

# Food surplus and waste in the UK – key facts

Updated October 2021

## 1.0 UK food and drink surplus and waste arisings

WRAP estimated annual food<sup>1</sup> waste<sup>2</sup> arisings within UK households, hospitality & food service (HaFS), food manufacture, retail and wholesale sectors in 2018 at around 9.5 million tonnes<sup>3</sup>, 70% of which was intended to be consumed by people (30% being the 'inedible parts'). This had a value of over £19 billion a year and would be associated with 36 million tonnes of greenhouse gas (GHG) emissions<sup>4</sup>. Over 85% (by weight) of this wasted food arises in households and food manufacture, although waste arising in one part of the supply chain is certainly influenced by other parts of the chain.

Figure 1 below shows the breakdown of food waste arising in the UK, post-farm gate<sup>5</sup>. In comparison, around 43 million tonnes of food are purchased in the UK<sup>6</sup> (the majority for in home use), meaning that the amount of food wasted post-farm-gate in the UK is equivalent to between a fifth and a quarter of that purchased by consumers for in home and out of home consumption (22%)<sup>7</sup>. By weight, household food waste makes up 70% of the UK post-farm-gate total, manufacturing 16%, hospitality and food service 12% and retail 3%. Figure 2 below shows the breakdown of food wasted, excluding the 3 million tonnes of 'inedible parts', in the UK.

In addition to food ending up as waste, around 740,000 tonnes of food surplus from manufacturing, retail and hospitality and food service is either being redistributed via charitable and commercial routes (ca. 80,000 tonnes in 2020<sup>8</sup>) or being diverted to produce animal feed (around 660,000 tonnes in 2015<sup>9</sup>). Both of these are classed as waste prevention according to food material hierarchy (Figure 3).

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<sup>1</sup> 'Food' is used throughout as a shorthand term for both 'food' and 'drink'.

<sup>2</sup> Definitions of 'food surplus' and 'food waste' can be found [here](#) (page 13 onwards).

<sup>3</sup> [UK progress against Courtauld 2025 targets and Sustainable Development Goal 12.3](#); WRAP 2020

<sup>4</sup> [UK Food System GHG Emissions](#); WRAP 2021

<sup>5</sup> 'Post-farm gate' excludes food waste arising in primary production, but includes all other sectors, from manufacture, through retail, wholesale and HaFS, and from households.

<sup>6</sup> Analysis of data from [Family Food 2017/18](#) and [The True Cost of Waste in Hospitality and Food Service](#).

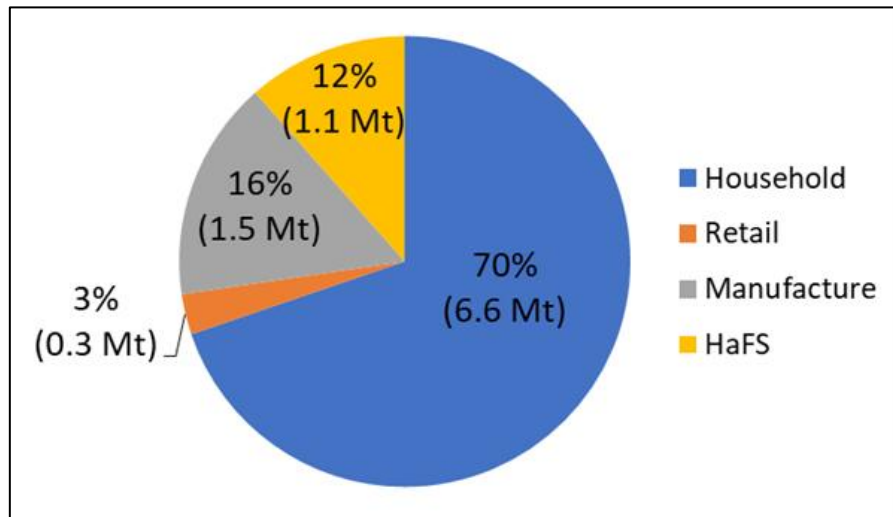
<sup>7</sup> This excludes food wasted outside of the UK in the production of food imported into the UK. Including the mean estimate of UK food waste in primary production yields a figure of 26% - meaning that the amount of food wasted in the UK is equivalent to around a quarter of that purchased by consumers for in home and out of home consumption.

<sup>8</sup> [Surplus food redistribution in the UK; 2015 - 2020](#); WRAP 2021; Approximately 85% of the 92,000 tonnes of surplus food redistributed in the UK in 2020 came from these three sectors.

<sup>9</sup> [Quantification of food surplus, waste and related materials in the supply chain](#); WRAP 2016.

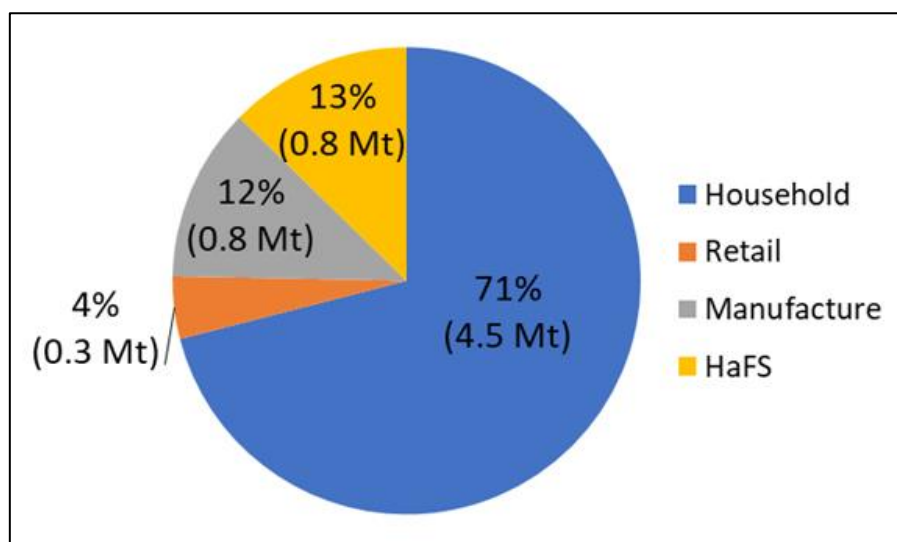
There are also 2.2 million tonnes of food by-products from food manufacturing used as animal feed, and up to another 2 million tonnes of animal by-products sent to rendering plants<sup>7</sup>.

**Figure 1:** Amounts of total food waste arising in the UK by sector (total post-farm-gate = ca. 9.5 Mt)\*



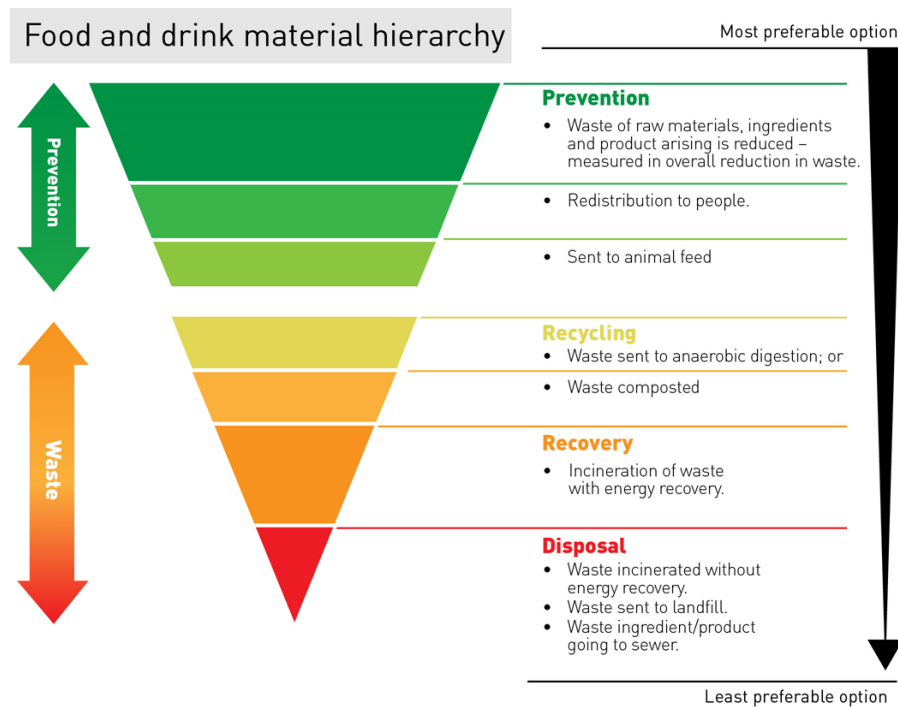
\* Data for households, HaFS and manufacture relate to 2018 (published [here](#)) and retail to 2020 (published [here](#)). In addition there are estimates of 43kt of food waste from wholesale (2015; see [here](#)), and around 100kt of food waste in litter (2012; see [here](#)). Data for household also includes waste to sewer, which is not currently available for other sectors.

**Figure 2:** Amounts of food (excluding inedible parts) wasted in the UK by sector (total post-farm-gate = ca. 6.4 Mt)\*



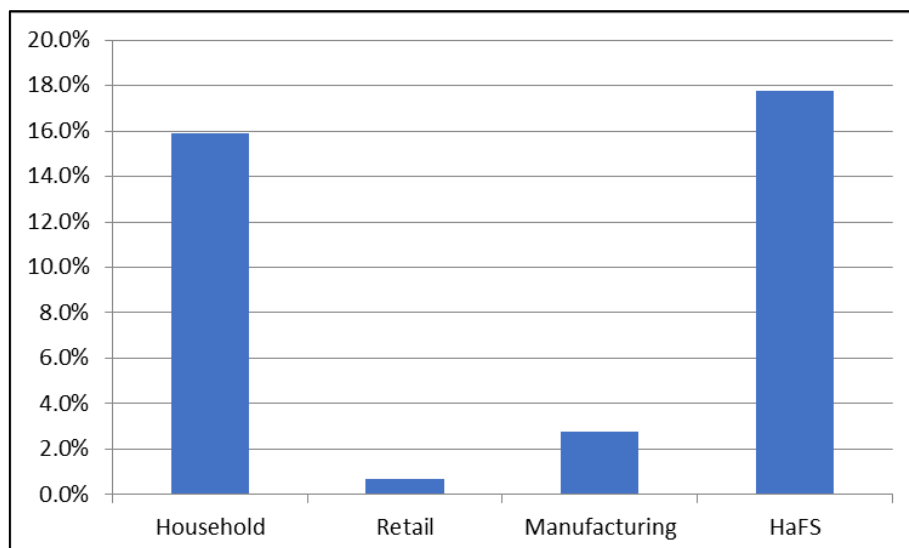
\* Food waste at wholesale and in litter is excluded from this analysis as the percentage of inedible parts is unknown and difficult to predict. Data for household also includes waste to sewer, which is not currently available for other sectors.

**Figure 3:** Food material hierarchy



The amount of food waste generated by households and the hospitality and food service sector, *as a percentage of the amounts of food purchased*, are similar at between 16% and 18% respectively (Figure 4). For manufacturing the percentage food waste of food produced/sold is less than 3%, whilst for retail the figure is under 1%. More detail can be found in the sections below.

**Figure 4:** Food waste expressed as a percentage of food purchases (household/HaFS) or sales (manufacture, retail), on a weight basis



## Food waste in primary production

There is no comparable estimate for food waste pre-farm gate in the UK, but the first detailed study<sup>10</sup> undertaken by WRAP revealed that for just two important crops, strawberry and lettuce, £30 million of food ended up as waste (9% of strawberry production and 19% of lettuces grown).

As data specific to the UK is unavailable for many sectors, WRAP has estimated food surplus and waste levels from primary production based on an extensive literature review<sup>11</sup>. This draws on the best available data from comparable geographies: Europe, North America and Australia. Due to uncertainties associated with the data used, and likely variation in food waste due to weather, market fluctuations etc., ranges are given for both surplus and waste. The central estimate for food surplus is 2.0 million tonnes (range 0.9 – 2.7), and for food waste 1.6 million tonnes (range 0.9 – 3.5).

The estimate for food waste in primary production would suggest that more food waste arises from this sector than from hospitality & food service and retail combined. However, the estimates for food waste from manufacturing, retail, hospitality & food service and households are based purely on UK data, and using methodologies that enable progress to be tracked over time, and therefore no direct comparison can be made.

[Courtauld 2030](#) and the [Food Waste Reduction Roadmap](#) have a farm-to-fork ambition and, even though primary production is not within the scope of the Courtauld 2030 quantitative food waste target<sup>12</sup>, there is an expectation that businesses will act in this important area, and this is increasingly a focus for action. The current evidence is not strong enough to serve as a benchmark against which progress can be assessed, and WRAP is working with Governments and businesses to determine how the evidence base can be strengthened and impacts judged.

Table 1 presents a summary of what is known about food surplus, waste and related material arisings in the UK, and their respective treatment and disposal routes.



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<sup>10</sup> [Food waste in primary production – a preliminary study on strawberries and lettuces](#); WRAP 2017

<sup>11</sup> [Food waste in primary production in the UK](#); WRAP 2019.

<sup>12</sup> *Courtauld 2030 has a target to reduce post-farm gate food waste by 50% per capita by 2030 compared to 2007.*

**Table 1** Summary of food surplus, waste and related material arisings in the UK, and their respective treatment and disposal routes  
(See notes on subsequent page for further detail)

	Household	HaFS*	Retail & Wholesale	Manufacturing	Farm	Total <sup>1</sup>
<b>Total food waste</b>	<b>6.6 Mt</b>	<b>1.1 Mt</b>	<b>0.3 Mt<sup>8</sup></b>	<b>1.5 Mt</b>	<b>[0.9 – 3.5 Mt]</b>	<b>&gt;9.5 Mt</b>
 <b>Food (excl. inedible parts)</b>	<b>4.5 Mt</b> <b>(£13.8 bn)</b>	<b>0.8 Mt</b> <b>(£3.2 bn)</b>	<b>0.3 Mt</b> <b>(£0.9 bn)</b>	<b>0.8 Mt</b> <b>(£1.1 bn)</b>	<b>nk</b>	<b>&gt; 6.4 Mt</b> <b>(&gt;£19 bn)</b>
<b>Redistribution &amp; animal feed</b>	<b>0.3 Mt</b> [n/a humans 0.3 Mt pets/ other animals]	<b>&gt;0.005 Mt</b> [>4kt to people [n/a to animals]	<b>0.07 Mt</b> [38kt to people] [27kt to animals]	<b>0.67 Mt</b> [35kt to people] [635kt to animals]	<b>nk<sup>9</sup></b> [7kt to people]	<b>&gt; 1.0 Mt</b>
 <b>Recycling (AD/composting)</b>	<b>1.3 Mt<sup>2</sup></b>	<b>0.04 Mt</b>	<b>0.15 Mt<sup>3</sup></b>	<b>0.44 Mt<sup>4</sup></b>	<b>nk</b>	<b>&gt; 1.9 Mt</b>
<b>Recovery (thermal, landspreading)</b>	<b>3.0 Mt<sup>5</sup></b>	<b>0.84 Mt<sup>6</sup></b>	<b>0.15 Mt<sup>3</sup></b>	<b>1.1 Mt<sup>4</sup></b>	<b>nk</b>	<b>&gt; 5.1 Mt</b>
<b>Disposal (sewer, landfill)</b>	<b>2.3 Mt<sup>5</sup></b> [1.5 Mt sewer 0.8 Mt landfill]	<b>0.21 Mt<sup>6</sup></b> [nk sewer 0.20 Mt landfill]	<b>nk<sup>3,10</sup></b>	<b>0.002 Mt<sup>4</sup></b> [nk sewer 0.002 Mt landfill]	<b>nk</b>	<b>&gt; 2.5 Mt</b>
<b>In addition:</b>						
<b>Rendering of animal by-products</b>				<b>0.6 Mt</b>	<b>nk</b>	<b>0.6 Mt</b>
<b>Other food by-products<sup>7</sup></b>				<b>2.2 Mt</b>		<b>2.2 Mt</b>

\* HaFS = hospitality and food service; nk = not known; n/a = not applicable

Notes relating to Table 1:

**Figures in black are the breakdown of the total food waste (figures in black and bold)**

The portions of total food waste excluding inedible parts are shown in red, and are a fraction of the total food waste (and should not be added to the figures in black or blue).

Figures in blue are materials not classed as food waste (food surplus) or by-products and are therefore not included in the total food waste figures in black.

Figures in grey relate to the range of estimates for food surplus and waste in primary production, which are not comparable to those for other sectors.

All food waste data is for 2018, estimates for food redistributed are for 2020, and those for surplus diverted to animal feed are for 2015.

1 – Estimates under the total column are indicated as minima, due to the absence of comparable data from on farm.

2 – This includes 0.78 Mt of food waste collected separately by local authorities and 0.53 Mt of food waste home composted.

3 – In WRAP's research it was not possible to identify the disposal route for much of the food waste from retail, but information from Courtauld 2030 signatories suggests that about half is recycled (via anaerobic digestion or composting) and half sent for recovery (primarily via thermal treatment).

4 – Detailed data on the destinations of food waste from manufacture are available for [2014](#), and the same split has been applied to the 2018 arisings data.

5 – Based on data for England from [Local authority collected waste management for England for 2018/19](#) which shows 79% of household mixed waste being incinerated with energy recovery, ca 1% being incinerated without energy recovery and 19% going to landfill.

6 – The split between recovery and disposal for residual waste from HaFS has been assumed to be the same as for household residual waste (i.e. 79% of mixed waste being incinerated with energy recovery, ca 1% being incinerated without energy recovery and 19% going to landfill).

7 – Examples include spent grain from brewing and dried sugar beet pulp.

8 – Includes [259,000 tonnes from retail](#) and 43,000 tonnes from wholesale.

Note: Food fed to pets and other animals in households and commercial food and related by-products used as animal feed are not classed as waste (as this is defined as a waste prevention activity). Estimates have been rounded and may not therefore add up to the total estimate for any given sector.

Source material:

- The primary source of data on UK food waste for 2018 (the most recent data available for most sectors) is the [UK progress against Courtauld 2025 targets and Sustainable Development Goal 12.3](#) report; WRAP 2020.
- Additional and more detailed sector data can be found in:
  - [Courtauld Commitment 2025 food waste baseline for 2015](#); WRAP 2018
  - [Household food waste: restated data for 2007-2015](#); WRAP 2018
  - [Overview of Waste in the UK Hospitality and Food Service Sector](#); WRAP 2013
  - [Food Waste Reduction Roadmap Progress Report 2021](#); WRAP 2021 (contains an estimate for retail food waste for 2020)
  - [Food surplus and waste in UK wholesale grocery](#), 2015; WRAP 2016
  - [Quantification of food surplus, waste and related materials in the grocery supply chain](#); WRAP 2016
  - [Surplus food redistribution in the UK 2015 - 2020](#); WRAP 2021

## 2.0 Further information

For information about WRAP's work to reduce food waste, please visit:

- [Food Waste Reduction Roadmap](#)
- [Food & Drink webpages](#)
- [The Courtauld Commitment 2030](#)
- [WRAPs Food Waste Data](#)

## 3.0 Changes in food surplus and waste over time

WRAP has published a number of reports on how food waste levels have changed over time, and the headline facts are listed here:

- Since 2007 the UK has had large-scale interventions aimed at reducing food waste across supply chains, and households. This contributed to a reduction in post-farm-gate total food waste between 2007 and 2018 of around 15% (1.7 Mt). Excluding 'inedible parts' the reduction was 21%, and on a per capita basis the reduction for post-farm-gate total food waste was 21%, and 27% excluding the 'inedible parts'<sup>13</sup> (see Table 2 below).
- Total household food waste in the UK was just over 1.4 Mt lower in 2018 compared to 2007, which equates to an 18% reduction. Excluding 'inedible parts' the reduction was 26%, equivalent to £4.8 billion less food being wasted in 2018 compared to 2007. On a per capita basis the reduction for total household food waste was 24%, and 31% excluding the 'inedible parts'.

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<sup>13</sup> [UK progress against Courtauld 2025 targets and Sustainable Development Goal 12.3](#); WRAP 2020

- Total post-farm gate supply chain food waste in the UK was 230,000 tonnes lower in 2018 compared to 2011, which equates to a 7% reduction (3.1 Mt down to 2.9 Mt). Excluding 'inedible parts' the reduction was 9% (180,000 tonnes; from 2 Mt to under 1.9 Mt). On a per capita basis the reduction for total post-farm gate supply chain food waste was 12%, and 13% excluding the 'inedible parts'.
- Food waste arising at manufacture reduced by around 395,000 tonnes between 2011 and 2018 (an approximate 21% reduction, from around 1.9 Mt), whilst levels of food waste at retail were around 5% lower in 2018 (277,000 tonnes) compared to estimates for 2009 (290,000 tonnes)<sup>14</sup>. The estimate for food waste in the HaFS sector increased by 19% (180,000 tonnes) compared to 2011<sup>15</sup>.
- Over the lifetime of the [Courtauld 3 voluntary agreement](#) (2012 to 2015) the estimated weight of food waste avoided by signatories was 100,000 tonnes, with a value of approximately £100 million. The amount of food waste reported by signatories was around 3.6% lower in 2015 compared to 2012<sup>16</sup>.
- Under the [Hospitality and Food Service Agreement](#) (2012 to 2015) there was a reduction in CO<sub>2</sub>e emissions of 11% against the (2012) baseline over the three years of the agreement. Food waste prevention activities saved an estimated 24,000 tonnes of food from being thrown away (worth £67 million)<sup>17</sup>.

**Table 2:** Comparison of UK post farm gate food waste in 2018 vs 2007\*

	2007*		2018			
	Tonnes	Per capita (kg)	Tonnes	% change	Per capita (kg)	% change
UK total post-farm food waste	11,200,000	181	9,500,000	15%	143	21%
UK post-farm gate food waste (excluding inedible parts)	8,200,000	132	6,400,000	21%	96	27%

\* In [Historical changes and how amounts might be influenced in the future](#) WRAP 2014, WRAP made the case for a baseline year of 2007 against which to assess changes in UK food waste over time. This was on the basis that a) there is robust data on the largest fraction of UK food waste from that year (i.e. household food waste; ca 70% of the total post-farm gate) and b) this is when the UK began large-scale interventions to reduce food waste (which were aimed exclusively at household food waste until 2010 – with a focus on supply chain food waste commencing under Courtauld 2 in 2010, and in 2012 on food waste from the hospitality and food service sector<sup>18</sup>).

<sup>14</sup> A subsequent update of UK retail food waste was [published](#), of 259,000 tonnes (2020)

<sup>15</sup> Whilst the data for 2018 suggest food waste from HaFS has been increasing over time from 2011, it is important to remember that this is a modelled result, based on changes in the number and types of hospitality and food service sites. WRAP is discussing how best to update the UK HaFS estimate going forwards.

<sup>16</sup> [Courtauld Commitment 3: Delivering action on waste.](#)

<sup>17</sup> [The Hospitality and Food Service Agreement - Taking action on waste.](#)

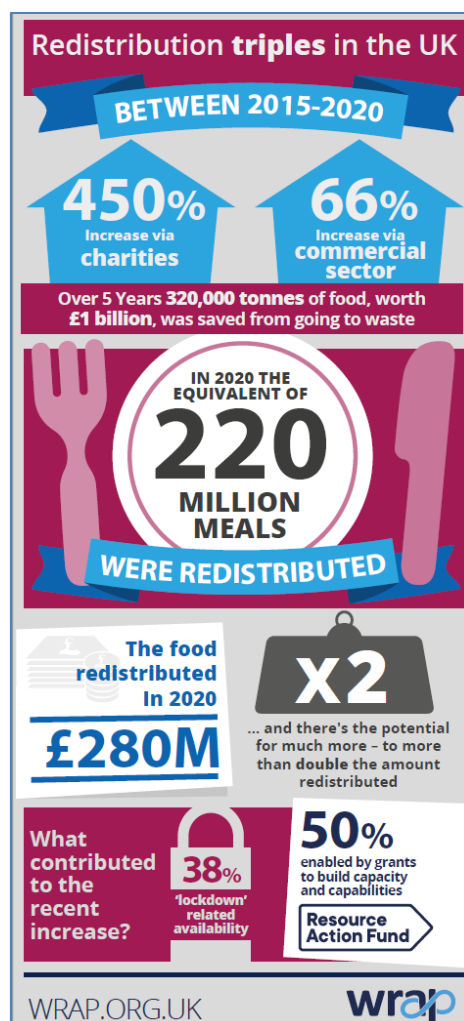
<sup>18</sup> Baseline data for household food waste is from 2007, retail data is 2009 and manufacture / hospitality and food service is 2011.



In 2021 WRAP published [Surplus food redistribution in the UK 2015 - 2020](#) which revealed that UK redistribution had trebled between 2015 and 2020, for the charitable and commercial sectors combined:

- Between 2018 and 2020, there was a 65% increase in surplus redistributed; an additional 36,000 tonnes, worth over £110 million and enough to provide the equivalent of 86 million meals.
- The amount of surplus food redistributed in 2020, over 92,000 tonnes, was worth £280 million and was the equivalent of 220 million meals.
- Total food redistributed between 2015 and 2020 equals ca. 320,000 tonnes, worth almost a billion pounds (£970 million) and equivalent to > three quarters of a billion meals (760,000,000).
- Surplus redistributed via charitable routes made up 70% of the total redistributed in 2020, compared to just over 40% in 2015.
- Two-thirds of the increase in 2020 came from retail and manufacture, with 23% coming from hospitality and food service/farm).

**Figure 4:** Infographic showing changes in UK food surplus redistribution 2015 to 2020



#### 4.0 Targets to reduce UK food waste

[UN SDG12.3](#) was announced in 2015:

“By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”

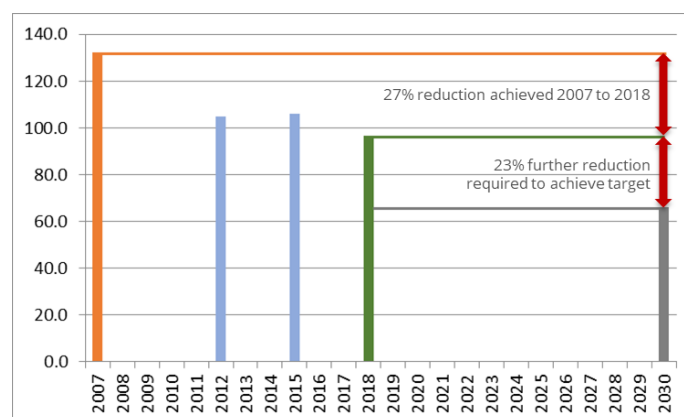
In the absence of detailed guidance from the UN on the scope of SDG12.3, The Champions 12.3 Group issued their own global guidance in 2017<sup>19</sup>. This stated that countries and companies should:

- Measure and report amounts of both wasted food & inedible parts (i.e. total food waste<sup>20</sup>)
- Report progress vs SDG12.3 on the basis of total food waste OR wasted food only (i.e. the ‘edible’ parts), if there is the ability to separately measure the latter
- Apply the ‘50%’ target reduction from ‘farm to fork’

The UK has followed the Champions 12.3 Guidance, and most recently published an update of UK food waste in January 2020. This report contained a comprehensive set of data on the absolute (tonnages) and relative (per capita) levels of food waste from households, HaFS, retail and manufacture, and how these had changed compared to the UK baseline (2007) and the last published update in 2015. Changes were reported for both total food waste and separately for the wasted food (‘edible’) fraction.

Based on the latter the UK reported a reduction of 27% compared to the SDG12.3 50% target, suggesting the UK was around halfway to achieving SDG12.3. This represents over halfway to the target of a 50% reduction by 2030 and equates to an average reduction of around 2% a year for the whole period (and 3% for 2015 to 2018), which is the rate required to achieve SDG12.3.

**Figure 5: Progress towards SDG12.3 (excluding inedible parts; kg pp per year)**



<sup>19</sup> [Guidance on Interpreting Sustainable Development Goal Target 12.3](#); Champions 12.3 2017

<sup>20</sup> Total food waste = wasted food (i.e. the parts which were intended for human consumption, sometimes referred to the ‘edible’ fraction) + inedible parts (i.e. those parts associated with food that are not intended to be consumed (such as bones, egg shells). A food waste prevention programme is much more likely to be focused on and affect wasted food rather than the inedible parts, especially from households, retail and HaFS

UNEP is the custodian of the [Food Waste Index](#) (FWI), which tracks food waste generation at global level (that is the '50%' part of SDG12.3). Details of the FWI were published in March 2021, and require countries to:

- Measure and report amounts of both wasted food & inedible parts (i.e. total food waste)
- Report progress vs SDG12.3 on the basis of total food waste (not wasted food only (i.e. the 'edible' parts')
- Apply the '50%' target reduction to households, retail and HaFS only (but the FWI does allow the reporting of food waste from manufacture not covered by the [Food Loss Index](#))

The report also states 'disaggregation by edible and inedible parts is valuable to policymakers in guiding policy interventions to make the best possible use of food resources, supporting a circular food system and the application of the waste hierarchy', but recognised that currently few countries have the ability to disaggregate their food waste data (the UK being one). In order to simplify reporting, this disaggregation is proposed as an advanced reporting option.

The UK/WRAP already publish the information required by the FWI but going forwards will publish progress against SDG12.3 on the basis of both total food waste and on wasted food separately. WRAP also will continue to follow the Champions 12.3 guidance to apply the 50% reduction target across all sectors (where data is available, i.e. excluding pre-farm gate until the evidence base for this part of the supply chain is sufficiently robust), and will continue to report data on food waste at a sector level and aggregated for the UK.

A 50% reduction in UK wasted food (excluding inedible parts) per capita by 2030 compared to 2007 would equate to a reduction from 132 kg per person to 66 kg per person. Taking into consideration population growth, this would mean a reduction in food going to waste of around 3.6 Mt a year (2007 levels were 8.2 Mt [11.2 including inedible parts], and in 2030 they would be 4.5 Mt [7.6 Mt including inedible parts]).

There is no room for complacency as there are significant challenges remaining. In order to achieve the SDG12.3 target another 1.9 Mt of food waste will need to be prevented by 2030 compared to 2018, around 1.3 Mt from reducing household food waste, around 80,000 tonnes from retail, around 200,000 tonnes from manufacturing and 300,000 tonnes from hospitality and food service.

Table 3 shows the impact of achieving SDG12.3 on UK food waste, on the basis that the 50% reduction applies to wasted food excluding inedible parts. For comparison Table 4 shows the same analysis but where the 50% reduction is applied to total food waste.

**Table 3:** Actual (to 2018) and modelled (2018 to 2030) changes in UK food waste assuming SDG12.3 is achieved on the basis of wasted food (excluding inedible parts)

	2007			2018			2030			% Reduction (2007 to 2030; per capita)	% Reduction (2018 to 2030; per capita)
	Total food waste (t)	Wasted food (t)	Wasted food per capita	Total food waste (t)	Wasted food (t)	Wasted food per capita	Total food waste (t)	Wasted food (t)	Wasted food per capita		
Household	8,100,000	6,100,000	100	6,600,000	4,500,000	68	5,300,000	3,200,000	46.7	53.3%	22.4%
Retail	290,000	290,000	4.7	277,000	277,000	4.2	200,000	200,000	2.9	38.3%	30.2%
Manufacture	1,900,000	1,100,000	16.9	1,500,000	770,000	11.6	1,300,000	540,000	7.9	53.3%	16.2%
HaFS	920,000	680,000	10.7	1,100,000	810,000	12.2	800,000	510,000	7.4	30.8%	29.7%
<b>Total</b>	<b>11,200,000</b>	<b>8,200,000</b>	<b>132</b>	<b>9,477,000</b>	<b>6,400,000</b>	<b>96</b>	<b>7,600,000</b>	<b>4,475,000</b>	<b>64.9</b>	<b>50.8%</b>	<b>22.5%</b>

**Table 4:** Actual (2007 to 2018) and modelled (2018 to 2030) changes in UK total food waste assuming SDG12.3 is achieved on the basis of total food waste (including inedible parts)

	2007		2018		2030		Reduction in tonnage required to achieve SDG12.3 (2018 to 2030)			% Reduction per capita		
	Total food waste (t)	Total food waste per capita	Total food waste (t)	Total food waste per capita	Total food waste (t)	Total food waste per capita	Wasted food (t)	Inedible parts (t)	Total food waste (t)	2007-2018	2007-2030	2018-2030
Household	8,100,000	132	6,600,000	100	4,400,000	63	1,827,000	373,000	2,200,000	24.2%	52.3%	37.0%
Retail	290,000	5	277,000	4	188,000	3	89,000	n/a	89,000	10.6%	42.0%	35.7%
Manufacture	1,900,000	30	1,500,000	23	1,050,000	15	230,000	220,000	450,000	24.6%	49.9%	33.9%
HaFS	920,000	15	1,100,000	17	685,000	10	363,000	52,000	415,000	-13.7%	32.6%	40.6%
<b>Total</b>	<b>11,210,000</b>	<b>181</b>	<b>9,477,000</b>	<b>143</b>	<b>6,323,000</b>	<b>91</b>	<b>2,509,000</b>	<b>645,000</b>	<b>3,154,000</b>	<b>20.9%</b>	<b>50.1%</b>	<b>36.9%</b>

\* See Table 2 for an explanation of the baseline

# Appendix 1: Useful facts relating to UK household food waste

1. WRAP research shows we now (2018) throw away 6.6 million tonnes of household food waste a year in the UK, compared to 8.1 million tonnes in 2007.
2. Of the 6.6 million tonnes we throw away, almost three quarters (70% of the total) is food we could have eaten (4.5 million tonnes).
3. Household food waste would fill approximately 66,000 three-bed terraced houses, equivalent to the population of a town the size of Peterborough.
4. By 2018 UK household food waste had reduced by around 18% (1.4 million tonnes) a year compared to 2007.
5. By 2018 food that could have been eaten (the 'edible parts') had reduced by 26% (1.6 million tonnes from 6.1 million tonnes to 4.5 million tonnes) a year compared to 2007.

[The amount of inedible parts increased by ca 0.2 million tonnes by 2018 compared to 2007, in line with the increasing population; explaining why total food waste 'only' reduced by 1.4 million tonnes]

6. The amount of food 'saved' (i.e. not wasted in 2018 compared to 2007) annually by 2018 would fill 3 Wembley stadia, 30 Royal Albert Halls, 13 million large wheelie bins (240l), 1,300 Olympic swimming pools or 170,000 bin lorries/dustcarts.
7. Had the reduction in wasted food & drink (the edible parts; i.e. the 4.5 million tonnes) not occurred, consumers would have been spending £4.8 billion a year more (in 2018 compared to 2007) on food & drink bought but thrown away.
8. The savings associated with the reduction in food that could have been eaten (the 4.5 million tonnes) amount to around 5.3 million tonnes of CO<sub>2</sub>e a year (in 2018 compared to 2007) (the same as taking 2.4 million cars off the road for a year).
9. Around 70% of UK food we throw away (post farm gate) still comes from the home (i.e. of the total from manufacturing / processing, retail, hospitality and food service and homes (9.5 million tonnes), approximately 70% comes from homes (6.6 million tonnes).
10. Food that could have been eaten but gets thrown away (4.5 million tonnes) is worth around £14 billion (£13.8 billion). This is around £60 per month for the average family with children. The carbon associated with this food is equivalent to that generated by one in five cars on UK roads.
11. A UK household wastes on average the equivalent of eight meals a week<sup>21</sup>.

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<sup>21</sup> Based on 4.5 million tonnes of wasted food, [420g meal weight](#) and 27,576,000 households.

12. An area almost the size of Wales (ca. 19,000km), would be needed to produce the food and drink currently wasted.

### 'Fun facts' – based on 2018 data

The food and drink we waste, that could have been eaten (the 4.5 million tonnes) would fill:

- 8 Wembley Stadiums (London, UK)
- 90 Royal Albert Halls
- 38 million wheelie bins (based on a standard 240l)
- 3,600 Olympic sized swimming pools
- 490,000 bin lorries/dustcarts

As a result of the updating the data on household food waste, a number of related estimates have also been revised. The values for 2018 are shown in Tables 4 and 5.

**Table 4:** Updated estimates for the amounts and value of food (excluding inedible parts) wasted by the average individual, household and family (per year and per month)

	kg	Value (£)
Household food waste excluding inedible parts per person (year)	69	£210
Household food waste excluding inedible parts per person (month)	5.8	£18
Household food waste excluding inedible parts per household (year)	165	£500
Household food waste excluding inedible parts per household (month)	14	£40
Household food waste excluding inedible parts per family (year)	244	£730
Household food waste excluding inedible parts per family (month)	20	£60

**Table 5:** Updated estimates for the amounts and value of food (excluding inedible parts) wasted by reason for disposal

Reasons for food being thrown away:	Mt	% by weight	Value (£ bn)
Not used in time	1.9	41%	£5.7
Personal preference	1.3	28%	£3.9
Cooked, prepared, served too much	1.1	25%	£3.5
Other	0.3	6%	£0.8
Total	4.5		£13.8

*This is 3.4 kg of wasted food per household per week.*

## Detailed statistics – based on 2012 data

**NB:** The numbers shown below are from research carried out in 2012 as the 2018 research did not repeat the detailed compositional analysis. WRAP is discussing when and how to update the more detailed household food waste data.

- Whilst chicken is our favourite meat, we're wasting the meat from 120 million of them per year

Proportions of wasted food & drink ('edible parts') by food group:

- Fresh vegetables & salad – 28%
- Drinks – 15%
- Bakery – 11%
- Meals – 9%
- Dairy & eggs – 9%
- Fresh fruit – 6%
- Meat & fish – 6%

[The remaining 16% is made up of other foods such as sauces, pasta, rice, cakes & desserts, oils & fats and confectionery]

Top 10 most wasted food and drink items in UK homes (that could have been eaten):

- Potato (fresh)
- Bread
- Milk
- Meals (home-made and pre-prepared)
- Fizzy drinks
- Fruit juice and smoothies
- Pork / ham / bacon
- Poultry (chicken, turkey, duck)
- Carrots (fresh)
- Potato (processed)

Every day in UK homes we throw away approximately:

- 20 million whole slices of bread (equivalent to 1,000,000 loaves at 20 slices per loaf; but more than a third less than in 2007)
- 4.4 million whole potatoes
- 920,000 (0.9 million) whole bananas
- 1.2 million whole tomatoes
- 720,000 (0.7 million) whole oranges
- 800,000 (0.8 million) whole apples
- 2.7 million whole carrots
- 970,000 (1.0 million) whole onions
- 86,000 whole lettuce
- 3.1 million glasses' worth of milk
- 2.2 million slices' worth of ham

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