

Collaborative approaches to reducing food loss and waste

David Rogers
Head of International Resource Management
30 May 2018

Part of WRAP:
www.wrap.org.uk



A large teal circle with a dark blue border, containing white text.

WRAP's
vision is a
world in which
resources
are used
sustainably

A Collaborative Approach



collaborate

collaborated; collaborating intransitive verb

- 1 : to work jointly with others or together especially in an intellectual endeavour.
- 2 : to cooperate with or willingly assist an enemy of one's country and especially an occupying force suspected of collaborating with the enemy
- 3 : to cooperate with an agency or organisation with which one is not immediately connected.

Framework | Roadmap | Voluntary Agreement | Pact

“A collaboratively agreed, self-determined ‘pact’ to take action on [*food waste generated at relevant stages of the food system*].”

Benefits of Collaborative Approaches

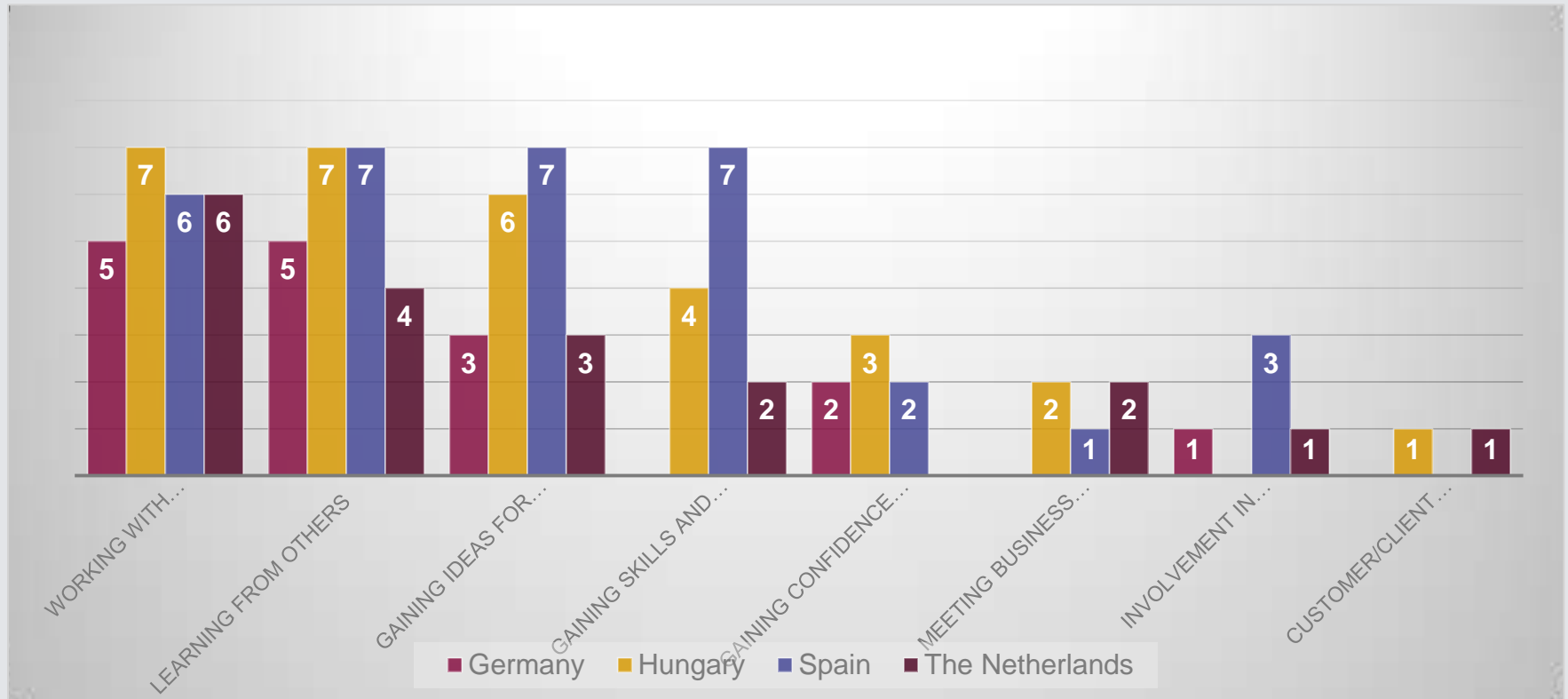


OECD:

- faster to implement and to adapt to new circumstances;
- can be better designed than legislation, since they are normally produced by those with an in-depth knowledge of the business sector in question;
- encouraging constant improvement and innovation (whereas legislation generally sets a target, but does not encourage further improvement); and
- allowing parties to the agreement greater choice over how to achieve the overall objective than legislation, which tends to be more prescriptive

Voluntary Approaches for Environmental Policy, An Assessment, OECD, 11 Jan 2000, ISBN 978926418026

Benefits of Collaboration



WRAP's Collaborative Agreements



Courtauld 2025
is an ambitious voluntary agreement that brings together a broad range of organisations involved in the food system to make food and drink production and consumption more sustainable.



Action will be delivered through collaboration, harnessing the power of partnerships, shared expertise and innovation

**THE UK
PLASTICS
PACT**



Courtauld Commitment track record



Courtauld 1 (2005-2009):

- 1.2 million tonnes of food and packaging waste were prevented.
- 670,000 tonnes of food waste and 520,000 tonnes of packaging were avoided across the UK between 2005 and 2009.

Courtauld 2 (2009-2012):

- A total of 1.7 million tonnes of waste prevented, saving £3.1 billion. This represents a reduction of 4.8 million tonnes of CO₂eq.

Courtauld 3 (2012-015):

- Over £100 million business savings delivered by reducing food waste.
- 7% reduction in carbon impact of food and drink packaging .
- A notable increase in surplus food and drink redistributed for human consumption.

Courtauld 2025



C2025 Signatories



Collaborating to Tackle Supply Chain Waste





Greencore and Sainsbury's



Collaborative sandwich supply chain waste reduction

In 2014, as part of a WRAP project, Greencore began working in collaboration with Sainsbury's and key suppliers to reduce food and packaging waste across the whole sandwich food supply chain.

Using a Value Chain Analysis methodology, key process stages of the supply chain were mapped and improvement opportunities identified. Output included the identification of:

- A range of efficiencies including raw ingredients, production, monitoring and communication
- 17 collaborative waste prevention projects across five participating entities
- A potential 1800 tonnes of supply chain waste savings to be delivered by the end of 2015.





Musgrave Group

Getting to the apple core of waste has many benefits

In 2014, Musgrave Group with WRAP undertook a whole supply chain review of apple waste and its root causes from field to stores. This activity aided the development of a 'future state' apple supply chain that generates less waste and uses less resources without compromising commercial returns. It identified a number of opportunities:

- A reduction in top fruit store waste of 30%, equivalent to around 20 tonnes, saving the business £40,000 annually
- More packing at source, saving packaging waste and double handling
- Improvements in date code labelling, helping consumers to reduce their waste
- Increased participation of British product when in season, allowing fresher product and direct deliveries which reduce CO₂ emissions.





Tesco

Trialling a change in packaging to tackle Scottish egg waste

Tesco wished to tackle packaging-related product damage in their supply chain due to eggs leaking into other packs. They have trialled using (rPET) plastic egg boxes instead of pulp packs in some stores in Livingston, Scotland.

During the trial period, there was evidence of a reduction in *egg waste and:

- trial packs were 30% lighter and made from 100% recycled material
- a reconfiguration of the 12 pack egg boxes allowed product fill rates to be improved by up to 24%
- the carbon footprint from the new packs was 44% lower than for the pulp packs it replaced**
- the response from customers when asked in store was generally positive.



Collaborating to Reach Consumers



GIVE A CLUCK
ABOUT FOOD WASTE

Collaborating to Reach Consumers: Retailers and brands



Example of recent retailer activity



Collaborating to Reach Consumers: Local authorities



Collaborating to Reach Consumers: Community orgs

Love Food Hate Waste - Save More

Introducing Love Food Hate Waste - Save More



Love Food Hate Waste - Save More
www.lovefoodhatewaste.com
Twitter: @CFHW_UK Facebook: Love Food Hate Waste Community



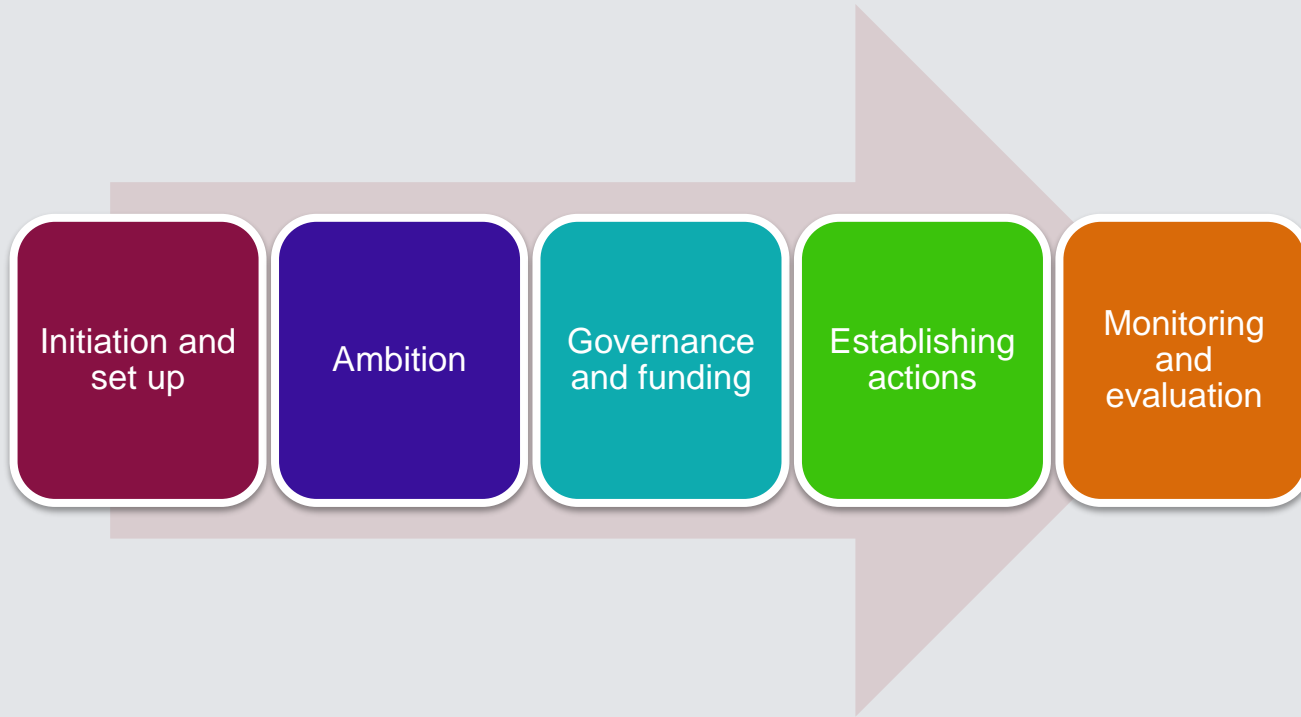
Section 3

Successful Collaborations



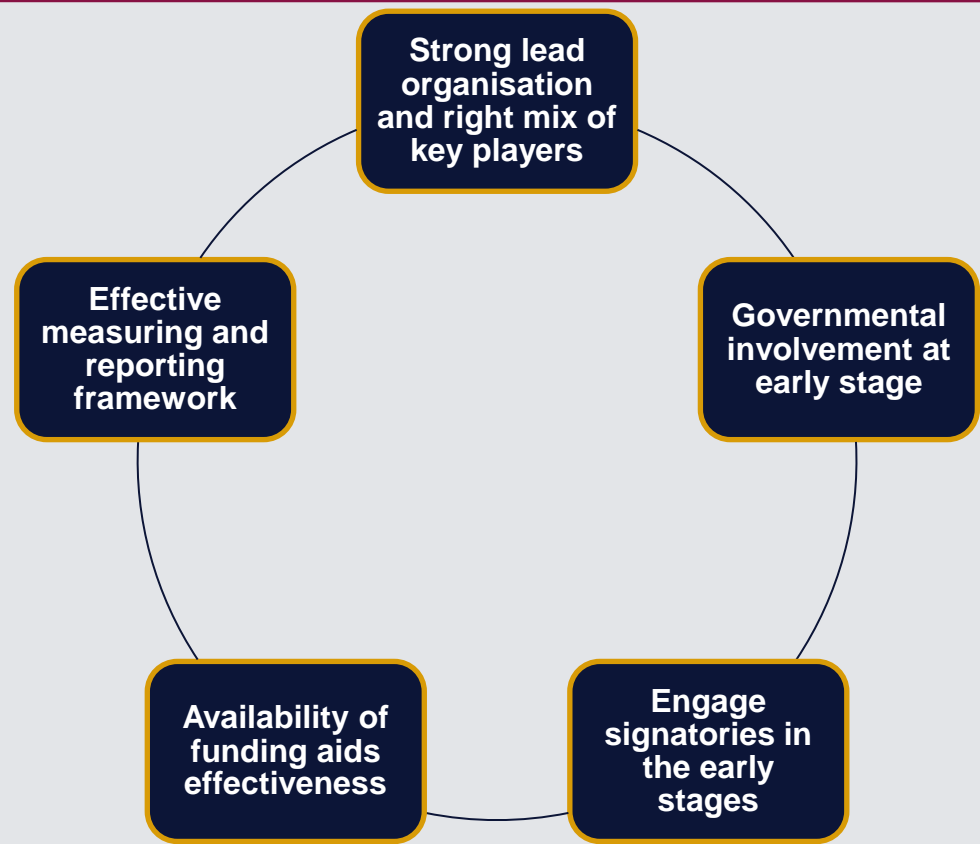


Success Factors of Collaborative Agreements

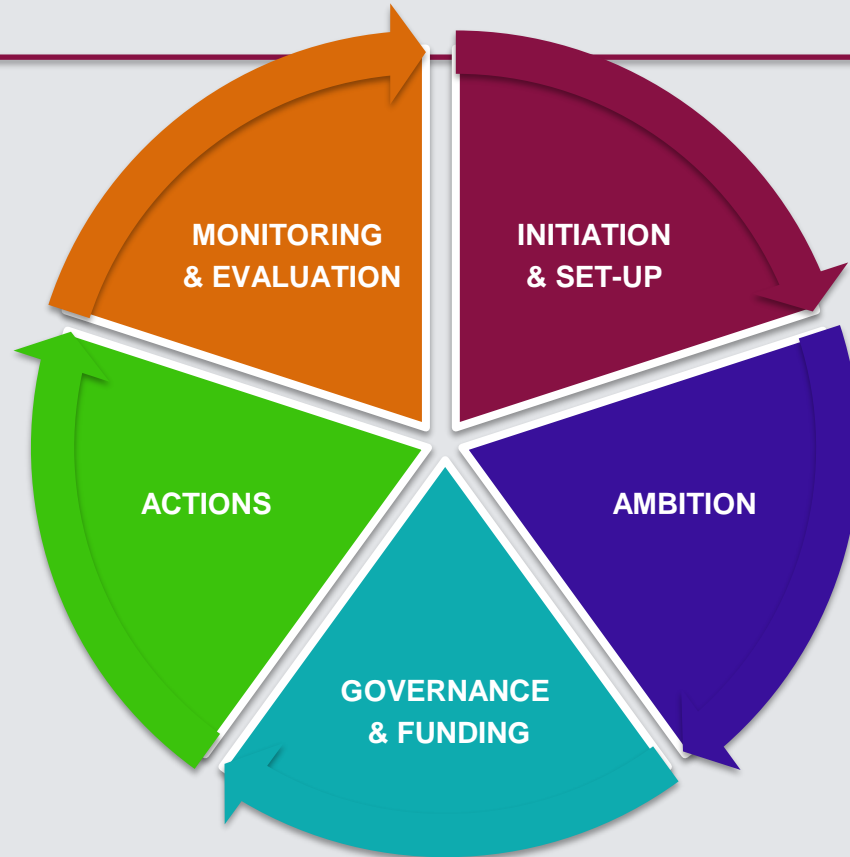




Key Success Factors



Blueprint For Collaborations & Frameworks





Initiation & set-up



Use to identify key players

- ✓ Can you identify a trusted and neutral lead organisation?
- ✓ Do you have government support?
- ✓ What are your priority areas?
- ✓
- ✓



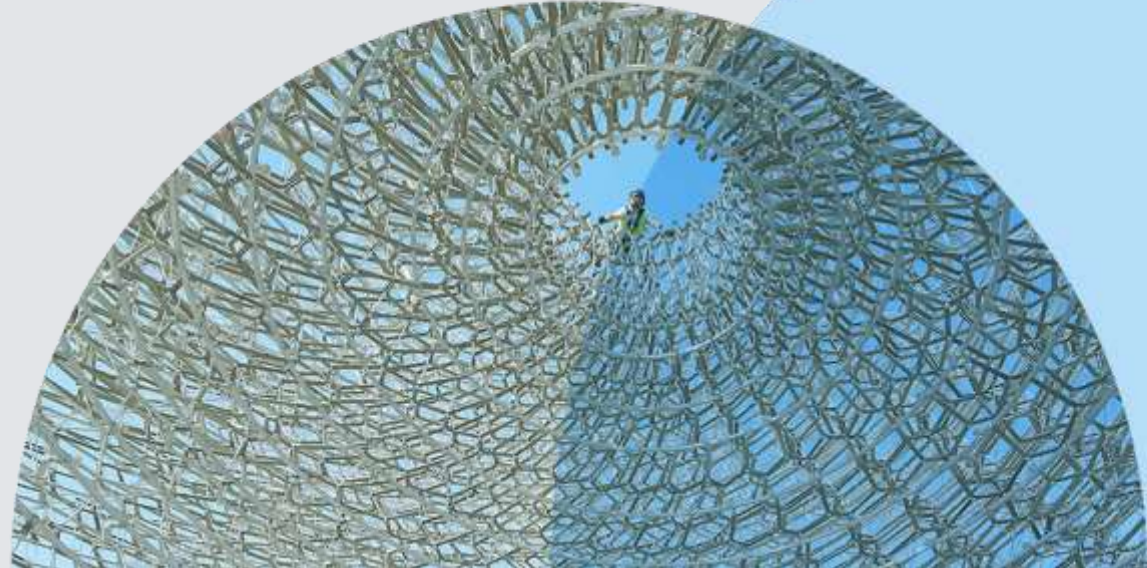
Ambition



Use to identify targets, timeframe and areas of focus

- ✓ Is there a national target, e.g. “Reduce waste by X% by Y date”?
- ✓ Are you aligned with wider goals such as UN SDG12.3
- ✓
- ✓

Measurement of food waste



Why measure?



- **Understand:**
 - The issue
 - What works to prevent food waste
- **Monitor targets**
- **For decision making**
- **For communications**
- **For making the business case**

Retail: what do we do in the UK?



With the CC, retailers monitor and report their FLW to WRAP

CC has retailers accounting for c. 90% of the UK market

At least two methods used including:

- Waste management data plus waste compositional analysis
- Scanning items that become loss / waste – report generated electronically

Definition of FLW and boundaries agreed with CC signatories

- Ensuring definitions and boundaries are used in practice is an on-going challenge

Wholesale and distribution



Courtauld signatories report on FLW where they own the food. Therefore much of distribution (including Regional Distribution Centres) is reported by retailers. Manufacturers report on waste when they still own the products.

Previous studies have shown that waste from wholesale in the UK is a relatively small amount, so – although an estimate exists (40,000 tonnes) – it is not regularly tracked.

Manufacturing: National estimate



UK estimate based on three datasets:

- Reporting to the UK Environment Agency as part of Integrated Pollution Prevention Control (IPPC) legislation
 - Provides information on the amount of waste for a business of a given sector and size, split by European Waste Catalogue (EWC) codes (annual data)
- WRAP commissioned compositional analysis to understand the % of food waste in different waste streams (categorised by type and size of business and EWC code) – ideal project would cost £millions
- Information on number of business, by sector and size (annual data)

Household: what do we do in the UK?

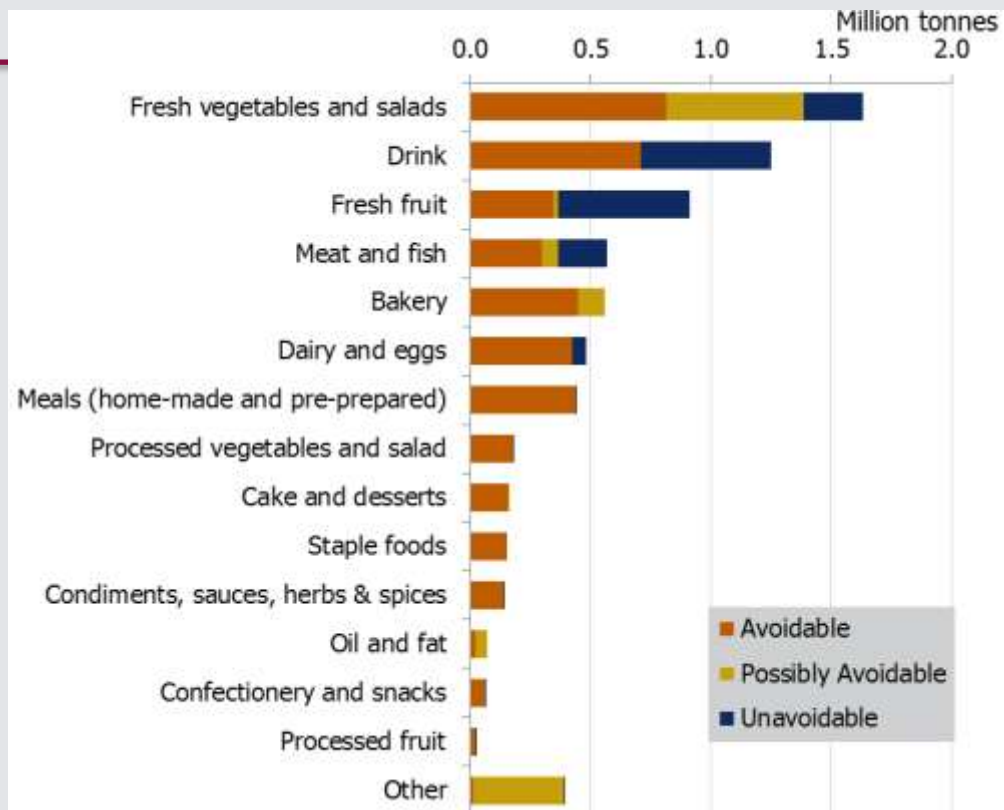


In 2007 and 2012, we obtained detailed information:

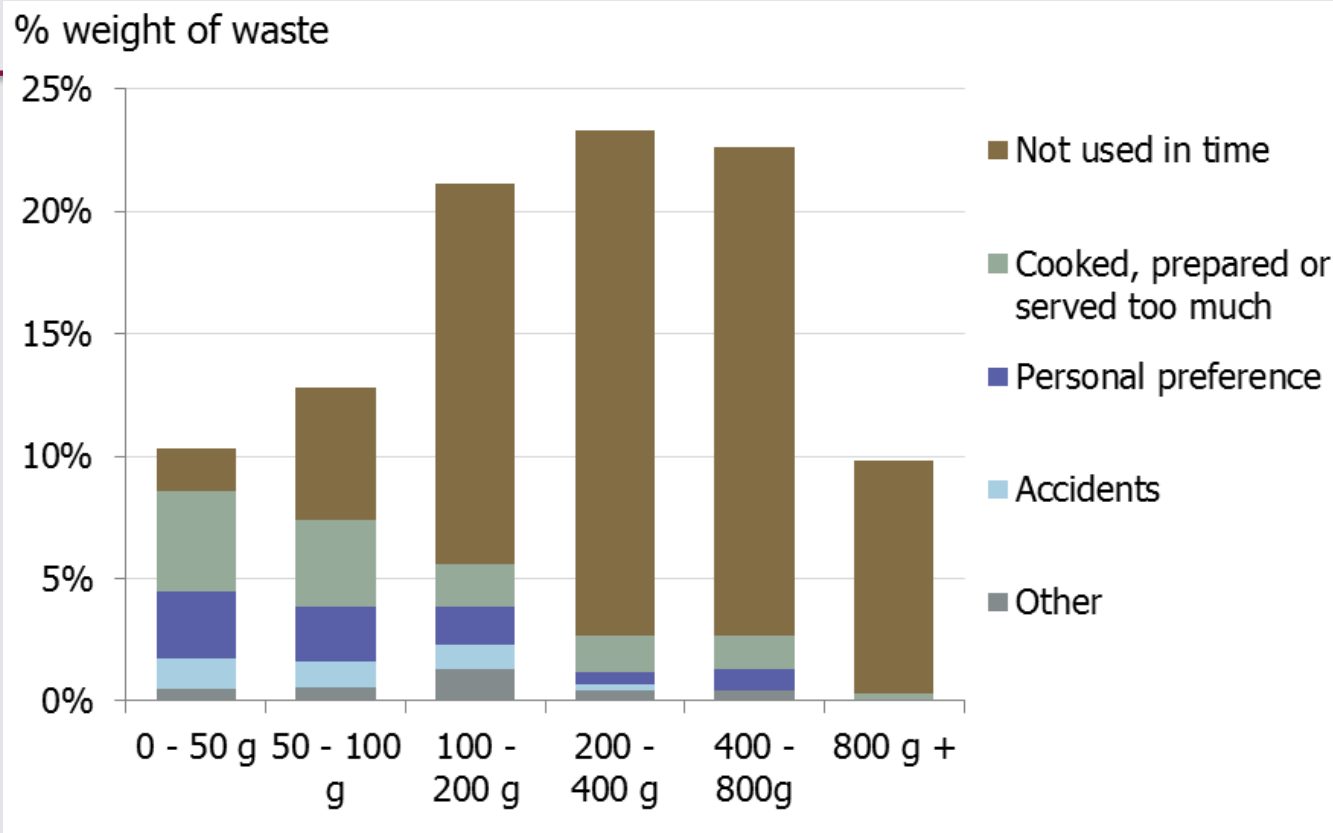
- **Synthesis of local authority data:** LA collected waste: residual, collections targeting food waste
- **Detailed waste compositional analysis (WCA):** Types of food, state, other info for LA collected waste
- **Kitchen diaries:** Amounts for home composted, sewer, reasons for disposal

In many intervening years (2010, 2014, 2015), we have just performed the **synthesis of local authority data**, and **modelled** waste to sewer and home composting.

Useful results



Diary – example statistics for bread



Campaigns can require facts...



WE THROW AWAY

7 MILLION TONNES

OF FOOD AND DRINK EVERY YEAR IN THE UK

MORE THAN 1/2 OF THIS WE COULD
HAVE EATEN



THIS COSTS THE
AVERAGE HOUSEHOLD
£470 A YEAR



www.lovefoodhatewaste.com

#EatitCookitFreezeit

MEAT AND FISH TOP THE LIST WHEN IT
COMES TO THE VALUE OF THE FOOD
WE THROW AWAY...



£2.1BN



WE CAN ALL DO OUR BIT BY NOT BUYING
OR MAKING TOO MUCH FOOD, USING IT IN
TIME OR FREEZING IT FOR USE LATER

Monitoring targets

Figure 3: Estimated arising of local authority collected household food waste in the UK 2007 to 2015, kg per person ($\pm 95\%$ confidence interval)



Results cover food waste in kerbside residual and collections targeting food waste for treatment, but exclude minor waste streams (HWRC residual and contamination of dry recycling).

The Business Case



Joint World Resources Institute / WRAP study

Measurement in the supply chain crucial to the business case

<http://www.wrap.org.uk/content/business-case-reducing-food-loss-and-waste-0>

SAVE MONEY

An analysis of 1,200 sites across 700 companies in 17 countries found that 99 percent of sites had a positive return on their investment in food loss and waste reduction, and half of the sites had a return greater than 14-fold.

COMPANIES



- | | |
|--------------------------------|---------------------------------|
| Measuring waste | Selling imperfect produce |
| Training staff | Creating new products |
| Improving inventory management | Reducing waste management costs |
| Changing packaging | Avoiding cost of food not sold |

Contact us



WRAP GLOBAL

Second Floor
Blenheim Court
19 George Street
Banbury, OX16 5BH
UK

Telephone:
+44 (0)1295 819900

wrapglobal.org