Food surplus and waste measurement and reporting guidelines for the Hospitality and Food Service Sector – September 2018

Introduction

WRAP and UK food businesses have agreed some common guidelines for measuring and reporting on food surplus and waste, consistent with the global Food Loss and Waste Accounting and Reporting Standard (FLW Standard). These have been produced in support of the UK Food Waste Reduction Roadmap – to help the UK meet the Sustainable Development Goal (SDG) 12.3 target to halve food waste by 2030.

The UK Guidelines are available here. They are accompanied by a common Reporting Template, which is recommended if sharing data externally for any purposes (e.g. public or anonymous reporting). The UK Guidelines have now been endorsed by a number of large food and drink businesses including retailers, manufacturers and hospitality and food service. It provides a common language and framework for describing what has been measured, so that companies and others can develop targeted food waste reduction strategies and realise the benefits from tackling this inefficiency.

This document should be used in conjunction with the wider UK Guidelines**. It provides additional recommendations for Hospitality and Food Service businesses, based on the specific operational considerations and challenges relevant to this sector, using practical examples, and a frequently asked questions (FAQ) section.**

These recommendations will be reviewed annually to ensure that they remain fit-for-purpose.

Why measure food waste?

Food waste costs the UK HaFS sector £2.9 billion each year (Source: WRAP website). Using the UK Guidelines can help HaFS businesses to understand how much, where, and why food loss and waste is occurring – so they can measure and act upon it.

Research from 1,200 business sites across 700 companies in 17 countries found that the median company (across multiple business sectors) saved over £10 for every £1 they invested on curbing food loss and waste (Source: Business Case for Reducing Food Loss and Waste (Champions 12.3)). There is also some specific business case studies in the catering sector and the Hotel sector.

How do I describe food waste in my HaFS business using the UK Guidelines?

What is considered 'food waste' in one business might not be the same as in another. HaFS businesses should therefore use the UK Guidelines to describe what is included in their food waste. The UK Guidelines provide definitions of the possible components of food waste in terms of the possible "material types" (i.e., food and/or associated inedible parts) and "destinations" (where material removed from the food supply chain is directed).

HaFS businesses define which material type(s) and destination(s) are in scope. In terms of the material types, you may choose to quantify both the wasted food and associated inedible parts (e.g., bones, rinds), just wasted food, or just associated inedible parts.

The table below provides definitions from the UK Guidelines for these material types and a proposed definition of food waste for companies to use. Question 6 in the Frequently Asked Questions (FAQ) Section below provides more detail on the destinations.

Table 1: Definitions from the UK Guidelines for material types

Food	Any substance that is – or was at some point – intended for human consumption. This includes both food and drink. **This includes material that has spoiled and is therefore no longer fit for human consumption** (i.e. would be regarded as no longer edible, for example due to it passing a 'use by' date or being spoiled). It *does not include* cosmetics, tobacco, or substances used only as drugs. It *does not include* processing agents used along the food supply chain, for example, water to clean or cook raw materials in factories or at home.
Inedible Parts	Components associated with a food that would never have been intended to be consumed by humans – such as shells, bones, pits/stones. **'Inedible parts' *do not include* packaging, or food that could once have been eaten but has been spoiled or passed its 'use by' date**. For some businesses, it may be helpful to separately quantify 'inedible parts' and 'food' (e.g. when developing a meaningful food waste reduction target), as opportunities to reduce or redirect the inedible parts to higher value options may be limited.
Food Waste	For the purposes of the **UK Guidelines** (insert link) the term 'Food Waste' describes **any food and inedible parts sent to any of the Food Waste Destinations listed in the UK Guidelines**. This definition *excludes* any material that is sent for redistribution to people, animal feed or, conversion into industrial products (collectively referred to as 'food surplus').
Food Surplus	For the purposes of the UK Recommendations, the term 'Food Surplus' describes any food and inedible parts that are sent to the following: Redistribution to people (e.g. through a charity or commercial redistributor) Animal feed (1) Bio-based materials/ biochemical processing (e.g. whey from cheese for energy drinks)

Capturing and defining edible and inedible parts can be challenging within a HaFS business. WRAP's Courtauld 2025 reporting for HaFS suggests combining edible and inedible food and report both as food waste.

Strict regulations exist for sending catering waste to animal feed. For DEFRA guidelines :https://www.gov.uk/government/collections/guidance-for-the-animal-by-product-industry

For help with these definitions, please review the **Frequently Asked Questions (FAQ)** section at the end of this document. A number of practical examples, specific to the HaFS sector, are described in this section.

The simplest way to start using the **UK Guidelines** is by reading Section A Summary which lays out the key recommendations and definitions for participating businesses.

How do I quantify the food waste I have described?

The UK Guidelines requires food waste to be reported in terms of weight. Section 2 of the UK Guidelines is designed to help you decide how to quantify food waste.

The **UK Guidelines** do not require businesses to use a specific method to quantify food waste; however, it does require describing the quantification method used. Different methods are available for measuring quantities generated. The most appropriate method will vary depending upon time, resources, logistics and objectives.

Some quantification methods, such as direct weighing, are straightforward while others, such as a waste composition analysis, where food waste must be separated from other materials in order to be measured, can be complex. You might choose to use paper-based systems for recording the data captured, an example being the **'Your business is food; don't throw it away'** tracking sheets and calculator (or Unilever Food Solution's Wise Up on Waste calculator for multiple sites). Click on the icon above for more details. Others may record data electronically. More advanced technology-enabled monitoring systems are available that utilise smart scales/meters to capture and analyse food waste data on a regular basis. In order to help you to find the right method for your business the FLW Protocol has produced an Excel-based **FLW Quantification Method Ranking Tool**. A **guidance document** is also available, which explains in detail the 10 methods most commonly used to quantify FLW.

What about food redistributed?

Food sent for redistribution / donation (for people) falls outside of the scope of the UK Guidelines and should not be considered as waste. The guidelines require that users record the weight of rescued food separately to their food waste. This can be done using the **Reporting Template** and **Data capture sheet**.

Should a destination be specified for material removed from the supply chain? What if I don't know where our food waste goes?

The **UK Guidelines** require you to report where the food and/or associated inedible parts that are removed from the food supply chain go. There are 9 universal categories referenced in the **UK Guidelines** (called the "destinations"), which cover all relevant outlets. The definitions are in the **UK Guidelines.**

If a business does not know the destination, users are required to at least report the initial path(s) – how the material gets to a destination. The three possible paths are:
1   On-site removal or use of food waste
2   Other entity takes food waste off site
3   Other paths, typically informal

If you do not know the destination of your food waste, measuring it on site, using Your Business is Food; don't throw it away / Wise up on Waste / smart meters can be captured in the Food Waste Reporting template.

How do I report my results?

The **UK Guidelines** supports both internal and external reporting and provides an excel template for capturing and sharing data with a third party (e.g. WRAP) and a word template for both internal and external reporting (e.g. with a customer or to support public reporting).

Although it is down to an individual business to decide if they wish to report their food waste data publicly this is seen as best practice and the recommendation is that you should be working towards this. You may already be sharing your data with those responsible for tracking and facilitating progress as appropriate (e.g. WRAP/Courtauld 2025, trade bodies, business customers). Be as robust and transparent as possible.

Other resources and sources of information

- WRAP have developed a Toolkit which supports the UK food surplus and waste roadmap and the implementation of its principles of Target, Measure, Act.
- *On the FLW Protocol website (www.flwprotocol.org):* You can find the easily digestible 12 page Executive Summary of the *FLW Standard* which lists key definitions and steps for implementing the Standard, the *FLW Standard* itself, and full set of tools and resources for using the Standard. This website also includes case studies describing how companies have used the Standard.
- Guidance on working with your Waste Management Contractor to obtain accurate food waste data is available here.
- *Champions 12.3 - Guidance on Interpreting Sustainable Development Goal Target 12.3*
- *Your Business is Food; don't throw it away*
- Other new tools & guidance will be listed when agreed and developed – eg waste to sewer

Frequently Asked Questions

Here are answers to frequently asked questions by HaFS sector businesses when it comes to defining and quantifying food waste.

Does food that is spoiled, dropped on the floor, past its 'Use By' date or over-cooked fall into the 'food' rather than the 'inedible parts' material type category?	Yes – if something was intended for people to eat but couldn't be eaten - for whatever reason - it would be considered wasted "food".
Some inedible parts such as bones, skin, peel, veg tails, can be used to make stocks. How does this fit within the scope of the standard?	In this example, the items that make up the stock are ingredients to a product intended for people to consume and are thus considered 'food'. It would only be after they are used for stock that they become 'inedible parts.' This is because at this point the material is no longer intended for human consumption. This is aligned with the **UK Guidelines** definition of inedible parts (see Section 4 above)
How should we define types of food that some people eat, but we do not serve as food within our business? (e.g. chicken feet, or certain types of offal)	This distinction will only matter if you are separating the amount that is wasted food from the amount that is inedible parts. If you want to separate these, the **UK Guidelines** simply requires stating the assumptions you make. Here are some guidelines for a framework you could use: 1) Consider whether, in your culture, the item is regarded as something that's "typically" eaten. If it clearly would be eaten by the average person, the material type is food. If it clearly would not be, it is an inedible part. 2) If it is unclear or borderline, decide what is "typical" in your particular business and report it as such. If you exclude from your inventory certain types of food and/or inedible parts, state so in the scope section of the data report.
What is recommended best practice for whether or not to include drink waste?	A company should decide what is included or excluded in their inventory based on the Scope of your inventory as outlined in Section 1 of the **UK Guidelines**, in particular considering whether a certain choice would compromise the principle of "relevance" (i.e., the decision-making needs of the inventory's intended users). If accounting for drink waste is not feasible due to limitations such as measurability or data availability, the **UK Guidelines** allows users to exclude it from an inventory, but does require disclosing and justifying any exclusion (note: describing what is included or excluded would be noted in the Boundary under "food category"). As an alternative to excluding drink waste, a company could also approximate the amount of drink waste, or use proxy data. The assumptions and limitations should then be transparently shared in the inventory report.

Describing different streams of purchased food that you doesn't use	
Does food donated via charities count as food waste?	The **UK Guidelines** outlines that food that is donated to charities (such as redistribution schemes) is out of the scope of food waste. It requires, however, that given the importance of this, users record the weight of food sent to this destination separately using the **Reporting Template**
In terms of characterising the "food category" of a food waste stream – what if the stream is heavily mixed – soups, stews, plate scrapings etc.?	The food category can be broadly described (e.g., all food and beverages sold at the operation). However, if more detailed information is available, it is ideal to be more specific in describing the food category so that one inventory can be more easily compared to another. The **UK Guidelines** advises that to provide further insight into improvement actions a business may choose to include a breakdown of food waste (eg key categories or component parts). For items that are composed of multiple ingredients (e.g., prepared meals, soup)". In the case of multi-ingredient items, the FLWS recommends an entity describe such items "with a commonly used name (e.g. beef stew)" and "instead of describing all ingredients, it may be more practical for an entity to select the main ingredient(s) that represent a significant proportion of the item's overall weight (e.g. for beef stew this might be beef, broth, onions, and potatoes)".
How do we account for quantities lost down the drains from cleaning, washing plates and cooking implements etc.?	Firstly, it is important to note that it is only food and drink that should be measured under the **UK Guidelines** not cooking or washing water. The **UK Guidelines** is agnostic about what quantification method is used; however, it requires that whatever method is used is described. You may find it useful to see how the Kellogg Company tackled this in the "Methodology Section" of their case study on the FLWS website: **http://flwprotocol.org/case-studies/**
When measuring, how do we categorise mixed food waste from plate scrapings received back in the kitchens from service – particularly during peak hours when time is pressured?	With respect to the **UK Guidelines** you are required to be transparent in describing your scope, you should record whether or not you include "plate waste" as part of the "lifecycle stage." Plate waste does not have to be separated into individual food groups. This is mainly for practical reasons in terms of the difficulty of separating plate waste components, and time pressures in the pot wash scenario where the speed of clearing and cleaning plates is high. If you do wish to separate plate waste into different food groups to gain deeper understanding of what items are being wasted then these can be tracked according to the appropriate major food waste categories on the plate.
How do we segregate materials from food waste streams that aren't food (e.g., packaging, napkins)?	In many situations, food waste may still be in its packaging, mixed with other material in a collection container, or data relating to food waste includes the weight of other material. However, since these other materials are not food waste the FLWS requires excluding their weight. While companies should strive for accuracy, excluding the exact amount of other material from food waste streams may not be feasible. However, a guiding principle is that the food waste data reported should be sufficiently accurate to enable intended users to make decisions with reasonable confidence that the information in the inventory is credible. With respect to packaging in particular, Section 8.3 of the FLWS **(inset link)** provides some guidance on approaches

	for subtracting its weight, including developing estimates. Where assumptions or estimates have been made, a company should note these in the inventory report. It is important that such sources of uncertainty in the reported data are reported as this affects both the interpretation and conclusions that can be drawn from the food waste data.

Quantifying and reporting

My business has not yet begun defining and quantifying its food waste. Where do I start when trying to understand these issues?	WRAP has produced a series of information sheets to support businesses in the hospitality and food service sector in taking action on waste. This is a useful starting point for any HaFS businesses. The information sheets are specific to stakeholder type (pubs, hotels, restaurants etc.) and include: • The cost of food waste for each subsector, including the cost per meal; • A breakdown of the type of food being wasted; • Simple, effective guidance for wasting less, recycling more and saving money; and • Good practice case studies. **The WRAP website** is also an excellent start point and contains links to further explanation on food waste definitions, quantification, case studies, tools for describing your scope, additional FAQs etc.
Do the UK Guidelines have a preferred system of quantification?	The **UK Guidelines** do not require a particular method because the method(s) an entity chooses will be influenced by its particular goals, the scope selected for its FLW inventory, the human and financial resources available, and whether it has direct access to the physical food waste. An FLW Quantification Method Ranking Tool is available at **http://flwprotocol.org/flw-standard/tools-resources/**.
Do we need to consistently and accurately measure food waste composition and weights on an ongoing basis, or can we establish some initial assumptions using audit work and make ongoing estimates based on this data?	Food waste tracking in kitchens allows businesses to accurately measure food waste composition and weights on an ongoing basis e.g using **Your Business is Food** or **Wise up on Waste** tools. This data can be analysed on demand with various time views. Constant measurement and tracking provides the most accurate results, but intermittent audit estimates are still an acceptable way of producing useful data for measuring food waste. Data should be sufficiently accurate to enable the intended users to make decisions with reasonable confidence that the information in the inventory is credible. If estimates and assumptions are made, this would be described within the reporting process.
Does each individual site within our chain need to provide an individual report, or is reporting supposed to take place centrally for the entire business chain?	This decision is up to the company reporting. The **UK Guidelines** can be used for both individual facility-level inventories and/or a centralised aggregated inventory. The decision of how to report would be based on how a company intends to use the information (e.g., for benchmarking across its operations, or for communicating at a corporate level to its external stakeholders).