

BACKGROUND

A significant amount of food intended for human consumption is never eaten. More than 1 billion metric tons of food per year is never consumed in a world where one in nine people are still undernourished (FAO et al. 2018). The global economy loses \$940 billion every year as a result of food loss and waste (FAO 2015). And the food that is lost and wasted each year accounts for an estimated 8 percent of annual greenhouse gas emissions (FAO 2015).

The world has a target to address this. Sustainable Development Goal (SDG) Target 12.3 aims to “by 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including postharvest losses” (UN 2017). To realize this ambition, governments and companies should pursue a simple but effective “Target-Measure-Act” approach to reducing food loss and waste:

- *Set targets.* Targets set ambition, and ambition motivates action. Governments and companies should therefore adopt an explicit food loss and waste reduction goal aligned with SDG 12.3.
- *Measure your food loss and waste.* The adage “what gets measured gets managed” holds true for food loss and waste as well. Quantifying food loss and waste within borders, operations, or supply chains can help decision-makers better understand how much, where, and why food is being lost or wasted. This information provides an evidence-based foundation for prioritizing interventions to reduce food loss and waste, and helps entities monitor whether they are on track to realizing their target. Governments and companies should therefore start to measure their food loss and waste and monitor progress over time.
- *Take action.* What ultimately matters is action. However, there is no proverbial “silver bullet” action for reducing food loss and waste. Rather, reducing it at scale will require numerous actors in the food supply chain to implement a variety of context-specific interventions.

PURPOSE OF THIS GUIDANCE

An increasing number of companies and others are setting targets, measuring, and reducing their food loss and waste. As reported in *SDG Target 12.3 on Food Loss and Waste: 2019 Progress Report*, of the world’s fifty largest food companies (by revenue), more than two-thirds have set an explicit target, and 40 percent are measuring their food loss and waste.

For some companies, measuring food loss and waste can be a big cultural adjustment. As a result, the individuals charged with measuring the amount of food loss and waste at their company (or asking suppliers to do so) may encounter inertia against, or resistance to, measuring.

This guidance summarizes the concerns people may raise about measuring food loss and waste, why they may have those concerns, and recommendations for how to respond in a way that inspires them to get on board with your organization’s goals. You can use these recommendations to help overcome resistance to measuring food loss and waste within your own organization—or to convince clients or companies in your supply chain to do so.

ABOUT THE FLW STANDARD

The *Food Loss and Waste Accounting and Reporting Standard* (or *FLW Standard*) facilitates the quantification of “food loss and waste”—what to measure and how to measure it—and encourages consistency and transparency in the reported data.

A summary of definitions and requirements of the *FLW Standard* can be found online along with related tools to help users report the scope of their inventory and select a method for quantification.

UNDERSTANDING THE RESISTANCE TO MEASUREMENT

Four statements sometimes expressed by individuals when asked to measure food loss and waste are:

- “We have our food loss and waste under control.”
- “We don’t have any food loss or waste.”
- “We’ll always have waste. It’s just part of our business.”
- “I don’t have time to measure. It’s just extra work.”

Behind these statements lie several fears and beliefs. These will vary depending on your business and the role of the individual, but commonly involve several themes (see Summary Table 1).

WHO SHOULD USE THIS GUIDANCE

This guidance is for the person in an organization who is tasked with gathering information about the amount of food loss and waste, yet is encountering (or may encounter) resistance. It is written with a business audience in mind, but many of the recommendations also are relevant for government agencies or other entities seeking to collect data on quantities of food loss and waste.

Summary Table 1. Concerns Underlying Resistance to Measurement of Food Loss and Waste

Underlying Concern		What the Individual May Be Thinking
BUSINESS CASE IS UNCLEAR	1. Unclear about why to measure	<i>I don’t understand why this is a priority. I don’t understand why you are prying into my work.</i>
	2. Not relevant	<i>Any food we don’t use in our business is donated, used for compost, fed to animals, plowed under, or used for a beneficial purpose. I don’t consider this to be “waste.”</i>
	3. Already efficient	<i>I value food and pride myself on already being as efficient as possible. I don’t see the need to start measuring, or adopt a new way of measuring food loss and waste (e.g., using electronic scales, expanding the scope of measurement to include additional destinations or parts of the business).</i>
	4. Not meaningful	<i>The amount of food loss or waste I generate is too small to matter.</i>
	5. No incentive	<i>I’m not evaluated on the amount of waste, so have no incentive to measure it. I already have a lot of demands on my time and this is a hassle.</i>
DISTRUST	6. Fear of “finger pointing”	<i>Acknowledging there is food loss or waste implies I’m not doing my job well and/or could be bad for our brand’s reputation. I’m going to be blamed or punished for any loss or waste we have.</i>
TOO HARD TO CHANGE	7. Limited ability to change situation	<i>I don’t have any control over factors that cause food to be lost or wasted (e.g., the weather, poor quality, menu decisions). I need to meet my boss’s or customer’s requests. I am simply meeting the consumer’s expectations (e.g., we can’t run out of food).</i>
	8. Measurement feels daunting	<i>I don’t feel confident in the quality of the data. We have no data for certain categories or parts of our business, and/or no visibility into our supply chain. I’m afraid we’ll find out how little we do know and the expectation will keep growing to dig deeper (i.e., I’ll never be done). The process of tracking food loss and waste or collecting data feels overwhelming. We don’t have a consistent process for tracking and reporting the data over time. I don’t have the authority, access to the food loss and waste, and/or resources (financial, time, cooperation from colleagues, physical equipment) to get the information being requested.</i>

Sources: (a) Discussion with companies. (b) CEC (Commission for Environmental Cooperation). 2019. *Why and How to Measure Food Loss and Waste: A Practical Guide*. Montreal: CEC. (c) WWF-US (World Wildlife Fund–United States). 2018. *No Food Left Behind, Part 1, Underutilized Produce Ripe for Alternative Market*. Washington: WWF-US.

TAKING ACTION TO OVERCOME THE RESISTANCE

There are a range of responses and actions that companies and others have undertaken to address these eight concerns about measuring food loss and waste. Tables 1 through 8 provide a nonexhaustive suite of recommendations for what you could say in response to each concern, why that response is likely to work, and a case example.

As you consider the appropriate response for your situation, you can also refer to Summary Table 2 as a guide. This table notes for the four commonly expressed statements which of the eight concerns are mostly likely underlying it. So, for example, if you hear expressed “we don’t have any food loss or waste” then most likely to be useful are the responses in Table 2 (not relevant) and Table 6 (fear of “finger pointing”). You may find that individuals also have other concerns but this table provides a good starting point for selecting the relevant response.

Summary Table 2. Concerns that May Underlie the Statements of Resistance to Measuring Food Loss and Waste

Statements of Resistance You May Hear Expressed	& What the Individual May be Thinking (Underlying Concerns)
“We have our food loss and waste under control.”	1. Unclear about why to measure 3. Already efficient 4. Not meaningful
“We don’t have any food loss or waste.”	2. Not relevant 6. Fear of “finger pointing”
“We’ll always have waste. It’s just part of our business.”	1. Unclear about why to measure 4. Not meaningful 5. No incentive 7. Limited ability to change situation
“I don’t have time to measure. It’s just extra work.”	1. Unclear about why to measure 3. Already efficient 4. Not meaningful 5. No incentive 8. Measurement feels daunting

Table 1. Underlying Concern: Unclear About Why to Measure

What the Individual May Be Thinking	What You Could Say	Why The Response May Work
<p><i>I don't understand why this is a priority.</i></p> <p><i>I don't understand why you are prying into my work.</i></p>	<ul style="list-style-type: none"> • “Our company has signed on to a commitment to halve its food loss and waste.” <i>For example, your company may be a member of The Consumer Goods Forum or Global Agribusiness Alliance, or your company may have been asked by a major customer to halve its food loss and waste.</i> • “There are financial benefits. Studies show that 99 percent of food loss and waste reduction efforts pay for themselves. In fact, half of all studied business food loss and waste reduction efforts earned or saved at least \$14 for every \$1 invested.”^a • “You will be helping make a difference in tackling an important global (as well as a business) issue.” • “Measuring food loss and waste gives us the data we need to understand how much food isn’t sold and why. It then enables us to identify hotspots, and the opportunities to take action so that we can put unsold food to better use.” • “Measuring food loss and waste will help you (fill in benefit relevant to the person’s function).” <i>Box 1 provides ideas for benefits you could highlight for different audiences.</i> 	<p>Given the many demands placed on people’s time, they need to understand why measuring food loss and waste is a priority for the business.</p> <p>Highlighting the positives of measuring makes it clear that the business wants this to happen, and provides tangible reasons for how the organization overall benefits, how they benefit in their role, and how they can connect more broadly to global and local societal issues.</p>
Case Examples		
<p>Sodexo (one of the world’s largest foodservice companies and provider of life services) has stated measurement is a priority by committing to halve food loss and waste from its operations by 2025. Its CEO publicly supports this target along with the company’s intention to be transparent and held financially accountable for its actions to reduce food loss and waste. Sodexo uses tailored messaging to improve engagement. For hourly employees, what is most motivating is hearing that reducing the waste of food can provide benefits to people in the community. The company therefore stimulates engagement by highlighting the benefit of rescuing excess safe food to support local families in need, and also that the average family of four spends \$1,500 a year on food that is never consumed.</p> <p>Sources: (a) L. Phipps. 2019. “For Sodexo, halving food waste by 2025 is a fiscal issue.” <i>GreenBiz</i>, November 4. (b) A. Clowes, P. Mitchell, and C. Hanson. 2018a. <i>The Business Case for Reducing Food Loss and Waste: Catering</i>. Washington, D.C.: Champions 12.3.</p> <p>Marriott International (a leading global hotel chain) has made a public commitment to reduce its food waste to landfill 50 percent by 2025. The company started developing its food waste reduction strategy by performing property waste audits to understand how much food was being wasted. From there, proof of concepts were conducted around the world to test various opportunities for tackling food waste. Marriott also has provided internal communications and tools/resources to make culinary associates and meeting planners aware of how they can support the company’s food waste reduction goal without impacting the guest experience. When communicating to associates, Marriott highlights that the reduction in food costs achieved by reducing over-ordering and overproduction can be invested in purchasing higher quality food and developing “new culinary experiences that are more customized to the guest.” Sources: (a) D. Naguib and D. Klatell. 2018. “Tackling Food Waste in Hotels: Q&A with Marriott International.” Blog, February 21. (b) Meeting Imagined. “How Marriott is Fighting Back Against Food Waste.”</p> <p>^a This report analyzed nearly 1,200 business sites across 17 countries and more than 700 companies, representing a range of sectors including food manufacturing, food retail, hospitality, and food service. More specific financial return on investment data is available for restaurants, hotels, caterers at https://champions123.org/publications/. For food and beverage manufacturers, Provision Coalition estimates CD\$228,000 in possible savings per facility from food waste reduction with an average 12-month payback period.</p>		

BOX 1. Communicating About Food Loss and Waste with Different Audiences

While the financial benefits (e.g., additional revenue, food cost savings, or waste hauler fee savings) can be a selling point, other benefits of measuring and taking action on food loss and waste are equally if not more compelling. The following are more specific examples of ways to describe the benefits in terms that may resonate with different types of audiences.

- **C-suite:** show leadership in meeting national/global food loss and waste reduction targets; stay ahead of your competition
- **Finance/tax:** capture enhanced tax deductions available when donating food; reduce operating expenses
- **Operations/supply chain:** increase efficiency (e.g., reduce time spent) managing unsold product; improve productivity and workflow; support continuous improvement strategy
- **Procurement/purchasing:** spend savings from reduced food spend to improve quality of food purchased
- **Merchandising/inventory control:** inform purchasing decisions (e.g., optimize timing of orders to reduce unsold inventory)
- **Sales/marketing:** improve brand recognition and customer retention; address consumer's interest in the issue; respond to public campaign or petition bringing attention to this issue; improve sustainable meetings and events offerings
- **Human resources:** improve employee engagement and collaboration; recruit talent
- **Sustainability:** meet other sustainability objectives (e.g., goals related to food security, landfill avoidance, greenhouse gas emission reductions)
- **Legal:** comply with existing or emerging regulations related to organic waste
- **Hourly/front-line individuals:** rescue safe but unmarketable food for local people in need; help households save money; make your job easier
- **Agricultural producers/ranchers/fishers:** identify alternative channels for surplus crops or catch; determine for which crops the cost of sending harvest crews in for another pass at your field would be justified; understand and unlock the opportunity for full utilization of what you grow, raise, or catch (e.g., to space plantings a few more days apart so that fields can be harvested again, to plant less acreage in order to reduce land and chemical use but still harvest the same amount, to train harvest labor to take more time in the field to ensure less product is missed)

Sources: (a) Spoiler Alert. 2018. "Sizing up food waste reduction: 4 factors to consider." August 21. (b) WWF-US (World Wildlife Fund–United States). 2018. *No Food Left Behind, Part 1, Underutilized Produce Ripe for Alternative Markets*. Washington: WWF-US. (c) WWF-US ((World Wildlife Fund–United States) in collaboration with the American Hotel & Lodging Association. 2018. "Fighting Food Waste in Hotels." Washington: WWF-US. (d) R. Dunning and L. Johnson. 2019. "Are You Leaving Money in the Farm Field?" *Blog*. August 7.

Table 2. Underlying Concern: Not Relevant

What the Individual May Be Thinking	What You Could Say	Why The Response May Work
<p><i>Any food we don't use in our business is donated, used for compost, fed to animals, plowed under, or used for a beneficial purpose. I don't consider this to be "waste."</i></p>	<ul style="list-style-type: none"> • “We want to know how much we don’t use or sell to see where there is an opportunity to get more value out of it. We buy our raw materials to make products for people, not for use as animal feed or compost.” <i>This second sentence should be customized to reflect the nature of your business.</i> • “Do we know how much goes to the different destinations? ^a Seeing what goes where helps us figure out how to: <ul style="list-style-type: none"> ○ avoid the loss and waste from occurring in the first place, ○ reuse material (e.g., repurpose trim or other byproduct for new products), and/or ○ make better use it (e.g., monetize it, send it to a destination where the outputs also have some value).” • “Do we know how much is being donated? We could highlight you and your team in a blog post/social media to share our goals and success in increasing the amount of food rescued for people in need.” 	<p>Different people have different definitions of waste. To encourage consistency and transparency, it is important to use the <i>FLW Standard</i> to clearly describe what has been quantified. It’s also important to be clear that the goal is to measure the amount of any material that is not sold—whether called waste or other terms such as “diverted,” “recovered,” or “recycled.” This helps individuals focus on “source reduction” to avoid any food from leaving the human food supply chain in the first place. It also encourages more expansive thinking about alternatives to landfill where some value may be extracted from food (or inedible parts) no longer safe for human consumption.</p>
Case Examples		
<p>Kellogg (a producer of cereal, cookies, crackers, savory snacks, and frozen foods) views any leftover or unwanted raw materials as valuable assets. It is prioritizing the prevention of waste to maximize the use of ingredients purchased, which it estimates could generate \$30 million in savings based on the cost of raw materials. As one example, Kellogg in the UK has teamed up with local brewery SE7EN BROTHERS to turn into beer corn flakes that are rejected for being too big, small, or overcooked as well as other non-packaged, less-than-perfect cereal. This turns raw materials that would previously have gone to animal feed into a product for people. <i>Sources:</i> Food Loss and Waste Protocol. 2017. “Kellogg Company: Food Waste in Global Manufacturing Operations” September 13. Washington, DC; Seven Bro7hers Brewery, Accessed November 24.</p> <p>Conagra Brands (a packaged foods company) is focused on not creating waste in the first place and has reframed with employees the way it talks about the materials that don’t make it into finished goods—referring to them as “byproducts” instead of characterizing them as “waste.” It also uses measurement as a standard operating procedure to identify improvement opportunities. As one example, after quantifying the amount of unnecessary packaging and product waste occurring during equipment start-up at one of its facilities, it changed its procedures, maintained product quality, and prevented 36 tons of food waste from being generated. <i>Source:</i> Conagra Brands. 2018. <i>Citizenship Report</i>, 2018.</p>		
<p>^a The 10 destinations included in the <i>Food Loss and Waste Accounting and Reporting Standard</i> describe where food and/or inedible parts may be directed when removed from the food supply chain.</p>		

Table 3. Underlying Concern: Already Efficient

What the Individual May Be Thinking	What You Could Say	Why The Response May Work
<p><i>I value food and pride myself on already being as efficient as possible.</i></p> <p><i>I don't see the need to start measuring or adopt a new way of measuring food waste (e.g., using electronic scales, expanding the scope of measurement to include additional destinations or parts of the business).</i></p>	<ul style="list-style-type: none"> • “We’d like to be <i>even more</i> efficient and need your perspective on how we can keep improving.” • “We want to highlight the efficiencies you have uncovered and make sure they are shared across our network.” • “Let’s measure and/or try this new system to see what we find (i.e., prove us wrong).” • “Let’s use what you know about how we already track and measure to also understand how much food loss and waste is being generated in other parts of the businesses (or, to those destinations) where we don’t yet have any insight.” 	<p>When individuals are invited to participate and share their knowledge and ideas on efficiency, they are more likely to see the valuable role they can play and also “buy-in” to the rationale for measurement.</p>
Case Example		
<p>IKEA (a leading home furnishings retailer with significant restaurant operations) summarized the experience of a kitchen production manager asked to implement a new waste measurement system:</p> <p>“We had a scale, waste sheets on the kitchen wall, and are quite competitive, so we also made sure to register the waste in our system on a daily basis. One day we were introduced to a new digital scale to measure food waste. Our kitchen production manager was not impressed, commenting: ‘we have control of our waste and this just gives us extra work.’</p> <p>This particular manager is well-respected for his many years of experience, consistent delivery of good results, and has the full trust of his team and others. When we were asked to be one of two pilot stores for using this new scale, although the production manager did not see any point in using the new measurement system, he agreed to be part of testing -- just to say ‘I told you so’!</p> <p>The manager went all-in to implement this new program, keeping up with the training of his co-workers, reporting back on issues that appeared, doing a good job on the categorization, and putting all food waste in the bin on the scale first. The manager was looking forward to making his point that the amount of food waste was the same despite a fancier scale.</p> <p>But ... it wasn’t! It was higher. Our manager was the first to admit he was wrong and started looking into the opportunities for change. At a team meeting a few months later, he demonstrated the big savings possible and stated loud and clearly: ‘I was wrong.’</p> <p>The implementation has gone easier than expected and tracking food waste daily created motivation to reduce it. In addition to seeing results quickly, our colleagues were motivated by the positive impact we were having on people and the planet.” <i>Source: Correspondence with IKEA</i></p>		

Table 4. Underlying Concern: Not Meaningful

What the Individual May Be Thinking	What You Could Say	Why The Response May Work
<p><i>The amount of food loss or waste I generate is too small to matter.</i></p>	<ul style="list-style-type: none"> • “We have a goal and it has a baseline so even if what we have is small, we have committed to reducing it.” • “Even though we have a low loss <i>rate</i>, it represents a significant <i>absolute</i> volume of food that could be put to better use.” ^a • “Even though the amount of loss or waste that you generate is small, when we add up all of it across our business units it represents a significant amount in total.” ^a 	<p>When individuals understand how their efforts contribute to something larger, they may be more motivated to see that their individual actions matter.</p> <p>Conveying the scale and relevance of food loss and waste in terms that are meaningful for the intended audience may provide a more relatable connection.</p>
Case Examples		
<p>Nestlé (a major nutrition, health, and wellness company) found that in 2017 the loss of milk between farm gate and their factories was on average 0.33 percent of milk purchased and in 2018 was reduced to an average of 0.20 percent. While the percentage of loss is low between farm gate and factory gate, across 30 countries this represents over 10,000 metric tons (i.e., 22 million pounds) of milk loss. From an economic perspective, the reductions from 2017 to 2018 provided farmers and Nestlé combined a net savings of approximately US\$2.6 million. <i>Source:</i> Food Loss and Waste Protocol. 2017. “Nestlé’s Milk Losses From Farm Gate to Factory in 30 Countries” July 19. Washington, DC: WRI</p> <p>Olam (a leading global agribusiness) reduced losses of rice in Cameroon from 1.25 percent in 2012 to 0.8 percent in 2016. Although these savings may seem small in isolation, the scale of Olam’s rice operations means that the amount of rice saved was in excess of 2,500 metric tons (5.5 million pounds) over this timeframe. This equates to over 50 million servings of rice. The savings in rice also avoided unnecessary production and therefore mitigated GHG emissions and water usage in the origin country where rice was produced. <i>Source:</i> Olam Rice “Reducing post-harvest losses in the Cameroon rice supply chain.”</p>		
<p>^a In order to provide context, where possible, also add the amounts and translate it into economic, environmental, nutritional, and/or meal-equivalent terms. The <i>Food Loss and Waste Accounting and Reporting Standard</i> provides guidance on converting weight into other terms or units of measurement (see Appendix D); the FLW Value Calculator is one such tool for doing so.</p>		

Table 5. Underlying Concern: No Incentive

What the Individual May Be Thinking	What You Could Say	Why The Response May Work
<p><i>I'm not evaluated on the amount of waste, so have no incentive to measure it.</i></p> <p><i>I already have a lot of demands on my time and this is a hassle.</i></p>	<ul style="list-style-type: none"> • "We will be reporting as a company on how we're doing to reduce food loss and waste against our target. Your involvement is critical to our company's success in meeting this goal." • "Measurement and waste prevention will become part of our routine performance evaluations." • "We are aligning KPIs across merchandising, operations, and supply chain in order to meet our corporate food waste goal." • "We'll give you scales/calculators/tools to make this easier. Is there other support or help you would need?" • "We're creating a food waste working group and will be recognizing those involved." • "We're highlighting wins, failures, and progress." <i>Insert whatever incentives are available – e.g., a dashboard to show the amount of food loss and waste and progress in reducing it, internal contests, a weekly reward system for use of a smart scale, bonuses, or other financial incentives. Even if loss is high, recognize employees who demonstrate commitment to the process of measurement.</i> 	<p>Waste prevention work can be difficult and relies heavily on front-line staff to solve problems and adapt—utilizing their time, labor, and knowledge.</p> <p>It is therefore important to not only provide tools that make the task easier, but also recognize and compensate employees through relevant key performance indicators (KPIs), rewards, celebration, increased pay, or other metrics that promote measurement.</p>
Case Examples		
<p>Pizzicato (a small restaurant chain) uses a waste log sheet to track overdone pizza, spoilage, and other food waste. It gives credit to managers who carefully track waste, which is then reflected in their bonuses. <i>Source:</i> The City of Portland, Oregon. 2019. "Tips from your peers: How local restaurants minimize food waste." (Accessed November 24)</p> <p>Ahold Delhaize (one of the world's largest food retail companies) reports publicly in its annual report on progress against its food waste reduction target using two metrics: "metric tons of food waste sent to disposal per food sales" and "percentage of unsold food donated to feed people." These metrics are evaluated periodically and quarterly to measure store brand performance. Food waste reduction targets also are incorporated into management incentive (bonus) plans. <i>Source:</i> AholdDelhaize. 2018. "Leading Together: Annual Report 2018."</p> <p>Google (a global technology company) has in its 200+ cafés around the world established a waste management plan with measurable goals based on its "food efficiency ratio." Kitchen staff members are provided with electronic scales so they can easily track pre-consumer food waste. A dashboard on the scales displays the value of the food wasted, providing motivation to chefs. In addition, Google uses an "instant win feature" to reward staff for their food waste tracking efforts. The data are routinely collected to provide chefs with information they then use to make adjustments in the kitchen, such as scaling back the purchasing of ingredients or teaching team members how to trim vegetables in order to utilize a greater percentage of the product. <i>Source:</i> M. Seltzer. 2019. "From food waste to tasty treats in Google's kitchens" Blog. April 24.</p>		

Table 6. Underlying Concern: Fear of “Finger Pointing”

What the Individual May Be Thinking	What You Could Say	Why The Response May Work
<p><i>Acknowledging there is food loss or waste implies I’m not doing my job well and/or could be bad for our brand’s reputation.</i></p> <p><i>I’m going to be blamed or punished for any loss or waste we have.</i></p>	<ul style="list-style-type: none"> • “We are focused on reducing food loss and waste because it can help us to …” <i>Use suggestions from Box 1 that provide the broader context for why tracking food loss and waste matters to your company.</i> • “We will reward the team’s effort to help us keep track of our food loss and waste.” • “We rely on you as our front-line staff for ideas on how we can improve our business.” • “We are providing training on loss/waste prevention for the entire team (e.g., on best practices in handling fruit, how to safely repurpose food).” • “We won’t attach your name to the measurement. We will only record and classify the food loss and waste by location.” • “We will be aggregating the numbers when we report the data.” 	<p>Sharing that food loss and waste is important to the organization and that measurement is a team effort can help individuals feel like they are part of something broader than just their job and also depersonalizes it, thereby easing some of the tension.</p> <p>Engaging actively with the individuals who are concerned they’ll be blamed (e.g., workers whose roles may be temporary or otherwise tenuous) sends a message that their role and participation is valued.</p> <p>In addition, individuals may worry that they or their site will be singled out, so depersonalizing the data can help ease that concern.</p>
Case Examples		
<p>At a hotel, the food waste-reduction program was led by management. Because of this, kitchen staff were initially skeptical, thinking that the program was covertly designed to micromanage or even punish poor performers. However, through a weekly reward system for use of the smart scale and a series of dedicated meetings on food waste, the site saw a complete culture change in kitchen staff, even among long-term employees. The increase in regular engagement led not only to more accurate data collection, but also to kitchen staff proposing creative solutions to efficiency problems. <i>Source: A. Clowes, P. Mitchell, and C. Hanson. 2018a. The Business Case for Reducing Food Loss and Waste: Hotels. Washington D.C.: Champions 12.3.</i></p> <p>When the management team of Gold Strike Resort and Casino (a property of the MGM Group) unveiled a program to track food waste, they were met with a mixed reaction by its staff. Some were excited, while others were suspicious, thinking that the program was designed to track individual performance. In order to encourage use of the program, each week the management team recognized the person with the most transactions as the “top tracker” and rewarded them with a free meal at the buffet. In addition, at the pre-shift meeting, the team talked about who was in the lead, which created friendly competition among the group and encouraged full participation in the program as well as accurate data collection. <i>Source: CEC (Commission for Environmental Cooperation). 2017. Case Studies on Food Loss and Waste in North America. Montreal: CEC.</i></p>		

Table 7. Underlying Concern: Limited Ability to Change Situation

What the Individual May Be Thinking	What You Could Say	Why The Response May Work
<p><i>I don't have any control over factors that cause food to be lost or wasted (e.g., the weather, poor quality, menu decisions).</i></p> <p><i>I need to meet my boss's or my customer's requests.</i></p> <p><i>I am simply meeting the consumer's expectations (e.g., we can't run out of food).</i></p>	<ul style="list-style-type: none"> • “We don’t know yet what we can do to reduce our food loss and waste, but our customers (e.g., retailers, consumers) are interested in this issue and expectations are high for us to measure the amount of food loss and waste in our business and identify possible opportunities for action.”^a • “Measuring gives us the information we need so we can start having a conversation with our [staff, waste haulers, clients, customers, suppliers . . . whoever influences the levels and management of food loss and waste] about reducing food loss and waste.” • “Tracking the amount of food loss and waste will enable us to better understand how much is generated and why so that we can change whatever is causing it. What support or help do you need to track and measure?” • “Let’s measure what people actually eat – or don’t eat. That will give us concrete data and show us patterns so we can keep meeting expectations but not overproduce to do so. We don’t have to keep doing things the same way just because we have done so in the past.” • “Would you share please what you see as the challenges to reducing food loss and waste? It would help us understand the different decisions made about the food we are buying/making/selling.” • “We would love to have you lead (or, be part of) a group of others from across the company to identify solutions based on the data we collect.” 	<p>There are usually a range of stakeholders whose decisions and behaviors affect the generation of food loss and waste.</p> <p>It is helpful to communicate that measuring the amount and causes of food loss and waste provides data and insights that open up the opportunity for conversations with the internal and/or external stakeholders who influence how much food loss and waste is generated.</p>
Case Examples		
<p>Novotel Brisbane (a 300 room hotel serving 150–400 guests daily) started tracking food waste at the breakfast buffet and identified several ways in which it could cut its waste. Out of 60 kilos a week in oranges, for example, 20 kilos were showing up as waste—all from the peel. When the executive chef commented: "It's a cost, we pay for it, what can we do with it?" the team got creative, creating house-made marmalade and a citrus cleaner made from orange peel and vinegar they now use in the kitchen. <i>Source:</i> S. Smith. 2018. “How Novotel Brisbane cut food waste 66%” Blog. September 6.</p> <p>For Branston (a large buyer of potatoes), one factor creating loss and waste was potatoes that were too big or too small to be sold in retail packs. Since Tesco (one of the world’s largest supermarket retailers) is a customer and focused on ensuring no food fit to eat goes to waste, the two companies worked together to find a new outlet for these off-spec sizes. Tesco introduced Branston to another one of its suppliers, Samworth Brothers, who now buys the odd-sized potatoes from Branston to make the “mash” that tops Tesco’s own-brand pies. <i>Source:</i> The Guardian. 2019. “Mash up: giving wonky potatoes a new lease of life.” November 4.</p>		
<p>^a If your customer is a company, you could add specific examples of companies that are working with suppliers on reducing food loss and waste. The companies to cite could be those that are part of the 10x20x30 initiative, The Consumer Goods Forum Food Waste Resolution, Global Agribusiness Alliance Food Loss Resolution, Pacific Coast Collaborative, U.S. Food Loss and Waste 2030 Champions, and/or Courtauld 2025.</p>		

Table 8. Underlying Concern: Measurement Feels Daunting

What the Individual May Be Thinking	What You Could Say	Why The Response May Work
<p><i>I don't feel confident in the quality of the data.</i></p> <p><i>We have no data for certain categories or parts of our business, and/or no visibility into our supply chain.</i></p> <p><i>I'm afraid we'll find out how little we do know and the expectation will keep growing to dig deeper (i.e., I'll never be done).</i></p> <p><i>The process of tracking food loss and waste or collecting data feels overwhelming.</i></p> <p><i>We don't have a consistent process for tracking and reporting the data over time.</i></p> <p><i>I don't have the authority, access to the food loss and waste, and/or resources (financial, time, cooperation from colleagues, physical equipment) to get the data being requested.</i></p>	<ul style="list-style-type: none"> • “We don’t need a super accurate number to get started with understanding the amount of food loss and waste. Let’s avoid the perfect becoming the enemy of the good. We can use what we have and improve our data over time.” • “Let’s not get stuck on what data we do or don’t have. We can start with one location and learn from there.” • “We’re going to create a cross-departmental taskforce to keep this project on track, identify our options for measuring food loss and waste, introduce and support any changes in practices, and review progress to plan for the future.” • “The discipline of tracking the amount regularly helps us build a culture of waste prevention. It will no longer feel daunting as it becomes part of your regular routine.” • “We need your experience because you know how things work around here. What do you suggest as options for overcoming these challenges?” 	<p>Getting started can be the most difficult step. But once people have taken an initial step along the path to measuring, the next steps usually become easier.</p> <p>It’s important to recognize early progress and continue to provide the motivation, knowledge, and resources needed to track food loss and waste on an ongoing basis.</p> <p>It also is important to acknowledge and communicate that it’s okay if the accuracy of your data improves with time, or additional data becomes available and the total amount of food waste rises as a result. One can make adjustments to rebaseline the total tonnage from prior years.</p>
Case Examples		
<p>Campbell Soup Company (a producer of cookies, crackers, chips, soup, sauces, and beverages) has been tracking and reporting on several of the food waste destinations since 2010. When the <i>FLW Standard</i> was published in 2016, they used the data previously collected and reported as a starting point to align with the Standard. From there, they identified gaps and worked to fill them. This required engaging internally across various departments to determine what other data existed, leveraging existing data sources (e.g., destruction reports) to extract the amount of food waste, as well as recategorizing some of their waste streams internally to improve data accuracy. Campbell’s process continues to evolve, especially as adjustments are needed to integrate data from acquisitions or remove data linked to divestitures. What remains constant is the commitment to report on their goal to reduce food loss and waste by 50 percent by 2030. In 2020, Campbell will complete their third year of reporting, going back to their FY2017 base line. <i>Source:</i> Correspondence with Campbell Soup Company</p> <p>G’s Fresh (a grower and packer of fresh vegetables and salads) established in 2017 a food waste baseline to track progress against its 50 percent reduction target. For those products that are grown and packed inside (e.g., mushrooms), the company has been able to calculate food waste with a high degree of certainty as the product is sold to customers by weight. However, for those products grown outdoors (e.g., celery, whole head lettuce) the amount of food waste is instead derived from several estimates based on a sampling protocol. As a result, there is some uncertainty in the data, but the estimates have been sufficient to nonetheless give the company insights on how it could reduce the amount of unharvested crop through growing improvements, and also move more surplus product up the waste hierarchy. <i>Sources:</i> G’s Fresh. 2018. Food Waste Inventory: 2018/2019; Correspondence with G’s</p>		

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ABOUT THE FOOD LOSS AND WASTE PROTOCOL

The Food Loss & Waste Protocol (FLW Protocol)—a multistakeholder partnership— has developed the global *Food Loss and Waste Accounting and Reporting Standard* for quantifying food and/or associated inedible parts removed from the food supply chain—commonly referred to as “food loss and waste” (FLW). World Resources Institute (WRI) serves as the FLW Protocol’s secretariat.

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