

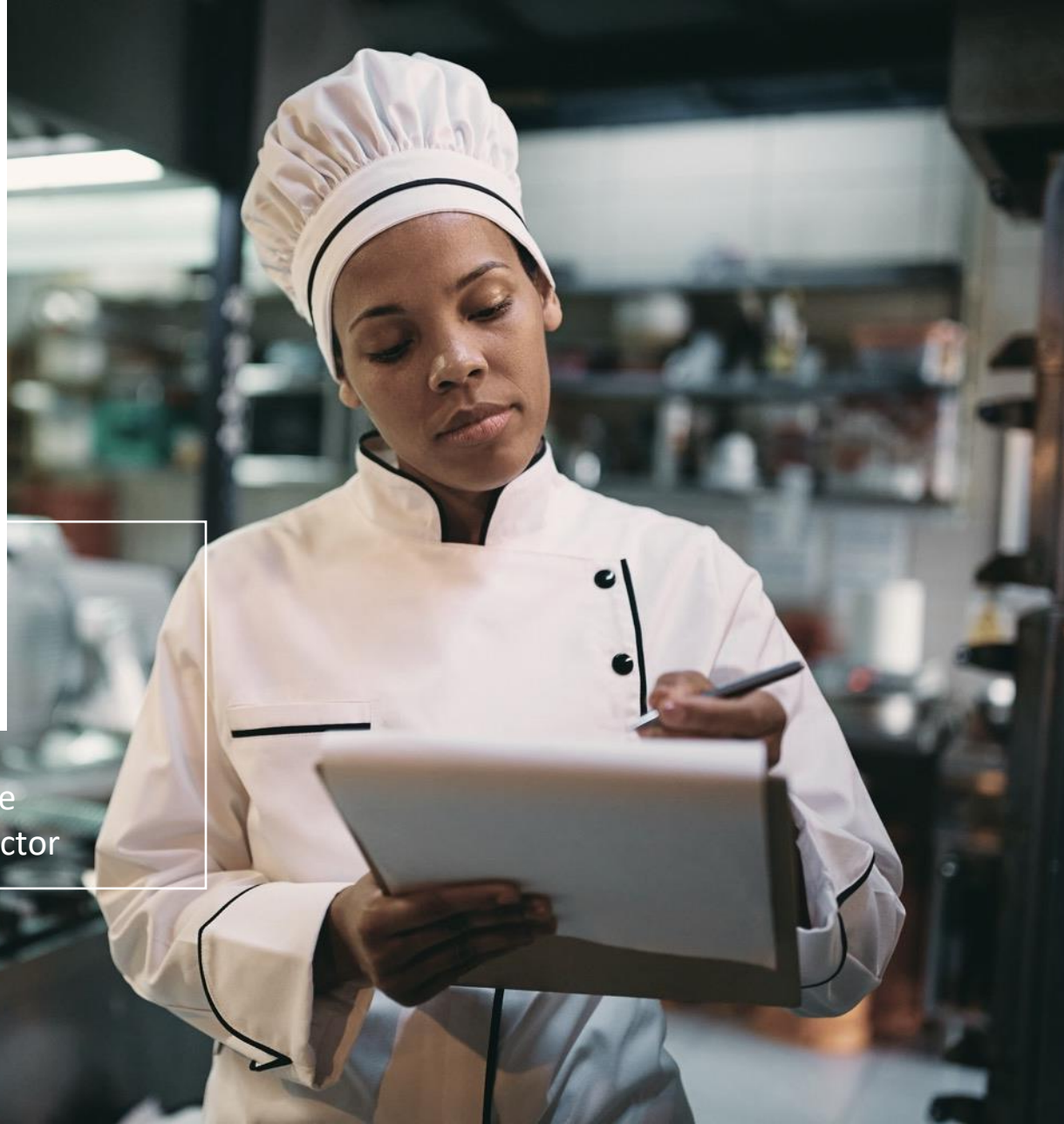


INTERNATIONAL  
**FOOD  
WASTE**  
COALITION

# Food Waste Measurement & Reporting Methodology

2024

Tailored to the  
Hospitality sector



# Introduction

The IFWC methodology for measuring and reporting food waste (FW) adheres to the fundamental principles of the UNEP Food Waste Index, which supports UN SGD 12.3, as well as the measurement methodology and minimum quality requirements of the European Union. As a result, the methodology employs comparable definitions, scope, and metrics.

This framework has been customized to the contact catering sector, providing businesses with the opportunity to:

**Act:** through enhanced data quality

**Align:** all parties by using comparable data and metrics

**Demonstrate:** progress to regulatory bodies by utilizing transparent, standardized data that aligns with their own methodologies

In 2023, more than 5,000 organizations in the European food service industry used this methodology. Our objective is to see it adopted throughout Europe as a standard for measuring and reporting food waste in the sector.

# Measurement Scope

The IFWC methodology measures and reports food waste according to specific parameters:



## Material Type

Edible & associated inedible parts



## Restaurants zones

Inventory, preparation, service & plate waste



## Metric

Grams per cover



## Destinations

All waste destinations excluding animal feed and biomaterial uses<sup>2</sup>




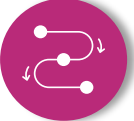


## Food Category

All food, excluding beverages & other liquids<sup>1</sup>

# Data collection and quality assessment

The data quality is assessed using the following matrix

|  | Entry level<br><i>(minimum requirement)</i>                   | Intermediary level          | Advanced level                                |
|--|---|-----------------------------|---|
|  Campaign duration      | Min. 1 full business week                                     | Min. 1 full business week   | Min. 2 full business weeks                    |
|  Frequency              | 1 campaign per year   | 1 campaign per semester     | 1 campaign per quarter                        |
|  Quantification methods | Staff measurement & data from biowaste collector <sup>3</sup> | Staff measurement           | Staff measurement                             |
|  Restaurant zones      | Pre-consumer, post-consumer                                   | Pre-consumer, post-consumer | Inventory, preparation, service & plate waste |

# Reporting Requirements

The following elements must be included in every single site measurement campaign report:

Country & site ID

Type of site

Campaign duration

Segment

Restaurant zones

Start day

No. of Covers

Food waste

Optional reporting

# Description

## Country & site ID

Country name and site identification number.

## Type of site

Central kitchen, restaurant with kitchen on site, delivered restaurant.

## Segment

Corporate, administration, education, health and sports & leisure.

## Start day

In the format day/month/year.

## Zones

Pre-consumers (inventory, preparation and service waste) and post-consumers (plate waste).

## Food waste (kg)

Food waste for each zone in kilograms.

## Number of covers (#)

Served during the measurement campaign.

## Campaign duration

In days

## Optional reporting

The amount of none-waste disposal (in kg) such donations to charities <sup>4</sup>, animal feed, and bioprocessed materials and the edible/inedible ratio of food waste <sup>5</sup>.

# IFWC key performance indicators

Reporting sites

Food waste by segment

Food waste reduction indicator

Quality index

## Description

### Reporting sites (# and %)

Total number of sites that report (#) and the percentage of sites that report (%).

### Quality Index

Average quality index is ranked using a scale of 1 (entry level) to 3 (advanced level).

### Food waste by segment (gram per cover)

Average food waste per segment

### Food waste reduction indicator (%)

Average food waste reduction indicator

# Calculating average Food Waste - Methodology

- Report food waste per site for the duration of the campaign
- Annualize food waste (in kg) and covers data.
- Sum up food waste (in kg) and covers for the entire year.
- Calculate average food waste by dividing the total food waste (in kg) by the number of covers.

## Example

|                    |                          |                 |            | Annualized      |            |
|--------------------|--------------------------|-----------------|------------|-----------------|------------|
| Site ID            | Campaign duration (days) | Food waste (kg) | Covers (#) | Food waste (kg) | Covers (#) |
| Site 1             | 5                        | 200             | 2,000      | 8,800           | 88,000     |
| Site 2             | 10                       | 600             | 4,000      | 13,200          | 88,000     |
| Site 3             | 15                       | 300             | 6,000      | 4,400           | 88,000     |
| Total per year     |                          |                 |            | 26,400          | 264,000    |
| Average (gr/cover) |                          |                 |            | 100             |            |

# Calculating Food Waste Reduction Index - Methodology

- Baseline - Choose the first compliant data point for a site.
- Baseline average – Calculate the average food waste for the baseline: A.
- Calculate the average food waste for the reported year: B.
- Determine the food waste reduction index =  $1 - (B/A) * 100$ .

## Example

|                                 | Food waste (gr/cover) |
|---------------------------------|-----------------------|
| Baseline average                | 100                   |
| Food waste average - 2023       | 80                    |
| 2023 food waste reduction index | 20 %                  |



# Definitions

## Food

This refers to any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans (EU regulation).

## Food Waste

This refers to any food and associated inedible parts that has become waste under the EU waste definition (Revised EU waste framework directive). Food donations or valorization for human consumption, animal feed, and bioprocessed materials is not considered as food waste

## Edible and associated inedible parts of food

This refers to the parts of food that were intended for human consumption are “edible parts” while components associated with a food that are not intended to be consumed by humans e.g. bones, rinds and pits/stones, are “ associated inedible parts”.

## A Cover

This refers to a person who has been served during a particular service period.

## Bioprocessed food

This refers to the conversion of food waste into industrial products for food and non-food purposes (e.g., creating packaging material; bioplastics; making or to make products such as soaps, biodiesel, or cosmetics).

## Measurement campaign

This refers to the number of days that a measurement campaign lasts. It is expressed in days

# Notes

- <sup>1</sup> Both the EU and UNEP food definitions encompass drinks and any substance, such as water, intentionally added to food during its production. Currently, there is a lack of standardized measurement methods for most beverages, hindering confidence and comparability in reported data. As a result, these types of food are not categorized as food waste according to EU regulation. Nevertheless, concerning soups, the EU is considering revising the inclusion criteria in the future. Hence, IFWC is being proactive by incorporating soups in food waste measurements and reporting.
- <sup>2</sup> Food utilized for animal feed and bioprocessed materials is not considered as food waste, as these materials remain in the food supply chain and or provide opportunities for efficient valorization of organic materials, particularly inedible parts.
- <sup>3</sup> Data from biowaste collectors are accepted provided the food waste segregation is done correctly, and the count of covers aligns with the timeframe of the food waste measurement campaign.
- <sup>4</sup> Food donations are not classified as food waste, as the food is ultimately consumed by humans.
- <sup>5</sup> It is recommended to perform every second year a separated weighing of edible and inedible parts of FW. The edible/inedible ratio will provide valuable information to better estimate the potential for waste reduction and prioritize the necessary actions to minimize edible food waste.

# References

- United Nations, SDG 12.3, 2015, <https://sdg12hub.org/sdg-12-hub/see-progress-on-sdg-12-by-target/123-food-loss-waste>
- UNEP, Food Waste Index Report, 2021, <https://www.unep.org/resources/report/unep-food-waste-index-report-2021>
- WRI, Food Loss & Waste Accounting and Reporting Standard, <https://www.wri.org/research/food-loss-and-waste-accounting-and-reporting-standard>
- European Parliament, Revised Waste Framework directive, 2018, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32018L0851>
- Delegated Decision establishing a common EU methodology to measure food waste, 2019, <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32019D1597>
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