Food waste reporting guidelines for the Hospitality and Food Service sector

1 Introduction
The aim of this fact sheet on the Food Loss and Waste Standard (FLWS) is to help the Hospitality and Food Service (HaFS) sector understand its use in delivering robust food waste measurement as part of a waste reduction strategy. As a foundation, all businesses should be regularly measuring their food waste at a site level and taking action. These guidelines will help a business define what and how to measure, and also provide a consistent standard for those businesses wishing to report their food waste.

This document will help you to understand why the FLWS is relevant to your business’s approach to food waste reduction. It will clarify the standard in the context of a commercial kitchen, using practical examples, and a frequently asked questions (FAQ) section, so that you have sufficient knowledge to effectively define and measure your food waste. If your business is only just starting to capture data on food loss and waste, then there are a number of useful resources that can help you to kick-start this process and these are detailed in the FAQ section of this guidance document.

2 What is the Food Loss and Waste Standard?
The FLWS, led by the World Resources Institute (WRI) as Secretariat of the Food Loss and Waste Protocol, enables companies, countries, cities and others to quantify and report in a consistent and transparent way on the amount of food (and the associated inedible parts) wasted. It provides a common language and framework for describing what has been measured so companies and others can develop targeted FLW reduction strategies and realise the benefits from tackling this inefficiency.

3 Why measure food waste?
Food waste costs the UK HaFS sector £2.5 billion each year (Source: WRAP website). Using the FLWS can help HaFS businesses to understand how much, where, and why food loss and waste is occurring – so they can measure and manage 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: The Business Case for Reducing Food Loss and Waste (Champions 12.3)).
4 How do I describe food waste in my HaFS business using the FLW Standard?

What is considered ‘food waste’ in one business might not be the same as in another. HaFS businesses should therefore use the FLWS to describe what is included in their particular definition of food waste. The FLWS provides 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 elect which material type(s) and destination(s) they consider to be “food waste.” In terms of the material types, they 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 standard for these material types, as well as WRAP’s suggestion about 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.
Food

Any substance - whether processed, semi-processed, or raw - that is intended for human consumption. “Food” includes drink, and any substance that has been used in the manufacture, preparation, or treatment of food. “Food” also includes material that has spoiled and is therefore no longer fit for human consumption. 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, in a particular food supply chain, are not intended to be consumed by humans. Examples of inedible parts associated with food could include bones, rinds, and pits/stones. “Inedible parts” do not include packaging. What is considered inedible varies among users (e.g., chicken feet are consumed in some food supply chains but not others), changes over time, and is influenced by a range of variables including culture, socio-economic factors, availability, price, technological advances, international trade, and geography.

Table 2: WRAP proposed food waste definition

The FLWS allows a user to select what combination of material types and destinations make up its definition of “food loss or waste.” WRAP suggests that companies define food waste as follows, based on the Guidance on Interpreting SDG Target 12.3: Food and the inedible parts of food removed from the food supply chain to be recovered or disposed of, which includes the following destinations: co-digestion/anaerobic digestion, composting/aerobic processes, controlled combustion, land application, landfill, crops not harvested/ploughed-in, refuse/discards/litter, and disposal to sewer/wastewater treatment. This definition excludes food surplus that is redistributed for human consumption, diverted to animal feed, or sent to bio-based material / biochemical processing (i.e., used to produce industrial products). All of these are considered for the purpose of the SDG Target 12.3 as waste prevention activities.

The suggested scope of what is included within this food waste definition is illustrated in the diagram below.
This has been taken from the Guidance document on Interpreting SDG Target 12.3 and shows the various destination types for food waste.

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.

Further assistance on defining food waste can be found in the “Guidance on interpreting Sustainable Development Goal Target 12.3” referenced towards the end of this document.

The level of detail is down to the needs of the business

The detail of what is considered food versus inedible parts only matters if the amount of the food wasted is reported separately from the inedible parts. In this instance, assumptions about what is inedible need to be explained and calculations provided for the approach to quantifying this. WRAP’s Courtauld 2025 reporting request for HaFS businesses suggests to combine them and report them both as food waste due to the practical challenges separation presents the HaFS sector.
The simplest way to start using the FLWS is by reading the short Executive Summary, which lays out the key definitions and requirements for participating businesses. A simple visual tool has also been developed to help you to customize and describe your scope using the FLWS.

5 How do I quantify the food waste I have described?
The FLWS requires food waste to be reported in terms of weight. Chapter 7 of the FLWS is designed to help you decide how to quantify food waste.

The FLWS does 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 FLW must be separated from other materials in order to be measured, can be complex. Businesses 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. 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 rescued?

Food rescued (i.e. redistributed for people to eat) falls outside of the scope of the FLWS and should not be considered as waste. The standard advises that users record the weight of rescued food separately to their FLW inventory. Support on this is provided in Appendix E of the FWLS guidelines providing advice on how a business can use some of the steps outlined to quantify the weight of food rescued.

Food sent for animal feed or bio-based materials/biochemical processing would also not be considered as waste according to the Guidance on Interpreting SDG Target 12.3 and the WRAP definition of food waste.

6 Should a destination be specified for material removed from the supply chain? What if I don’t know where our food waste goes?
The FLWS makes it easy to report where the food and/or associated inedible parts that are removed from the food supply chain go. There are 10 universal categories referenced in the standard (called the “destinations”), which cover all relevant outlets. The definitions are in the FLWS and also on the FLW Protocol website.

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.

Additional details on this are available in Section 6.5 of the FLWS.

7 How do I report my results?
Reporting can be external or solely for internal purposes – there is no requirement for external reporting of data under the FLWS.

A blank summary table of the eight reporting and accounting requirements contained in the FLWS (see Chapter 4) can be downloaded from the FLW Protocol website for companies to use. Guidance on implementing these requirements is provided throughout the FLWS and you can see how other companies have responded to the requirements in the FLWS case studies. In addition, a sample inventory reporting template in Excel is available, but users of the FLWS may report the results in whatever format is most useful to the intended audience.

Chapter 13 of the FLWS provides additional guidance on reporting your food waste inventory. Assurance processes are not a requirement of the FLWS. However, Chapter 12 of the FLWS provides information explaining why obtaining assurance of your food waste inventory can provide a variety of benefits.
8  Are there examples of other businesses using the FLWS?
Examples of other businesses that have successfully adopted the FLWS can be viewed on the FLW Protocol website. This includes savings from food waste measurement at Ikea cafes.

9  Other sources of information
The links below reference documents that provide guidance on adopting the FLWS:
- The FLW Protocol website contains links to the case studies mentioned above, tools for describing your scope, additional FAQs, and the easily digestible FLWS Executive Summary.
- The FLW Standard (start with the Executive Summary, then use this as a reference document)
- Guidance on FLW Quantification Methods
- Champions 12.3 - Guidance on Interpreting Sustainable Development Goal Target 12.3
- Your Business is Food; don’t throw it away
### Distinguishing between “food” and “inedible parts”

Remember... the detail of what is considered food versus inedible parts only matters if the amount of the food wasted is reported separately from the inedible parts. In this instance, assumptions about what is inedible need to be explained and calculations provided for the approach to quantifying this. WRAP’s Courtauld 2025 reporting request for HaFS businesses suggests to combine them and report them both as food waste due to the practical challenges separation presents the HaFS sector.

| 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 FLWS 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 FLWS 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 accounting and reporting principles described in Chapter 5 of the FLWS, 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 |
FLWS 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.

<table>
<thead>
<tr>
<th>Describing different streams of purchased food that the business doesn’t use</th>
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<tr>
<td><strong>Does food donated via charities count as food waste?</strong></td>
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<td>The FLWS explicitly rules “food rescued” (such as redistribution schemes) out of the scope of food waste. It advises, however, that given the importance of rescuing food, users record the weight of rescued food (separately from their FLW inventory) and provides guidance in Appendix E of the Standard.</td>
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<td><strong>In terms of characterising the “food category” of a food waste stream – what if the stream is heavily mixed – soups, stews, plate scrapings etc.?</strong></td>
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| 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 FLWS recognises that (see pg.51): "For an entity (e.g. a restaurant or retailer) interested in understanding what types of food make up its FLW, the GSFA, CPC, GPC, or UNSPSC codes may not provide sufficient detail [to describe the food category] 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 FLWS, not cooking or washing water. The FLWS 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/](http://flwprotocol.org/case-studies/) |
| **When measuring, how do we categorise mixed food waste from plate scrapings received back in the** |
| With respect to the FLWS, 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 |
**kitchens from service – particularly during peak hours when time is pressured?**

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 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.

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**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 information sheets can be accessed at this link.*

*The FLW Protocol website* is also an excellent start point.
| **Does the FLWS have a preferred system of quantification?** | The FLWS does 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/](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 systems allows businesses to accurately measure food waste composition and weights on an ongoing basis. 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 FLWS 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). |

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