



Valencia Conference Centre Case Study

Assessment and Solutions to Food
Waste at Congress Events

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1. CHALLENGE

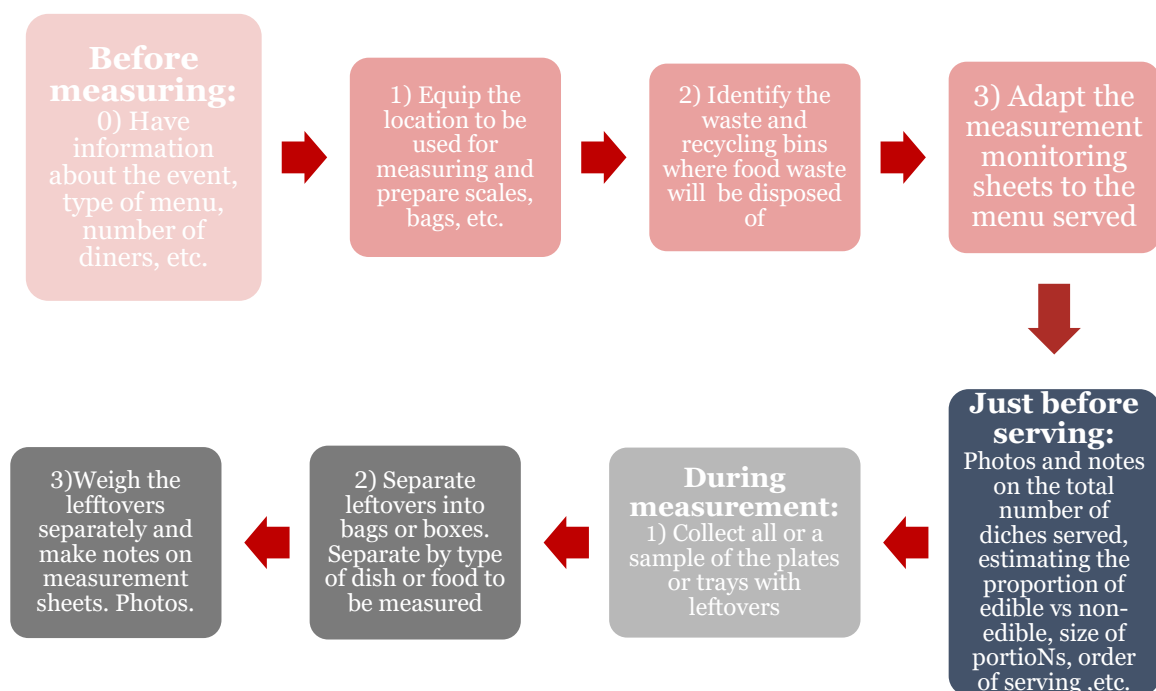
Addressing global food waste is a formidable challenge, requiring comprehensive efforts across the food supply chain, particularly in sectors prone to waste like HoReCa (Hotel, Restaurant, and Catering). In MICE (Meetings, Incentives, Conventions, and Exhibitions) tourism, where gastronomy is a major attraction, overlooked meal services during working meetings contribute significantly to food waste. The MagNuS (Magnitude, Nutritional value, and Sustainability) project aims to assess and address food waste during conference events at the Valencia Conference Centre in Spain.



2. SOLUTION

The Valencia Conference Centre has addressed advanced sustainable management in catering for its events by collaborating with the Valencia World

Center for Sustainable Urban Food (CEMAS), the University of Valencia, the Valencian Institute of Agricultural Research (IVIA), and the Lluís Alcanyís Foundation, with support from Gourmet Catering & Events. This initiative, known as MagNuS (Magnitude, Nutritional value, and Sustainability) project¹, involves, from 2022 to 2023, the validation of a protocol for measuring food waste, enabling systematic tracking and reduction strategies, the drafting of proposals to minimize and prevent food waste, a comprehensive review of the Nutritional Footprint Index² and an energy-nutritional analysis of popular menus to ensure a balance between health and sustainability.



Flow chart 1. Protocol used to measure food waste.

¹ Fernandez-Zamudio, M.-A.; Zarzo, I.; Pina, T.; Soriano, J.M.; San Onofre, N. Assessment and Solutions to Food Waste at Congress Events: A Perspective of the MagNuS Project. *Foods* **2024**, *13*, 181. <https://doi.org/10.3390/foods13020181>

² Zarzo, I.; Soler, C.; Fernandez-Zamudio, M.-A.; Pina, T.; Barco, H.; Soriano, J.M. 'Nutritional Footprint' in the Food, Meals and HoReCa Sectors: A Review. *Foods* **2023**, *12*, 409. <https://doi.org/10.3390/foods12020409>

In 2024, this project was expanded to MAGNUS + to develop the following activities; training sessions have been conducted to equip catering staff with tools and knowledge about sustainable practices and waste reduction, including the use of a new manual aligned with the 2025 Prevention of Food Loss and Waste Law, while awareness messages have been displayed on digital screens during events to encourage sustainable practices among attendees.



Furthermore, menus are being reviewed to incorporate healthier, more sustainable options without increasing costs, focusing on plant-based, seasonal, and locally sourced ingredients, accompanied by detailed nutritional profiles for each dish. Examples include quinoa salads, baked salmon, and whole-grain offerings, with a commitment to using eco-friendly packaging.

Additionally, the project includes training the catering service (Gourmet Catering & Events) to independently measure food waste in kitchens and dining areas, educating staff about sustainability and food loss prevention, and implementing tools for autonomous data collection, as part of fostering a culture of accountability. Awareness campaigns and a sustainability-focused guide have been developed to promote responsible consumption, reduce waste, and engage participants in green initiatives, further supported by the creation of practical

tips displayed during events and comprehensive evaluations to track the environmental impact of catering practices.



3. ACCOMPLISHED GOALS

An important milestone is the goal to donate all consumable waste while converting the majority of inedible waste into compost, utilizing partnerships with organizations and technology providers to streamline these processes. Specifically, from May 2023 to December 2024, a total of 8,850 meals have been donated to the Food Bank. Saving this food avoided the release of 9,294 kg of CO₂ into the atmosphere.

On the other hand, at least 98% of non-consumable waste has been converted into compost to support sustainable landscaping practices, with collaboration underway with start-ups to optimize donation and composting processes.

Beyond these figures, Project MagNus + provides a long-term model for sustainable event management, with broader implications for other industries. By aligning all stakeholders, fostering education and collaboration, and emphasizing innovation in sustainability practices, the project paves the way for significant environmental, social, and economic benefits while demonstrating a

scalable approach to achieving sustainability goals in the MICE tourism sector and beyond.

