



Reducing Food Waste in Hospitality through Measurement Programs

Summary of Early Learnings and Industry Data

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In the US, 40% of all food is wasted, leading to significant impacts on energy, water, and land use. To address this problem, the food service industry must prioritize reducing food waste. With access to a critical mass of food service workers and consumers, the hospitality industry is the ideal starting point for change that can spur action across the entire food service industry. To reduce food waste in hotels, a cultural and behavioral shift is needed. Limited data exists on trends in food waste or on best practices in food waste reduction. Therefore, the first step is to conduct research to identify trends, opportunities, and best practices in food management that can prevent and minimize food waste in the hospitality sector. What we learn can lead to lowering food costs and reducing our environmental footprint.

To gain insight into how food waste and measurement is perceived within the hotel industry, and guide the development of strategies for food waste reduction, WWF commissioned two studies to gather qualitative data using interviews from hotel and lodging industry experts and thought leaders.

In the first study, market researcher Ben Bellinson and corporate sustainability strategist Dr. Steve Schein, from Bellinson and Company, were commissioned to research the dynamics of food waste across multiple hotel brands; identify the key issues, challenges, and opportunities to reduce waste within the hospitality industry; and gain perspectives on hospitality industry executives' interest, knowledge, and motivation around food waste.

In the second study, Dr. Tim de Waal Malefyt, anthropologist and clinical associate professor of marketing at Fordham University, was commissioned to dig deeper into kitchen behavior and operational culture by conducting ethnographic interviews with key individuals in the food and lodging industry. Dr. Malefyt's study suggests that hotel employee awareness is required to facilitate measurement and management of food waste, and that this awareness—and relevant training—should be a cultural priority for the entire industry if food waste reduction is to become a reality.

Based on the findings from these studies, WWF has developed hotel engagement activities and pilot projects to facilitate hotel and lodging industry property owners' ability to become active leaders in industry-wide system change efforts that reduce food waste.

Food Waste Opinion Leaders Study

conducted by Bellinson and Company

The intent of the Bellinson and Company study was to develop a survey instrument that was both qualitative and quantitative that could probe the attitudes and behaviors of hotel leadership about food waste on their properties. In the study, 32 participants from



multiple hotel brands were surveyed. Most of these participants were executive chefs, food and beverage directors, and general managers. In this survey, participants rated six statements and answered five open-ended qualitative questions, along with follow-up probing questions.

The following findings were the most relevant to developing our hotel engagement activities and pilot projects:

1. Few properties have a plan to address food waste and a dedicated person responsible for coordinating efforts
2. Participants expressed a strong need for specific training and education that is lacking across the industry and within operations
3. Measurement and tracking of food waste is limited and informal

Reconsidering the Food Journey in Hotels

conducted by Dr. Tim de Waal Malefyt



The intent of Dr. Malefyt's study was to develop strategies and prioritize actions in the hotel industry to prevent food waste and loss; identify the most productive use of food in hotel service; and foster hotel employee awareness by training them in the measurement procedures required for food waste reduction.

Although Dr. Malefyt interviewed a much smaller group of food service chefs and practitioners than the first study did, these interviews consisted of participants discussing their daily duties in more detail, thus revealing what new practices for addressing food waste they might be open to.

The following findings were the most relevant to developing our hotel engagement activities and pilot projects:

1. Standards for measuring food waste should be developed through a sequence of practices, including (1) defining the goals; (2) reviewing reporting principles; (3) determining how to quantify food waste; (4) gathering data; (5) calculating inventory results; and (6) reporting food waste outcomes
2. To reduce food waste, chefs need to increase the experiential value of the food they serve (the aesthetic pleasure the food offers guests), and managers need to increase the transactional value of food by taking into consideration food waste disposal costs (food's profitability for the business)
3. Positive work culture dynamics can empower employees to minimize food waste

Learnings from both studies

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- Food is undervalued along production and service chains. While some chefs and kitchen staff care deeply about the issue of food waste and conservation, the overall value of food and the importance of reducing food waste are neither shared values nor operational goals across most internal food service teams (sales, food and beverage, stewardship). Increasing awareness and training surrounding the value of food is key to food management success.
 - There is a great need for regular and cross-functional training programs across all food service departments. These training programs must educate staff on the interrelationships between departments and show how food waste reduction can only be accomplished through a shared operational objective or hotel-wide campaign.
 - Food waste is not typically measured as part of a hotel's standard operating procedures. Even when food waste information is gathered from composting, onsite equipment, or haulers, that information is not always communicated back to food service teams. To develop a training and awareness campaign, feedback loops or measurement procedures must be created so that hotels can accurately track food waste reduction efforts.



Conclusions

Based on the studies conducted by Bellinson and Company and Dr. Malefyt, we developed two objectives for our hotel engagement activities and pilot projects. The primary objective is to identify training and awareness programs that are effective for catalyzing food waste reduction and maintaining consistent staff engagement. We will conduct three pilot projects that maximize the value of food and integrate food-saving practices into daily hotel activities through (1) training and awareness of kitchen staff, (2) menu planning, and (3) customer engagement strategies. Additional guidance will be provided on obtaining property-wide commitment to encourage shared operational objectives.

Since industry-wide data is important for producing effective strategies and training and awareness campaigns, a second objective is to create measurement standards and managed food waste reduction efforts. This includes establishing a food waste measurement standard (metric) that can be adopted and/or encouraged by the hotel and hospitality industry. The hotel engagement activities will offer guidance on suggested separation and measurement practices, as well as opportunities to submit measurement and overage data for industry analysis.

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