we limited categories to meat, produce and bakery and defined food waste as food that wasn’t sold to our customers or donated for human consumption.

Our ASDA business in the UK offered customers tips for choosing “unsightly” produce and better value for their money through discounted prices, as well as their own bags and merchandising sections called “Beautiful on the Inside”. This campaign helped ASDA reduce unnecessary food waste and support farmers through selling almost 1,000 tonnes of perfectly good produce.

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KEY FIGURES

- Since 2006, Walmart stores, Sam’s clubs and distribution centres in US have donated 3 billion pounds of food to organisations that distribute it to people in need in the US, which is equivalent to 2.5 billion meals
- Since 2008, Walmart locations in US sent the equivalent of over 25,000 semi-truckloads of inedible food to processed animal feed, commercial composting and anaerobic digestion
- Our ASDA business in the UK kept its food throwaway rate at the very low level of less than 1 percent in the last five years
At Woolworths, we are committed to working towards zero food waste to landfill. To help meet this commitment, while also supporting the growing need for hunger relief across Australia, we are proud to partner with leading food relief organisations to ensure the food that cannot be sold in our Supermarkets goes to feeding people in need.

**OUR POSITION**

Food waste costs Australian households more than $8 billion each year, and Australians generate 361 kilograms of food waste annually per person. The demand for food relief is rising, with 1 in 6 Australians reporting experiencing it at least once in the last 12 months and over a quarter of those facing it regularly. Reducing food waste by increasing food rescue not only reduces environmental impacts but supports valuable community support networks.

Woolworths is committed to reducing Australia’s food waste. As an important issue to our customers, we are taking a leadership position, increasing food rescue, supporting our customers to be food savers and developing an end-to-end waste strategy across the whole food value chain. Since the majority of food waste is generated outside of the retail sector, Woolworths works to influence food waste across growers, supply chain, retail and customers. We are part of the Australian Government’s Roundtable on Food Waste, developing an Australian food waste target.
OUR ACTIONS

Our food waste reduction solutions are supported by successful partnerships with external parties such as national food charities and local groups that turn the food into meals for those in need, including OzHarvest and FoodBank Australia. We have renewed this commitment through to 2020 and have launched a new partnership with OzHarvest, to further develop opportunities to reduce waste.

An estimated 25% of edible fresh fruit and vegetables are thrown away, due to visual imperfection or cosmetic damage, every year in Australia. Supermarkets set high quality standards for produce as we know that is what our customers prefer, but our national roll-out of ‘The Odd Bunch’ programme challenges that trend. Through the programme, we offer produce that doesn’t look perfect, but still tastes great, is nutritionally the same and comes at a discounted price. We moved quickly on this programme, getting the offer into all stores with specific labelling to engage our customers with the offer.

If the food in our Supermarkets cannot be sold, Woolworths is committed to directing food waste to other forms of beneficial reuse. Over 750 of our stores partner with farmers to donate food waste for animal feed, and over 580 stores use commercial waste management services diverting from landfill using commercial composting and anaerobic digestion technologies.

We encourage our stores to separate organic waste from landfill. We have designed our Hearts and Minds programme to educate employees about the why, what and how of separating organic and non-organic waste. All our stores now have colour-coded bins and display materials.

Measurement of food waste sources has been a crucial component in reducing food waste. We collect data on food rescued by our community partners, food donated to farmers, waste sent to commercial composting and anaerobic digestion facilities, and waste sent to landfill. This information is supplemented with waste audits at selected supermarkets to build up a comprehensive understanding of food waste.

OUR RESULTS

Partnering with our national food charities and local groups, our stores separate edible food for rescue for those in need. In FY16, we diverted 6.4 million meals to those in need, worth $3.2 million.

We reduce food loss through our end-to-end stock-loss initiative – Faster, Fresher Food. These initiatives to reduce shrink (loss) in store have generated savings of over $65 million and material reductions in food loss.

More than one third of shoppers purchase whatever produce is cheaper, regardless of marks or appearance. We take advantage of this to reduce our food waste by offering misshapen fruit and vegetables through our ‘The Odd Bunch’ initiative. We have sold more than 30 million kilogrammes of these fruit and vegetables, which would otherwise have been food waste.

Woolworths is committed to achieving zero food waste to landfill by increasing access to landfill diversion options for stores and encouraging stores to separate food waste into organics bins. At least one of these options is available to more than 90% of our Supermarkets, and will continue to expand this programme to cover more stores across the Group. We estimate that we have reduced our food waste to landfill by more than 60,000 tonnes in FY15.

KEY FIGURES

- Food rescue: 6.4M meals rescued, worth $3.2M
- Odd Bunch: In FY16, we sold more than 30 million kilogrammes of these fruit and vegetables, which would otherwise have been food waste
- Diversion from landfill: 60,000 tonnes of food waste diverted from landfill to food rescue, farmers, composting and anaerobic digestion
- Over 90% of our stores have programmes to divert food waste from landfill
OUR POSITION

Globally, food waste is a serious problem, causing loss of valuable nutrients and contributing to global greenhouse gas emissions. To support the UN Sustainable Development Goal 12.3 to cut global food waste in half by 2030, Ahold Delhaize recognizes our potential as retailers to drive new habits that produce less food waste and contribute to this goal.

We began measuring our total food waste in 2016, knowing that by measuring it we can then better prioritize the highest impact projects for reducing food waste.

OUR ACTIONS

We measure food waste quarterly at all brands, using the global Food Loss & Waste Protocol. This has enabled us to track company-wide progress towards our commitment to reduce our own food waste by 20% between 2016 and 2020.

We take a three-pronged approach to reducing food waste in our own operations, focusing on prevention, donation and recycling. To measure effectively, we have worked across our brands to report in tonnage, derived directly from product weight information, which was a change from previous waste measuring based on tonnes of waste hauled away from stores and warehouses. The most progress has been achieved when we are able to create detailed food waste reports per location (store or warehouse) and incentive the management to reduce food waste.
CHALLENGES

Shrink is a well-known metric in the retail industry, but ‘food waste’ as defined by the Food Loss & Waste Protocol (FLW) has not been historically measured. To implement a metric around food waste was therefore a big task. We used the FLW protocol to create the food waste measurement, counting food ‘shrink’ then subtracting any unsold food that is able to be redistributed to charities or as feedstock for new food products (such as stale bread being used as feedstock for beer). The processes for measuring food waste and accuracy of the data continues to improve across our brands as the data collection matures.

Another challenge was to shift focus from food waste recycling to food waste prevention. Earlier Ahold Delhaize targets focused on ‘zero waste’ – removing waste from landfill. Therefore, the organizational focus was on increasing food waste recycling programs, such as biogas, composting and feeding animals.

Today we work more on preventing food waste from becoming waste in the first place. We do this by improving our replenishment systems, enabling longer product shelf life by using innovative packaging, and continuing to strengthen food donation programs.

OUR RESULTS

At one of our U.S. brands, Hannaford, efforts to reduce food waste were highlighted in a study commissioned by the Rockefeller Foundation and the Initiative for a Competitive Inner City (ICIC). A sidebar titled “An Example of Food Retail Waste Reduction” features Hannaford’s award-winning food-waste reduction program and addresses its sustainability initiatives.

Hannaford was recognized by the U.S. Environmental Protection Agency for excellent performance in food waste reduction and in 2011 joined the Food Recovery Challenge and created a ‘Moving Towards Zero Waste’ pilot program, which aimed to eliminate food waste in several stores. The program reduced food waste by 30%, primarily by recycling and composting unsalvageable waste.

The success of the pilot led to the program’s implementation in all Hannaford stores, where efforts “increasingly focus on source reduction and donations of extra food to food banks and pantries. A Leadership Partner with Feeding America, Hannaford donated over 20 million pounds (over 9 million kilos) of food for hunger relief in 2015.

Further, Hannaford sends all of its damaged or expired food to a processing plant that uses anaerobic digestion to convert food waste into biogas, and thereby achieves complete elimination of food waste in 40 of its supermarkets in central and northern Maine.

Teams at Delhaize Belgium have excelled at preventing food from becoming waste by optimizing the use of automated warehouses to minimize the time between receipt and delivery of fresh products, adjusting the assortment in the stores and donating unsold food to charities – resulting in the lowest food waste per sales among all our brands. They recently celebrated 5 years of their fresh food donations program.

Two of our brands – Albert Heijn and Delhaize Belgium – recycle 100% of food waste through the various means available in each market. In 2017, we used the waste reduction model developed by the Environmental Protection Agency to estimate the impact of all of our food waste reduction activities on our greenhouse gas emissions. The model suggests we prevented approximately 224,000 tonnes of equivalent CO2 emissions, or 5% of our total emissions.

Using constant exchange rates our 2016 figure for tonnes of food waste per food sales is 5.36 t/MEUR, resulting in a 1% decrease in 2017.

We will continue to work with suppliers and partners on minimizing our food waste and support customers in ensuring sustainable consumption and work with our suppliers in building sustainable production patterns.
OUR POSITION

As a global food company, we believe we play a significant role in helping to end hunger and create sustainable food systems to feed a growing population. We recognize that a critical element of our work can support food security and help eradicate hunger by eliminating food waste from our value chain. That’s why we’ve committed to supporting U.N. SDG Goal #2 and U.N. SDG #12.3 and hold ourselves accountable through measuring continuous improvement.

OUR ACTIONS

We take a holistic approach for measuring and reducing Food Loss & Waste (FLW) across our entire value chain, starting at the farm and through to the consumer level. In 2016, we piloted the World Resource Institute (WRI) FLW standard reporting methodology. And we are one of the first companies to report against the WRI Food Loss & Waste Protocol, reporting global volumes by destination in our 2016/2017 Corporate Responsibility Report and Food Loss and Waste Methodology.

• Farming: We are working with partners to reduce pre and postharvest loss on farms to ensure that more of the food that is grown is consumed.

• Making our food: We measure food waste and loss in our facilities and implement solutions to eliminate food waste in our processes, capturing it when appropriate to feed people in need.

• Reaching out to consumers: We are working to standardize our food date labels and educate consumers if food is safe to consume, as well as delivering tips and packaging innovation to help them reduce food waste at home.

• Sharing with communities: Through our global signature cause platform, Breakfasts for Better Days™, we ensure our food goes to help those in need either due to natural disasters or chronic hunger in communities around the world.

MEASUREMENT
OUR CHALLENGES

Reducing and measuring pre- and postharvest loss is challenging. Our company’s direct suppliers are not growers; they are the millers and processors of crops. This means that Kellogg is typically operating one or two steps away from farmers and farm-level impacts. Therefore, we work to develop initiatives with our suppliers, which help farmers improve their agriculture practices to mitigate on farm crop loss. We have examples of training programs as well as agricultural and storage practice improvements in farm-level programs around the world.

OUR RESULTS

Kellogg food loss & waste inventory meets the FLW Standard reporting and accounting requirements. UESPA and USDA has recognized Kellogg as a 2030 Food Loss & Waste Champion.

• **Farming:** Through our Postharvest Loss Reduction Program, we are working with partners to help farmers reduce food loss through training on improved agriculture practices in India, Bangladesh, South Africa, Thailand, Philippines, and other countries.

• **Making our food:** We have extremely low amounts of food waste in our operations after several years of focus. In 2017, we achieved nearly 5% percent further reduction within Kellogg manufacturing operations.

• **Reaching out to consumers:** As part of date labels standardization efforts, we’ve made the change to “BEST if used by” on 50 percent of our packages.

• **Sharing with communities:** Through our global signature cause platform, Breakfasts for Better Days™, we provided nearly 570 million servings of food to people in 30 countries via donations to 38 foodbanks in 2017.

WHAT’S NEXT?

As a leading global food company, Kellogg is seeking to drive transformational change in addressing the worldwide issue of food security through our integrated commitments to nutrition, hunger relief and sustainability. Mitigating food loss and waste is a critical element that enables the creation of more sustainable food systems. While proud of our progress, we recognize there is still more work to be done. We will continue to focus on ways to effectively reduce food loss and waste across our value chain, while using our voice as a Champions 12.3 Food Loss and Waste Champion to work together towards helping to achieve the U.N. Sustainable Development Goals which address these issues, particularly #2 – zero hunger, #12.3 – Food Loss and Waste, and #17 – Partnerships.
OUR POSITION

At Danone we believe a healthy body needs healthy food, and healthy food needs a healthy planet. We simply can’t have one without the other.

30% of the food produced is not consumed, creating a key challenge for health, for the planet and for the economy. Danone committed to reduce its unrecovered food waste by 50% in 2025 (vs 2016). We achieved a 10.7% reduction between 2016 and 2017.

OUR ACTIONS

Danone quantifies food loss at all its production sites - excluding bottling plants for our Waters business, in accordance with the first international Food Loss and Waste (FLW) Protocol. These losses may involve finished products, raw materials and by-products (when not recovered for human food).

In 2012, Danone started tracking the total amount of waste generated in production facilities, as well as monitoring the recovery rate.

In 2015, Danone piloted a draft version of the FLW protocol in a range of business units to assess their maturity and capacity to collect relevant data in a timely manner.

In 2016, Danone set a first baseline assessing food waste in accordance with the FWL protocol, and extended tracking to downstream distribution whenever Danone is responsible for the final disposal of physical waste.

Credit: Danone Ecosystem Fund / Philippe Cap
OUR CHALLENGES

Our main challenges have been identifying our primary food waste streams and separating them from other material considered as waste. We started by conducting a full mapping of all waste categories generated in our factories and identified four main streams of food waste:

1. Food waste collected and sent to any destination through a waste management company (semi-finished/finished product, process losses, raw materials etc.)
2. Whey generated on site and sent to any destination
3. Food waste sent to drain/sewer with waste water to our waste water treatment plant (WWTP)
4. Food waste sent to drain/sewer with waste water without treatment and discharged in an external waste water treatment facility

Quantifying the fourth stream was the biggest challenge, as we could not track these amounts. Instead we estimated the organic load of the effluent discharged from all our production sites by measuring the chemical oxygen demand.

OUR RESULTS

Using the FLW Standard provided a common language to clearly describe the various materials and streams that might be considered “food waste." For example, we use the destinations as defined by the FLW Standard to clearly describe what we consider to be “non-recovery" (e.g. landfill) as compared to “indirect recovery” (e.g. anaerobic digestion) versus “direct recovery” (e.g. used to feed animals).

By measuring waste levels, we increased awareness of the impact of waste, sparking the first actions to reduce it. Understanding where the biggest sources of waste are, we set targeted actions to reduce them. Each local business unit creates an action plan to reduce waste within its operations. A central zero waste team then supports the execution and tracks the delivery.

This practice allows benchmarks between business units and with other companies, helping Danone to identify best practices and fostering cooperation between actors.

WHAT’S NEXT?

Measuring waste according to the protocol has helped Danone clarify where and how to increase our waste recovery, and accelerated our ambition to becoming Zero Waste to Landfill.

In 2018, our North American subsidiary created an ambitious partnership with Veolia, regarding all waste streams from the 15 North American manufacturing sites in the USA and Canada. A standardized digital reporting tool is helping to ensure full transparency, and track real time information, which will in turn improve performance and generate savings for the business unit. We are exploring opportunities to roll out this tool in new regions, such as Africa and CIS.
OUR POSITION

Vega is committed to providing consumers clean, plant-based nutrition and on-the-go convenience, with a strong empowerment program on nutrition. Being a part of the Danone North America family of brands allowed Vega to look outside of the brand’s own operations, and work with sister brands to develop new solutions to reuse residual materials.

OUR ACTIONS

With the launch of new Vega One® Organic All-In-One Shake, Vega and Earthbound Farm, both part of Danone North America, we saw an opportunity to work together to prevent greens from being wasted.

Earthbound Farm had very large surpluses of greens to sell within shelf life. Using them would guarantee Vega’s supply, while reducing Earthbound Farm’s waste, a win-win solution for both companies.

A key success factor was the collaboration and problem-solving process put in place between both sister companies. This allowed the swift identification of a model that would benefit both entities, diverting waste from one and creating added value for the other.
OUR CHALLENGES

The first challenge was linked to the drying process, and required investment in new space and equipment. We had to identify a high-quality drying facility located close to EarthBound Farm, in order to minimize shipping time. This was especially important because fresh greens need to remain within shelf life and quality specifications when the drying process begins.

The second challenge was to identify which specific greens would be suitable as a consistent supply. Teams worked together to review all types of greens and develop a firm ingredient listing. We had to match greens available in surplus to requirements for taste, color and vitamin content, consistent with Vega’s product promise.

OUR RESULTS

While this partnership is relatively recent, it is projected that about 400,000kg of baby greens will be diverted from waste in 2018, and used in the Vega One product line.

The partnership is also helping us reduce our CO2 footprint through local sourcing solutions. We are currently working to measure the CO2 savings related to this program.

WHAT’S NEXT?

Vega has been donating short-dated products to charities since 2013. This allows us to provide nutrient dense foods to people in need, and avoid generating unrecovered food waste. We are looking to step up partnerships to maximize our donations and achieve zero waste.
OUR POSITION

Danone committed to nourishing the planet and health. In 2016, we joined the Consumer Goods Forum (CGF) food waste resolution to contribute to the UN Sustainable Development Goal on Food Waste, by preventing waste and maximizing its recovery. We committed to reduce by 50% non-recovered food waste (in Kg/tons of sales) between 2016 and 2025.

Further to that, we see the reduction in waste and increased in recovery as a dual benefit, both for the environment and the organization.

OUR ACTIONS

Through analysis of our waste streams and benchmarking against business units globally, Danone South Africa identified areas to improve. We started with governance, building an internal Food Waste Steering Committee. The entity was also supported by the executive committee to drive identified projects.

Key Projects identified 2016 – 2018:

• Store Order Management: more collaboration and transparency with customers
• Using GPS: a global planning system, supporting integrated decision-making, anticipating scenarios 18 months ahead, taking all factors into account, including the financial impacts;
• Extension of Product shelf life without impact on quality or use, targeting lines with greatest waste contribution and % of volume sold;
• Commercial alignment in terms incentives and compliance: incentives for field teams based 50% on sales, 50% on the volume of returns;
• Waste disposal agreements with a service provider who seeks to first recover through recycling, anaerobic digestion and composting.

Key Success factors:

• Commitment from the management to the field staff level, with the support of the executive committee to align and engage all parties;
• Projects prioritized based on timing, stakes and impact;
• Clear roles and deliverables assigned to sales and supply chain leads.
OUR CHALLENGES

After the first internal analysis, we were able to source best practices from international business units and contacts. We then needed to test them, then learn and adapt them to local conditions. Upscaling from pilot to actual universe proved challenging specifically for Store Order Management, as some efficiencies where lost as scale increased.

During our 12-store pilot period, we micro-managed the stores, to ensure a controlled universe for analysis. As a result, we recorded a 40% average reduction in returns across these stores whilst maintaining sales out volumes and on shelf availability. When extending to 500 stores, we found that we could achieve about 25% reduction in returns due to general timing and store level complexities for the greater universe.

The mindset also changed, as the usual idea of pushing volume shifted to find a better balance between sales out and low returns levels.

OUR RESULTS

This integrated approach generated important improvements in the first year of the project, including savings and overall food waste reduction:

• 17% reduction of unrecovered food waste in 2017 vs. 2016 baseline

• 10 % Reduction in Trade Returns as % Volume Sold (2.6 % 2016 vs 2.36 % 2017)

• 24 % Reduction in overall finished goods waste

This success and the involvement of all the levels of the organization is also an opportunity to share the experience with others. Other African teams have started learning from this experience to see what could be replicated, as facing the similar challenges around waste management and reduction.

WHAT’S NEXT?

The project only started and will keep growing in terms of technicity and scope. The objective is then to extend the scope of the successful actions in order to deliver the following:

• Store order management extended to additional stores as well as further advancement on algorithms used for calculations

• Further extension of product shelf life targeting additional families as well, without impacting its quality

• Target for 2018 is to land on returns as % volume sold of 2.0 %, which would represent a 15 % improvement vs. the 2.36 % landing in 2017
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