Courtauld Commitment 3: Delivering action on waste
Introduction
Introduction

“The Courtauld Commitment 3 (CC3) has built upon WRAP’s previous work with the sector, providing motivation and a shared sense of purpose to prevent food being wasted and reduce the impacts of packaging. However, we recognise that there is more work to be done, particularly in reducing household food waste, and we will build on these solid foundations as we work with signatories to deliver the Courtauld Commitment 2025.”

Marcus Gover, Chief Executive, WRAP

“The Food and Drink Federation (FDF) is delighted to see that these results show that the food and drink industry has met or in some cases exceeded the targets to reduce the carbon impact of packaging and the quantity of supply chain waste. This is yet further evidence that voluntary initiatives based on collaborative working across supply chains can deliver positive benefits both for the environment and for business. Our recently launched Ambition 2025 reaffirms the industry’s commitment to whole supply chain approaches to improving resource efficiency and reducing waste, including household food waste. As a signatory to WRAP’s Courtauld Commitment 2025, part of our new Ambition will also include making a contribution to the new 20% food waste reduction target.”

Helen Munday, Director of Food Safety, Science & Sustainability and Chief Scientific Officer, Food and Drink Federation

“Retailers have worked hard with their suppliers and customers to tackle food and packaging waste. There is much more to be done, particularly focusing on cutting waste on farms and helping customers to save more food and money but after a decade of progress we’re confident Courtauld is the best way to meet the challenge.”

Andrew Opie, Director of Food and Sustainability, British Retail Consortium
Background to the Courtauld Commitment 3: Delivering action on waste

Why was the Courtauld Commitment 3 created?
Wasting food and drink is not only a waste of money and resources, but is also detrimental to the environment due to the associated carbon emissions that are generated:

- Approximately 10 million tonnes of food and drink are thrown out (post farm gate) in the UK every year with a value of £17 billion. Around 60% of this is avoidable and could have been consumed.

- In the UK, household food waste was estimated at 7 million tonnes in 2012 and valued at around £12.5 billion. This equates to around 20% of the weight of food and drink purchased\(^1\).

- Three in five of us say we throw away hardly any food, but on average we threw a quarter of a tonne of food into the bin in each home in 2015. That’s equivalent to 500 meals, or more than one meal a day. Half of the food we waste is thrown away because we don’t use it in time, and another third because we cook, prepare or serve too much.

- The proportion of food that ends up as waste in the supply chain is much lower than in households (less than 5% of production/sales), but still amounts to 2 million tonnes, with a value of around £2 billion a year. The main causes of retail food waste relate to product damage or product that is ‘out of code’. In manufacturing there are a number of potential causes, such as mismatches between production and forecasts/orders, non-conformity with specifications and a lack of awareness of the potential to redistribute food surplus or send suitable material for animal feed production.

- Every year around 11.4 million tonnes of packaging is used in the UK\(^2\). About 5 million tonnes is household related and, if it isn’t reused or recycled, can end up being disposed of via landfill or incineration.

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Working in partnership with grocery retailers, brands and suppliers as well as governments, over the past three years, WRAP developed and delivered a collaborative solution to reduce waste through the Courtauld Commitment 3 (CC3). It was launched in May 2013, building upon the success of the previous Commitments3, with ambitious targets to further reduce the weight and carbon impact of household food waste, grocery product and packaging waste, both in the home and the UK grocery sector.

Over 50 grocery retailers and food and drink manufacturers signed up to CC3, which completed at the end of 2015.

In the “A catalyst for change” section of this report, you will read examples of how WRAP has worked closely with signatories to deliver the agreed targets through working groups and the development of practice guidance. Many of these signatories are now continuing to work with WRAP under the new Courtauld Commitment 2025 (C2025).

WRAP developed and delivered CC3 using funds from all four UK governments.

Read the full list of signatories to CC3

3. The Courtauld Commitment was first launched in 2005 to tackle food and packaging waste. Courtauld Commitment 2 continued to build on this work and ran from 2010 until 2012, tackling waste and carbon impacts in the supply chain as well as at a household level.
Achievements against the targets
Achievements against the targets

The three targets within CC3 were owned by WRAP and collectively delivered by the signatories:

1. **Household target:**
   To reduce food and drink waste by 5% by 2015 compared with 2012.

   Down -5% reduction target

   No significant change 2012–15

   **What has been delivered?**
   - The target to reduce household food waste (HHFW) by 5% by 2015 compared with 2012 has not been achieved.
   - The estimated amount of HHFW in the UK for 2015 was 7.3 (+/- 0.3) million tonnes, compared with 7.0 (+/- 0.3) million tonnes in 2012, an apparent increase of 4%. On a per-person basis, the apparent increase was 2%. Neither of these increases was statistically significant at a 95% confidence level.

   **Table 1: Household food waste arising 2012–15**

<table>
<thead>
<tr>
<th></th>
<th>Baseline 2012 (tonnes)</th>
<th>2015 (tonnes)</th>
<th>Change (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total food waste</td>
<td>7,022,000</td>
<td>7,333,000</td>
<td>311,000</td>
</tr>
</tbody>
</table>

   4. Figures throughout the report, including the tables, have been rounded.

   5. www.lovefoodhatewaste.com

   - Considerable efforts have been made over the last three years to help reduce HHFW. WRAP and its partners have delivered media campaigns, particularly through Love Food Hate Waste, and provided face-to-face training and information in-store and in the community. Food businesses have also improved date labelling and storage advice to help the public make the most of their food. Partner activity increased substantially over this period, and many people have benefited.

   However, during 2012–15, the population grew, food prices fell and more people lived alone – factors that can increase the amount of food thrown away at home. This has meant the scale, targeting and effectiveness of these interventions, against this backdrop, have not been sufficient to deliver a reduction in HHFW.

   - Although HHFW has not reduced in recent years, **there has been an overall 12% reduction in HHFW over the timeframe from 2007 to 2015**, equivalent to 960,000 tonnes, with a value of £2.7 billion.
WRAP’s research\(^6\) shows that more can be done to reduce HHFW. Launched in March 2016, there is a target under C2025 to reduce food waste across the whole UK food chain by 20% per capita by 2025.

The new phase of collective action on food waste brokered by WRAP brings together food businesses, local authorities, trade organisations, governments and other partners. Signatories already represent 95% of UK food retail and 40% of council populations, so there is a great opportunity to intervene at scale and reach millions of customers each week.

The HHFW figures were determined using composition data from local authority funded studies in conjunction with regular data reporting by local authorities on waste collection and treatment.

Levels of waste in both the residual waste stream and separately collected streams were collated and analysed to determine the changes in the amount of HHFW. These studies represent around two-thirds of all HHFW in the UK. As there is no recent data on HHFW disposed of via drains, home composting and fed to animals, other evidence was used to inform an assessment of how HHFW in these fractions may have changed since 2012.

Further details about these methods are available in ‘Synthesis of Food Waste Compositional Data 2014 & 2015’\(^7\) and ‘Household Food Waste in the UK, 2015’.

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\(^6\) WRAP (2014) ‘UK food waste – Historical changes and how amounts might be influenced in the future’

\(^7\) See www.wrap.org.uk/hhfw2015
2. Packaging target:
To achieve no increase in the carbon impact (CO₂e) of packaging by 2015 relative to the 2012 baseline.

What has been delivered?

- **The packaging target has been exceeded**, with a reduction of 7% in CO₂e emissions against a target of no increase over the period of CC3, although total packaging material placed on the market rose by 1%, from 2.92 million to 2.96 million tonnes. The main causes of the CO₂e reductions have been increased use of recycled content and changes in the packaging materials used.
- The estimated cumulative CO₂e saving over the lifetime of CC3, against a counterfactual based on signatory growth, is between 1.1 million and 2 million tonnes, depending on how much of the carbon saving from the increased recycling rates of packaging is attributed to CC3.

### Table 2: Packaging arisings and CO₂e impact 2012–15

<table>
<thead>
<tr>
<th></th>
<th>Baseline 2012 (tonnes)</th>
<th>2015 (tonnes)</th>
<th>Change (tonnes)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Packaging weight</strong></td>
<td>2,923,000</td>
<td>2,956,000</td>
<td>33,000</td>
<td>+1%</td>
</tr>
<tr>
<td><strong>Greenhouse gas (GHG) emissions</strong></td>
<td>5,429,000</td>
<td>5,073,000</td>
<td>-356,000</td>
<td>-7%</td>
</tr>
</tbody>
</table>

The changes in emissions for various packaging types are broken down in Figure 1 on page 10.
CC3 signatories provided data on the amount, material and recycled content of packaging within the scope of the Commitment. This information, combined with the CO$_2$e impact of each material, was used to estimate the carbon emissions of packaging materials.

8. For details of the method used to calculate the carbon factors, see WRAP (2014) ‘Methodology for assessing the climate change impacts of packaging optimisation under the Courtauld Commitment phase 3’.

The reduction in carbon emissions of packaging relative to growth in the sector is shown in Figure 2, which compares actual changes against what would have been expected based purely on changes in signatory sales.
3. Manufacturing and Retail target: To reduce ingredients, product and packaging waste in the supply chain by 3% by 2015 relative to the 2012 baseline.

What has been delivered?

- The target has been achieved, with manufacturing and retail waste (including waste to sewer) falling by 74,000 from 2,504,000 tonnes to 2,430,000 tonnes, a reduction of 3%.
- Over the lifetime of CC3, cumulatively an estimated 219,000 tonnes of food and packaging supply chain waste have been saved. This equates to a CO₂e saving of 555,000 tonnes.
- In addition to this absolute reduction, significant volumes of waste have moved up the waste hierarchy, from landfill disposal or incineration to recovery (including energy from waste) and recycling. The recovery and recycling rate grew from 95% in 2012 to 99% in 2015 (equivalent to 89,000 tonnes of additional recovery in 2015).

Table 3: Table of manufacturing and retail packaging and food waste 2012–15

<table>
<thead>
<tr>
<th></th>
<th>Baseline 2012 (tonnes)</th>
<th>2015 (tonnes)</th>
<th>Change (tonnes)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid waste</td>
<td>2,298,000</td>
<td>2,239,000</td>
<td>59,000</td>
<td>-3%</td>
</tr>
<tr>
<td>Waste to sewer</td>
<td>206,000</td>
<td>190,000</td>
<td>16,000</td>
<td>-8%</td>
</tr>
<tr>
<td>Total waste</td>
<td>2,504,000</td>
<td>2,430,000</td>
<td>74,000</td>
<td>-3%</td>
</tr>
</tbody>
</table>

Figure 3: Change in total supply chain waste over time (tonnes/year)
• From 2012 to 2015, the data indicates there has been a notable increase in the amount of surplus food and drink being sent for charitable or commercial redistribution, from an estimated 6,000 to 18,000 tonnes. However, the 2012 baseline data are subject to significant uncertainty, and so the scale of the increase presented here should be taken as indicative.

<table>
<thead>
<tr>
<th></th>
<th>2012 (tonnes)</th>
<th>2015 (tonnes)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surplus food and drink sent for charitable or commercial redistribution</td>
<td>6,000</td>
<td>18,000</td>
<td>190%</td>
</tr>
<tr>
<td>Surplus food and drink diverted to animal feed</td>
<td>333,000</td>
<td>320,000</td>
<td>-4%</td>
</tr>
</tbody>
</table>

Table 4: Table of surplus food and drink redistributed 2012–15

• Over the lifetime of CC3, the estimated weight of food waste avoided was 100,000 tonnes with a value of approximately £100 million (assuming a food waste value of £1,000 per tonne); this is equivalent to 200 million meals (assuming a meal weighs 500g10).

• Over the lifetime of CC3, the cumulative additional amount of surplus food redistributed was approximately 29,000 tonnes. This is equivalent to 58 million meals between 2012 and 2015 (based upon each meal weighing 500g).

WRAP worked closely with signatories to collect data each year. Signatories provided data on their progress on a confidential basis. WRAP analysed these data and under the terms of WCC3 reported the total impact from all the signatories. WRAP’s analysis of the submitted data has been independently audited.

10. This is the estimated value of supply chain food waste accounting for combined avoidable and unavoidable waste (1.9 million tonnes worth approximately £1.9 billion). See WRAP (2016) ‘Quantification of food surplus, waste and related materials in the grocery supply chain’.
A catalyst for change
A catalyst for change

CC3 has been a catalyst for change among leading businesses and their supply chains, providing motivation and inspiration for others to follow their lead in preventing waste. Its success can be assessed in relation to the four factors outlined in this section:

“The industry has an important role to play and we have been working with retailers and brands to help their customers when purchasing food. For example, improvements in labelling, such as removing the ‘display until’ label and simply having either a ‘use by’ or ‘best before’ mark, depending on the food type, is less confusing for customers, whilst promotions that give consumers more flexibility to use up the food they buy are also beneficial.”

Richard Swannell, Development Director, WRAP
Winning hearts and minds: Successful achievement of some of the CC3 targets has required awareness of the issues and opportunities for food waste and packaging prevention to be raised across businesses. Winning the hearts and minds of employees and other stakeholders has been critical for success. Communication needs to be open and regular to enable all staff at all levels to feel engaged and contribute. Objectives and targets also need to be visible.

“As one of the first companies to receive training on Your Workplace Without Waste, we can see the potential for the programme to get our employees involved in waste reduction and return real results for our business and the environment.”
Debbie Dyson, Health, Safety & Environment Manager, AB World Foods

Imagine Your Workplace Without Waste: CC3 signatories realised the need to engage their employees to get them involved in waste prevention action. WRAP worked closely with them to develop Your Workplace Without Waste1, an engagement programme to raise staff awareness, empower them to identify where waste occurs within their business and to take action to reduce it. Following a successful trial with signatories, Your Workplace Without Waste continues to be rolled out across more workplaces under C2025.

See our ‘Winning hearts and minds’ CASE STUDIES here

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1. Further information on Your Workplace Without Waste can be found at www.wrap.org.uk/content/get-employees-board-help-cut-waste
Working together in partnership: Through the right people working together to deliver a shared goal, CC3 showed that ‘the whole is greater than the sum of the parts’.

Over the lifetime of CC3, WRAP brought the signatories together to tackle common challenges in working groups – from food waste prevention to supply chain initiatives, to surplus food redistribution. Best practice outputs and guidance were shared across the signatories.

"We firmly believe that no food that could be eaten should be wasted, which is why we have made a commitment that no food safe for human consumption will go to waste in our stores by the end of 2017. Our award-winning Community Food Connection programme is one of the ways we will achieve this. The programme has been very successful to date, and it is now live in over 805 stores. We’ve donated over 3 million meals worth of surplus food to over 3,000 charities and community groups and we hope to see these numbers rise, as we begin to roll out the scheme to our convenience stores in 2017."

Mark Little, Head of Sustainability, Sourcing and Waste Policy, Tesco PLC

See our ‘Working together in partnership’ CASE STUDIES here
WRAP builds the evidence-base
New research revealed that over half of the food waste generated by the UK manufacturing and retail sectors is avoidable. WRAP’s report ‘Quantification of food surplus, waste and related materials in the grocery supply chain’\textsuperscript{12} highlighted that a combination of preventing food waste being generated, redistribution of food surplus and diverting surplus to animal feed could lead to a 42% reduction in avoidable food waste, saving businesses millions of pounds a year. This information has helped raised awareness and allowed organisations to prioritise action.

“We welcome today’s report (Quantification of food surplus, waste and related materials in the grocery supply chain), which gives us the best picture we’ve ever had of the root causes, quantity and nature of surplus food in the supply chain. It is very clear from the study that there is much more to do and we have a real opportunity to stop even more surplus food from becoming waste. To unlock this surplus stock and enable it to reach people’s plates, we all need to support greater collaboration between retailers, manufacturers and redistribution organisations.”

Tom Rumboll, Commercial Director, Company Shop

Pioneering change: To build momentum first of all, managers need understand what ‘good’ looks like and how it can be built into the business. Some pioneering signatory businesses led the way in doing things differently. These pioneers then shared their insights more widely across the sector through CC3 to inspire other businesses to take action.

Companies such as Morrisons Farmers Boy used WRAP’s W.A.S.T.E. problem-solving discipline to find substantial potential savings in meat pie production. Other WRAP collaborative operational efficiency projects included working with Tesco to reduce in-store bakery waste and supporting Greencore and Sainsbury’s as they identified waste prevention solutions across their sandwich supply chain. WRAP also facilitated the sharing of knowledge across the beer and soft drinks sectors, working with Carlsberg (UK), the British Beer and Pub Association, Britvic Soft Drinks and the British Soft Drinks Association, leading to the development of a checklist of operational actions to reduce waste in drinks manufacture.

"Britvic recognise that waste represents a cost and are committed to reducing its generation wherever possible. We operate a system of continuous improvement in all manufacturing sites. This project demonstrates the importance of providing clear and comprehensive information to operators to enable them to prepare syrup batches accurately. We were able to achieve a significant cost saving and minimise syrup waste from preparation without any capital investment."

Alison Rothnie, Sustainability Manager, Britvic Soft Drinks

Operational improvements need to be embedded in an organisation:
Reducing food waste can have substantial business benefits, from financial savings to improving customer satisfaction. These could be small changes or step changes, but both make a difference and improve operational efficiency.

See our ‘Operational improvements’ CASE STUDIES here
Building on the momentum
WRAP is continuing to build upon the momentum of CC3 through C2025. This is an ambitious ten-year voluntary agreement bringing together organisations from across the food system.

Signatories to C2025 include leading businesses, sector organisations and local authorities. They are working together to develop good practice solutions to increase resource efficiency across the food chain, and share these results more widely. This includes changes in operations and the ways that businesses engage with suppliers and customers.

An early priority is to identify those high-impact strategic actions that may take some years to develop and pilot, but will be essential to deliver large-scale change.

In particular, WRAP will work with leading food businesses to investigate and pilot potential high-impact actions such as on-pack, in-store and online information for the most wasted food and drink products, and agree industry-wide best practice. Through actions such as these, signatories and campaign partners will be able to reach millions of customers each week to reduce household food waste. Each action will be piloted first, before taking them to scale, so that signatories can focus effort on what works best.

The shared ambition of C2025 signatories is to cut the waste and greenhouse gas emissions associated with food and drink in the UK by at least one-fifth per capita in ten years and reduce the impact of water use, with cumulative savings of around £20 billion.

To keep informed our work, please sign up to our Food WRAP newsletter.

"The Courtauld Commitment 3 has been influential in bringing the sector together to help identify and prioritise the actions that are key to making a real change in reducing food waste. Working together has helped identify opportunities, not only within the supply chain but also in our customer’s homes. Waitrose looks forward to continuing to build upon this progress under Courtauld 2025."

Victoria Harris, Head of Sustainability and Responsible Sourcing, Waitrose
Case studies
Case studies
Winning hearts and minds

CC3 tackles Meaty Issues

34,000 tonnes of beef goes to waste every year in the UK. Love Food Hate Waste’s Meaty Issues campaign, launched in January 2016 aimed to encourage the public to value and make the most of the meat they buy, as well as significantly raise awareness of the case for action.

Core to the campaign was a launch event at Smithfield Market for news, trade media, Love Food Hate Waste ambassadors and bloggers. BBC Countryfile presenter and livestock farmer Adam Henson partnered with Love Food Hate Waste to promote the campaign.

The campaign was strengthened through widespread CC3 signatory support online and on social media, from Central England Co-op, Co-op, Morrisons, Premier Foods, Tesco and Waitrose, with in-store messaging from Asda. With extensive media coverage, the message of getting more value from beef was successfully delivered.

“As a farmer by trade, I’m passionate about the issue of wasted meat and how to minimise it – I’m fully behind Love Food Hate Waste’s campaign to highlight the issue. Beef is one of our favourite meats in the UK, and we really should be doing everything we can to make the most of it once we’ve put it in our shopping trolleys.”

Adam Henson, Farmer and TV presenter

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Winning hearts and minds

Co-op works to improve labelling

In 2014, the Co-op re-launched its bread and morning goods range to provide customers with clear, concise, simple instructions on how to get the best from their shopping and reduce food waste. Following the successful roll-out of the 'keep me' labelling initiative on produce, the logo was added to bread and morning goods and included storage/freezing advice on the front and back of packs. Around 40 bread product lines were reviewed and updated to carry the 'keep me' label with product presence on-shelf across the Co-op estate.

Read the full case study here

“As an ethical and responsible retailer we felt it was important that our customers were provided with clear guidance on how to get the best from their shopping and reduce food waste. Following the success of the ‘keep me’ label on produce, we looked to adopt it on other key high waste categories.”

Aaron Fawcett, Labelling Technologist, Food Policy, The Co-op

‘Winning hearts and minds’ CASE STUDIES continue here
Case studies
Winning hearts and minds

Engaging the community in 10 Cities

WRAP’s 10 Cities campaign delivered Love Food Hate Waste behaviour change activities at key cities across the UK. The campaign brought together leading retailers Asda, Central England Co-op, Co-op, Marks & Spencer, Sainsbury’s, Tesco and Morrisons, with ten local authorities, covering residents in Belfast, Birmingham, Cardiff, Glasgow, Greater Manchester, Leeds, Liverpool, Newcastle, Nottingham and Sheffield.

Activities included:
- Direct engagement with more than 12,000 people face-to-face at the 10 Cities launches, which gained over 2,500 pledges to #DoOneThingDifferently;
- Delivering Love Food Hate Waste’s cascade and awareness training sessions to over 5,000 attendees. The training involved 760 different businesses, organisations and community groups;
- 45,000 ‘Loafsavers’ food clips distributed at 12 events across the country to help people save their bread;
- The ‘Big Freeze’ event in city centres, where we spoke to over 8,000 people about how to save food by freezing;
- Over 100 cookery clubs, which organised practical hands-on cookery classes to help attendees gain greater kitchen confidence and learn Love Food Hate Waste’s five key behaviours to reduce food waste in the home; and
- The Love Food Hate Waste cookery demonstration, which toured the UK to deliver 107 days of interactive sessions.

Find out more and watch the 10 Cities video.

“I learned so much when I did the course. I was moving into my own place with my partner and I had all these great tips for shopping, planning meals and saving food.”
Lara Hollingsworth, Love Food Hate Waste training session attendee

“10 Cities is a great example of harnessing collaboration between retailers, local authorities and other stakeholders to reach householders through local engagement in major urban areas.”
David Moon, Head of Food Sustainability, WRAP

“Our pizza session was a breakthrough moment for many parents who saw how simple it was to make their own pizza from things they already had in the fridge.”
Julie Plaiter, Lead Teaching Assistant
Case studies

Working together

Nestlé and suppliers target waste

Nestlé UK and Ireland engaged its key suppliers to support and encourage action on reducing waste in the wider supply chain. Working with suppliers and WRAP, it introduced a set of key performance indicators (KPIs) against which it could evaluate the progress of its suppliers towards implementing a waste minimisation culture at their own sites. KPIs were developed for their packaging and ingredients. Suppliers were engaged from the outset, and helped develop a commercially sound solution to reduce cost and value lost as well as preventing waste.

Building on the success of this project, Nestlé UK and Ireland has been developing an online portal to enable suppliers to share and access best practice that will aid KPI delivery.

Read the full case study here.

“By collaborating with key suppliers, we have been able to develop a set of KPIs that have been agreed by everyone and are solution focused. The benefits will be reduced waste in our supply chain and a platform for improved supplier engagement and knowledge sharing.”

Robin Sundaram, Supplier Development Manager, Nestlé UK and Ireland

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Working together

Redistribution helps charities

Under CC3, WRAP established the Manufacturing and Retail Working Group to stimulate action to reduce food being wasted, including the potential for increasing redistribution of surplus food to people. Over the course of a year, WRAP worked in partnership with signatories, sector bodies and food redistribution organisations and developed:

- The Framework for Effective Redistribution Partnerships, which provides guidance on which foods can be redistributed, and templates for setting up partnerships for both food surplus providers and receivers.

This built on the guiding principles produced previously:

- Guiding Principles for Redistribution, a quick and easy guide to help increase food redistribution without impacting on food safety or brand integrity.

Here are examples of work by signatories in this area.

**Sainsbury's** back-of-store pilot: WRAP worked with a Sainsbury's store in Cardiff to set up a back-of-store surplus food collection scheme with two local charities. The aim of this project was to act as a pilot for Sainsbury's, leading to the kick-off of further schemes across Wales. As a result, 345kg of surplus food was collected from this one store per month. From this work, WRAP developed case studies and guides for retailers and charities on how to create successful partnerships.

“There are many benefits to Sainsbury's of being involved, not least the chance to positively impact our local community and our wider environment. Our colleagues have been engaged throughout, as ever they are the key to our success. This has been a fantastic opportunity for us to work collaboratively alongside some great local charities.”

*Sainsbury's* store manager

**Marks & Spencer** and **Neighbourly** link up: In 2015–16, food waste in Marks & Spencer stores has reduced by 9% per 1,000 sq ft of food-selling space compared with 2013–14. This has been achieved through improved systems leading to better sales estimation and the nationwide roll-out of an unsold food redistribution scheme with social network Neighbourly.com. The scheme has seen Marks & Spencer stores work with 500 charities such as food banks and community cafes, with over 500,000 people being fed since the programme began.

“We are working hard to reduce food surplus at our suppliers, depots and stores. Our partnerships with Neighbourly and Community Shop are great examples of this. These partnership schemes support our store programme to reduce food surplus, and benefits include those in need getting a helping hand where they need it most.”

*Louise Nicholls*, Head of Responsible Sourcing, Packaging and Plan A, Marks & Spencer

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Working together

Tesco food redistribution: Community Food Connection is a major initiative to donate edible surplus food from Tesco stores. This builds on activities that make surplus food available from the Tesco supply chain and distribution centres. Community Food Connection is run in partnership with food redistribution charity FareShare, using an app developed by social enterprise FoodCloud. The scheme enables stores to alert local charities and community groups to how much surplus food is available at the end of each day. Charities simply respond by text message to confirm that they want the food and then come and collect it – free of charge.

Thanks to this scheme, Tesco has donated 3 million meals worth of surplus food from its stores to over 3,000 charities and community groups. Tesco has committed that no good food will go to waste in its stores, and the scheme will be live in all Tesco stores by the end of 2017.

Morrison’s redistribution: All Morrisons stores can now redistribute edible surplus food to local community groups. On average, Morrisons is working with over 420 local community partners and is redistributing on average 200,000 products per month. Since the programme began, Morrisons has donated an average of 1.5 million products.

Co-op redistribution from depot: The Co-op is donating surplus food from its warehouse depot to local charities. Trialled at its Castlewood depot, surplus chilled items and fresh produce have been supplied to the charity FareShare, which passes it on to community groups and charities who make it into meals for vulnerable people. The trial showed that in just 10 weeks, Co-op redistributed 32 tonnes of food from one depot, contributing towards 76,192 meals.

“This project has the capacity to improve the variety and nutritional value of the food redistributed by Co-op, and to significantly increase the number of people that FareShare can support. In addition to the huge human benefit, there are significant positive environmental impacts as all of this food will be diverted from anaerobic digestion back into the food chain, feeding people first as was intended.”

Steve Murrells, Chief Executive, Retail, The Co-op

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Working together

Surplus food helps feed livestock

Working with CC3 signatories, WRAP developed guidance for food and drink companies on sending surplus food to animal feed, if it was no longer fit for human consumption. The guidance includes information on regulations, how to identify foods suitable for animal feed and how to create a business case for the economic and environmental benefits of diversion to animal feed. Feedback on these guidance documents was received from Defra and key food trade bodies, and was incorporated into the published documents.

Additionally, WRAP has worked with signatories and stakeholders to develop good practice case studies, highlighting the benefits of sending surplus food to animal feed.

Arla Foods Ltd now sends all of its surplus food from one of its largest sites to animal feed instead of anaerobic digestion. This has resulted in 1,000 tonnes of surplus per year being diverted. Arla Foods Ltd plans to roll this out over all of its sites.

“We are delighted to have worked with partners to divert our surplus products to animal feed, which benefits both our businesses and the environment.”

Richard Laxton, Arla Foods Ltd, Sustainability Manager

Coca-Cola Enterprises has developed a process for redistributing surplus food for human consumption, or diverting to animal feed, in line with the food waste hierarchy. The typical ‘types’ of surplus food are those with a short shelf life, end of promotion lines, food with packaging faults, food that does not meet company standards or unwanted ingredients/liquid waste.

Find out more.
Case studies
Pioneering change

**Co-op** working together with its potato suppliers

Studies identified that between 5 and 10% of potatoes in Co-op’s supply were being screened out, going to lower value markets such as animal feed. By changing the screening size from 45mm to 43mm, 5% more King Edward potatoes (equivalent to 1,000 tonnes) could be sold by the retailer. Along with reduced packaging waste and transport costs, it could add up to cost saving of up to £600,000 per annum for Co-op.

Find out more.

**Musgrave** working across its supply chain to drive change

Musgrave brought together growers, suppliers and convenience stores to identify the root causes of resource inefficiencies across the supply chain and so identify solutions. Applying ‘lean-based’ thinking across the whole supply chain, from apple orchards to retail stores, helped Musgrave reduce store waste, carbon emissions and packaging materials, whilst improving information flows and product quality. Cutting apple and pear store waste by 50% alone would deliver over £60,000 worth of savings a year.

“Walking the process was key, as it highlighted the need to observe what actually happens, not what we thought happened.”

*Steve Normington,* Top Fruit Trading Manager, Musgrave GB

Find out more.

**Marks & Spencer** and Sainsbury’s trial detectable black packaging

With the premium ready-meal sector growing year on year, the use of black CPET trays has increased in the waste stream. Being undetectable in plastic sorting equipment means an estimated 30,000 tonnes of black CPET trays going to landfill and energy recovery. Working with WRAP, Marks & Spencer and Sainsbury’s trialled new trays with a detectable pigment in their south-east England stores.

The trays were sent as part of a mixed-material stream to a plastics recovery facility where they were recovered and sorted. The project demonstrated that it is possible to recycle the trays back into food-grade trays, assuming the availability and recovery of enough detectable black CPET to make it viable in full-scale commercial conditions.

Find out more.

‘Pioneering change’ CASE STUDIES continue here
Case studies

Pioneering change

Asda helps customers tackle food waste at home

In 2015 following feedback from customers, Asda looked at ways to help customers to reduce their food waste at home. Asda worked with Love Food Hate Waste on the messaging around storage guidance, using up leftovers and labelling. The food waste campaign comprised three elements:

1. **In-store**: Asda's Community Champions engaged customers in food waste during in-store events at 600 stores, playing interactive games, sharing tips, and asking customers to pledge to 'change one thing' at home to reduce food waste. This type of face-to-face engagement proved the most effective method of changing behaviour.

2. **On pack**: this involved putting information stickers on four of the most wasted products, with storage guidance and leftover ideas. These were on pack for six weeks, with over 4 million products sold.

3. **Print**: a three-page feature in Asda Magazine discussed household food waste, and was distributed in-store and online. It included top tips for reducing food waste, and multiple recipes for using leftovers. 55% of customers who read Asda Magazine recalled seeing the feature.

The results were that a staggering one-third of customers remembered seeing the campaign and of those, 81% said they would follow the advice provided. This equates to 2 million customers making a change in their home thanks to the campaign, on average saving £57 a year through the changes made.

“As a major food retailer we have a responsibility and ability to bring about large-scale change when it comes to tackling food waste. By listening to our customers and working with the University of Leeds and WRAP, we have been able to deliver a campaign that truly helped our customers to save money and live better.”

Laura Babbs, Sustainability Manager, Asda

PET categorisation improvements in design

The soft drinks sector has been improving PET (Polyethylene terephthalate) plastic bottle design in recent years. Based on information provided via the Soft Drinks Roadmap, the industry improved the design of PET drink bottles. In 2008, using the categorisation tool developed by WRAP, 21% of bottles were considered unfavourable to recycling compared with the equivalent figure of only 7% in 2014. Bottles considered ideal for recycling increased from 55% to 63% in the same period.
Case studies

Operational improvements

**Greencore** and **Sainsbury's** work together to make improvements

Greencore began working in collaboration with Sainsbury’s, key suppliers and WRAP to reduce food and packaging waste across its whole sandwich food supply chain. Using a ‘value chain analysis’ methodology, key process stages of the supply chain were mapped and improvement opportunities identified. Outputs included the identification of:

- A range of efficiencies, including raw ingredients, production, monitoring and communication; and
- 17 collaborative waste prevention projects across five participating entities, with an opportunity to deliver 1,800 tonnes of supply chain waste savings.

“Having a team from across the supply chain and from various business disciplines meant that the effects of potential solutions could be assessed quickly and ensured a win–win scenario for all participants.”

**Rick Saini**, Group CI Manager, Greencore

“We are committed to unlocking opportunities to reduce waste across our supply chains. This project is a great example of partnerships and wider collaborations delivering direct improvements that can be replicated in other areas of our business.”

**Stuart Lendrum**, Head of Sustainable & Ethical Sourcing, Sainsbury's

Find out [more](#).

‘Operational improvements’ **CASE STUDIES** continue here
Case studies

Operational improvements

Morrisons reduces the impacts across its pork supply chain

Working across its vertically integrated supply chain, Morrisons has conducted a whole-chain review of its pork supply chain efficiency with the support of WRAP. Analysis demonstrates significant potential savings for Morrisons through improvements in intake variability. Recommendations include the dissemination of best practice guidance to the whole supplier base and optimisation of purchasing specifications. Analysis also suggests there are even stronger resource efficiency benefits for the wider industry that will help build on those already taken, for example to reduce emissions and waste associated with feed.

“We understand variability is an issue with unique challenges and this report helps demonstrate the impact this has across our whole supply chain.”

David Evans, Head of Agriculture, Morrisons

“This project has given us much to think about, in particular how we shape our relations with suppliers in order to deliver for our customers in a way that reduces the resource impact of production.”

Steven Butts, Head of Corporate Responsibility, Morrisons

Find out more.

‘Operational improvements’ CASE STUDIES continue here
Case studies

Operational improvements

**Tesco** helping consumers reduce poultry waste at home

Tesco has worked with packaging supplier Linpac and Cargill to introduce a new split pack for chicken portions, with the two breasts stored in separate compartments within the pack, with the support of WRAP. The new packs are targeted at the growing number of single-person households, allowing consumers to use only what they require, whilst keeping the remainder in the fridge with all the shelf-life and food safety benefits of an unopened pack.

“Our calculation indicates that the packs could help prevent 1,370 tonnes of chicken from going to waste every year with an associated 5,490 tonne reduction in the carbon footprint. If we extrapolate this across a number of products, we estimate a potential poultry waste prevention of 3,100 tonnes and a carbon saving of 12,400 tonnes of carbon equivalent – an outstanding result for all the companies involved in the project.”

*Mark Caul,* Technical Manager for Packaging, Tesco

**Secondary packaging benchmarking**

WRAP’s report on Secondary Packaging Benchmarking across the Grocery Sector\(^{14}\) identified areas with the greatest potential to reduce the carbon impact of secondary packaging, and produced benchmarks in these areas. Ten areas were identified as having the greatest opportunities for carbon saving. For each area, the best in class was benchmarked against the average secondary packaging to show the opportunity for savings.

WRAP then took these learnings into one-to-one sessions with the Co-op, and Sainsbury’s. Both retailers benefited from these sessions, with Sainsbury’s then developing a pilot project to work with its wine producers to optimise their secondary packaging.

WRAP has also published an interactive, **Secondary Packaging Digest**, that summarises the information needed to take action on optimising packaging design and reducing waste. The digest includes tailored guidance and practical actions a business can take, using examples of what other retailers and brand owners have done.

“Benchmarking is always key to understanding Sainsbury’s achievements in sustainability against our competitors. The one-to-one session with WRAP was invaluable to gain a deeper understanding of the secondary packaging environment and agree how we could use the findings to develop a pilot with our wine producers.”

*Jane Skelton,* Head of Packaging, Sainsbury’s

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WRAP’s vision is a world in which resources are used sustainably.
Our mission is to accelerate the move to a sustainable resource-efficient economy through re-inventing how we design, produce and sell products; re-thinking how we use and consume products; and re-defining what is possible through re-use and recycling.