



IFC Food Loss and Waste Prevention Advisory for

Food Service and Hospitality



What is Food Loss and Waste (FLW)?

Food Loss and Waste (FLW) – the decrease in the quantity or quality of food intended for human consumption, of either edible or inedible status, caused by actions and decisions of all actors along the food supply chain.

Food Loss (FL) – the decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the chain, excluding retailers, food service providers and consumers.

Food Waste (FW) – the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers and consumers.

Food Surplus (FS) – food and inedible parts that are sent to the following: redistribution to people (e.g. through a charity or commercial redistributor), animal feed or bio-based materials/biochemical processing (e.g. feedstock for other industrial products).

As applicable to the Food Service and Hospitality stage of the Food Supply Chain, Food Waste is the primary concern.

Why is FLW important?

- Approximately one-third of all food produced globally by weight is lost or wasted along the food supply chain annually (FAO, 2013).
- Despite producing enough food to feed everyone, 733 million people still face hunger globally (FAO, 2024).
- Organic waste represents 40% (World Bank, 2018) of all municipal solid waste generated globally.
- The cost of global food loss and waste (FLW) is estimated at \$1 trillion (UNEP, 2024).
- Concerning impacts to the environment, FLW causes about 8-10% of global Greenhouse Gas (GHG) emissions (UNFCCC, 2024).

Focusing on food service and hospitality:

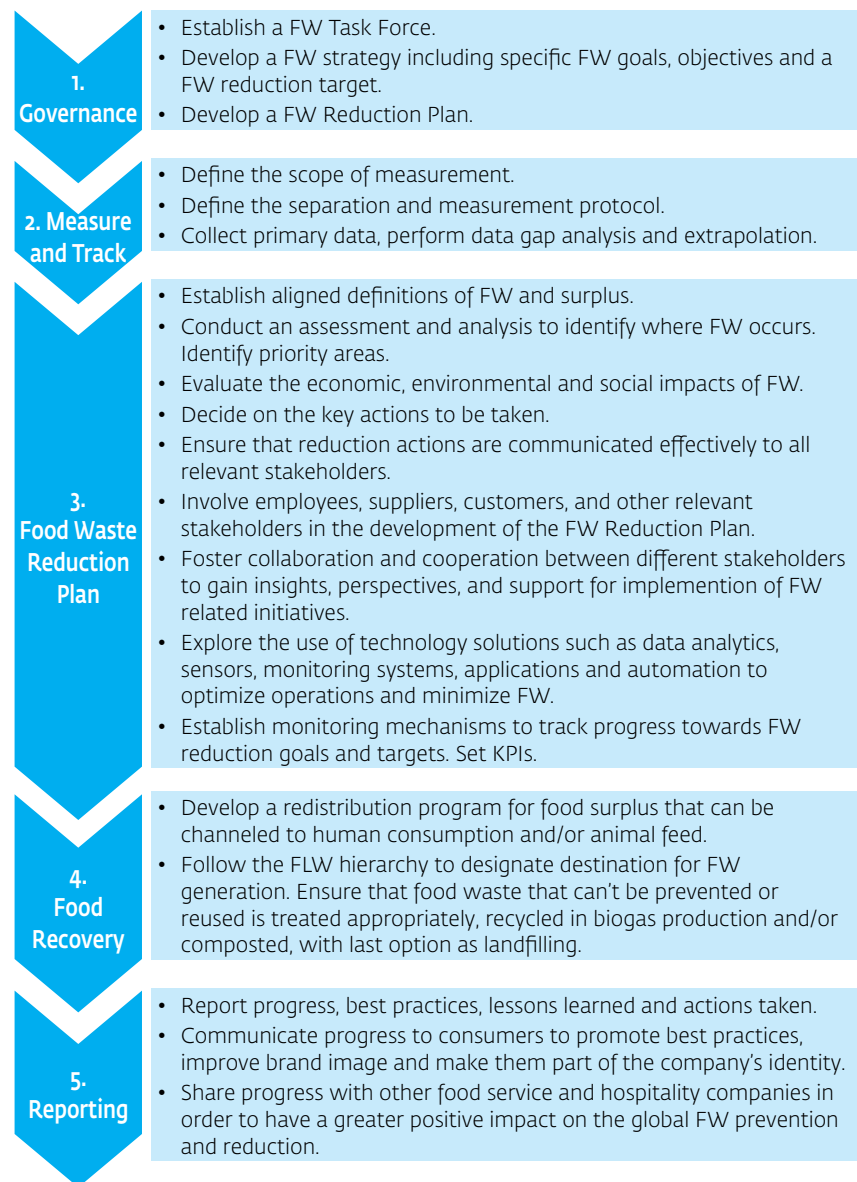
- Hospitality waste has become a significant issue for both developed and developing countries (Dhir et al., 2020) due to the increasing trend of out-of-home dining, spurred by growing income levels and tourism.





The Food Waste (FW) Reduction Journey

Here are actions that food service and hospitality businesses can consider when tackling FW generation.



What are the challenges Food service and Hospitality businesses might be facing?

Food service and hospitality businesses may face the following challenges when tackling FW:

- Absence of a clear production plan with food quantities.
- Damage during transportation or handling.
- Errors when ordering ingredients.
- Overstock: excess inventory that ends up being discarded.
- Poor storage conditions.
- Low quality of packaging or inadequate packaging.
- Limited shelf life of perishable food.
- Inappropriate work procedures.
- Generation of FW while manipulating and preparing the food. E.g. Inedible parts, overcooking, bad seasoning, leftovers thrown away, only using part of the food product but not the whole.
- Oversized portions of food.
- Excess supply of food during buffet offering.
- Overproduction of menu items that are under-consumed.
- Cancelled orders or unplanned change in number of restaurant guests/attendants.
- Lack of a food donation system.
- Fear by employees related to tracking waste, in case it will be considered as a cause of poor performance.
- Lack of top leadership commitment resulting in absence of guidance to employees regarding the issue.
- Absence of a FW monitoring system.
- Absence of internal FW Policy.





Collecting FW Data

- The scope of the FW inventory should include all food and associated inedible parts, covering all operations the business owns or directly controls.
- The measurement method does not need to be highly technical or fully comprehensive, but must be consistent and reliable, whilst being focused on the goals and objectives agreed.
- The FW inventory must be reported in weight.
- There is no one specific method to quantify the FW, but the suggested quantification approaches for food service and hospitality are the following:
 - **Direct weighing**
 - Weighing waste streams only containing FW, for example plate waste, preparation waste, spoilage waste, buffet waste.
 - Waste compositional analysis for mixed FW streams that can be assessed. Used to physically separate, categorize and weigh FW. Can be used to record the total FW or FW by type, i.e. fruit & vegetables, dairy, meat & fish, sauces etc.
 - Smart bins, FW tracking applications, devices that can weigh individual instances of FW and record totals over a given period in a designated online platform.
 - **Counting/scanning** to involve assessing the number of items that make up FW and using the result to determine the weight. Only appropriate for the early stages of food's journey through the food service and hospitality sector.
 - **Diaries** to maintain a record or log of the food thrown away. It provides insights about why the food is thrown away, the types of food and other information that can be recorded in the diary. This method can be used in conjunction with direct weighing, i.e. the entity first notes the recorded FW in a diary and then enters the values in the designated online platform.

What are the benefits for food service and hospitality businesses?

Here are some of the benefits food service and hospitality businesses can obtain from beginning their FW reduction journey:

Environmental (including Climate)	<ul style="list-style-type: none">• Reducing FW in food service and hospitality reduces the use of inputs (i.e. energy, water and land), and ultimately reduces the carbon footprint of food production.• Engaging in FW can help deliver climate goals both for own operations and with supplier base.
Social	<ul style="list-style-type: none">• FW reduction may enhance food availability and accessibility, and therefore improve food security.• Increasing employee and customer awareness on the impact of FW and benefits of reduction.• Increasing positive local community engagement by creating partnerships with charities, associations, food banks for donation of food surplus to those in need.
Financial	<ul style="list-style-type: none">• An analysis for the food service industry found that hotels saved \$7 for every \$1 invested in reducing FW, caterers saved \$6 for every \$1 invested in reducing FW, and restaurants saved \$7 for every \$1 invested in reducing kitchen FW (Champions 12.3, 2018).• Most of the businesses recoup their FW reduction investments in less than 2 years (Champions 12.3, 2018).• Improving efficiency in operations when FW is taken into account and managed responsibly. This will reduce hidden costs which are associated with improper FW management.• Reducing FW means reducing costs as wasted materials need to be processed and/or lose value.
Legislative	<ul style="list-style-type: none">• Reducing FW ensures ahead of time adherence to emerging FW legislations obliging actors from the food industry to report and monitor their FW generation.• Accounting for FW generation allows companies to be prepared in case they want to sign voluntary FW agreements i.e., WRAP / Champions 12.3 / 10x20x30.
Reputational (Brand)	<ul style="list-style-type: none">• Improving corporate responsibility.• Meeting customer expectations for companies to deliver sustainability measures in their operations, in the products that they sell, and in their supply chains.• Inspiring more conscious marketplace and positive change.



Sample questions for food service and hospitality businesses

Understanding where a business is on its FW journey is essential before taking any steps setting reduction targets and developing roadmaps. Asking questions such as the ones below helps to establish the current status and define the next steps accordingly:

- Does the company understand the definition of FW in their sector?
- Does the company have an estimated volume of their FW generation?
- Has the company estimated the economic cost associated with their FW generation?
- Does the company already have KPIs for FW reduction?
- Does the company engage in sustainability reporting?
- Is the company considering the role of FW as part of its GHG emissions reductions roadmap / net zero journey?
- Is the company signatory to voluntary FW agreements and needs support in following these i.e., WRAP / Champions 12.3 / 10x20x30?
- Does impending legislation on FLW impact the company? (please note this question is country specific – i.e., France and Spain have legislation and mandatory requirements with regards to FLW measurement and reporting).
- Is the company struggling with cost-of-goods increases and therefore could benefit from the FW prevention and reduction in terms of cost savings?
- Does the company have a process set up to prevent / reuse FW thus avoiding FW?
- Does the company have a process set up to donate / re-distribute surplus food, thus avoiding FW?
- Does the company have a process set up to appropriately dispose of unavoidable FW?
- Is the company communicating with its customers to influence behavioral change and attitude towards FW?
- Is the company engaging with its suppliers on FW?
- Is the company prepared for the consumers' growing demand on sustainability in their operations?
- Has the company identified any hotspots of FW generation in its operations? But does not yet know the cause of it?
- What amount of time and resources does the company want to assign to measuring FW?
- Does the company require support in FW measurement and monitoring?
- Does the company communicate about the actions it takes on reducing FW? (website, Sustainability reports, case studies...)

Insights gathered from these questions will help in designing measurement procedures, reporting standards, and site metrics which can be tailored to the company's needs and amenities.

Potential Interventions

Interventions can be done by:

- a. **The company directly** – either before IFC disbursement or after with appropriate reporting back to IFC;
- b. **The company works in partnership with IFC**, potentially through Advisory Services engagement.

Examples:

- Initial assessment of status quo.
- FW measurement and monitoring.
- Impact evaluation of actions and interventions.
- Creation of a culture on FW inside the company through employee awareness and training on FW prevention/reduction.
- Avoidance of excess production through creation of more precise demand forecasts.
- Packaging development and optimization for take-away services.
- Improvement of inventory management.
- Conduct customer awareness and education campaigns.
- Adapt portion choices and offer customized dishes.
- Integrate innovative zero waste techniques and develop circular menus.
- Increase financing for innovation and scaling of promising technologies.
- Shift the mentality of the team.
- Consider full ingredient utilization when designing menus.



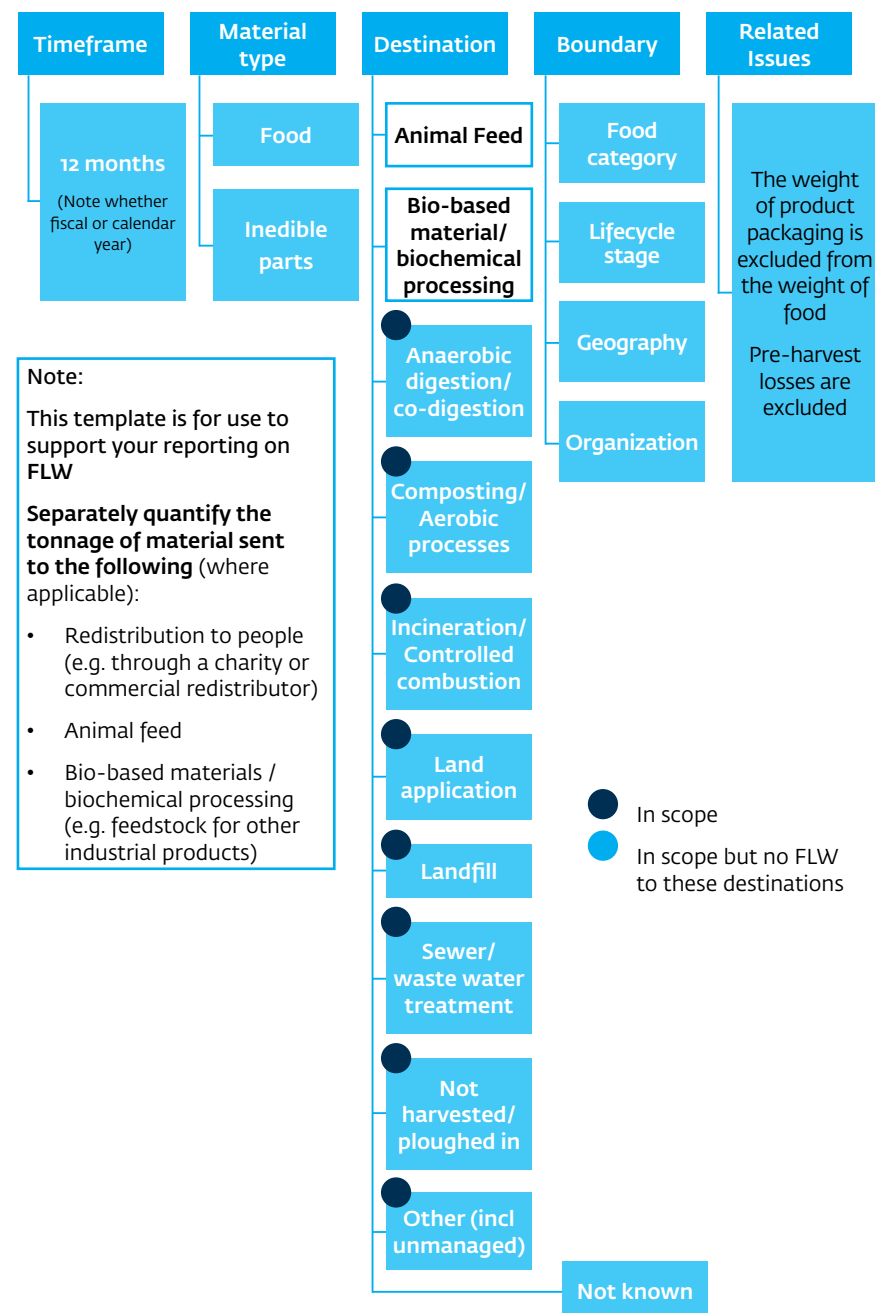


IFC FLW Advisory Tools

- **Assessment Tool** permits verification of current FLW status of client and review of existing practices.
- **Training course** introduces key issues on food loss and waste (FLW) in the food supply chains. It is designed to help IFC clients understand the importance of FLW and the need to act. In this regard, this course builds on the Global Food Loss and Waste Standard, the most widely system to quantify and report FLW, and guidance on how to set targets and a roadmap.
- **Data Capture Sheet (WRAP)** supports the FLW data analysis and monitoring process. The tool is in line with the principles to Target, Measure and Act in support of UN Sustainable Development Goal 12.3, and it complies with the FLW Standard.
- **Progress Tool** allows to track year on year reductions in FLW and give a monetary value to FLW and food surplus.
- **Data Validation Checklist** enables IFC to check over any data that clients have entered. This is a very high-level checklist, that allows IFC to ensure the key information has been included.
- **Client Tool Checklist** goes into detail about each step of the reporting process and assists with the reporting process for both the WRAP data sheet and the Progress Tool.
- **IFC Food Loss Climate Impact Tool** assists in quantification of FLW in terms of avoided GHG emissions.

NB: IFC FLW Advisory Tools encompass both Food Loss and Food Waste, therefore the terminology used in reference to IFC Tools includes FLW.

Scope of the FLW Inventory



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