

A Short Guide to Food Waste Management Best Practices

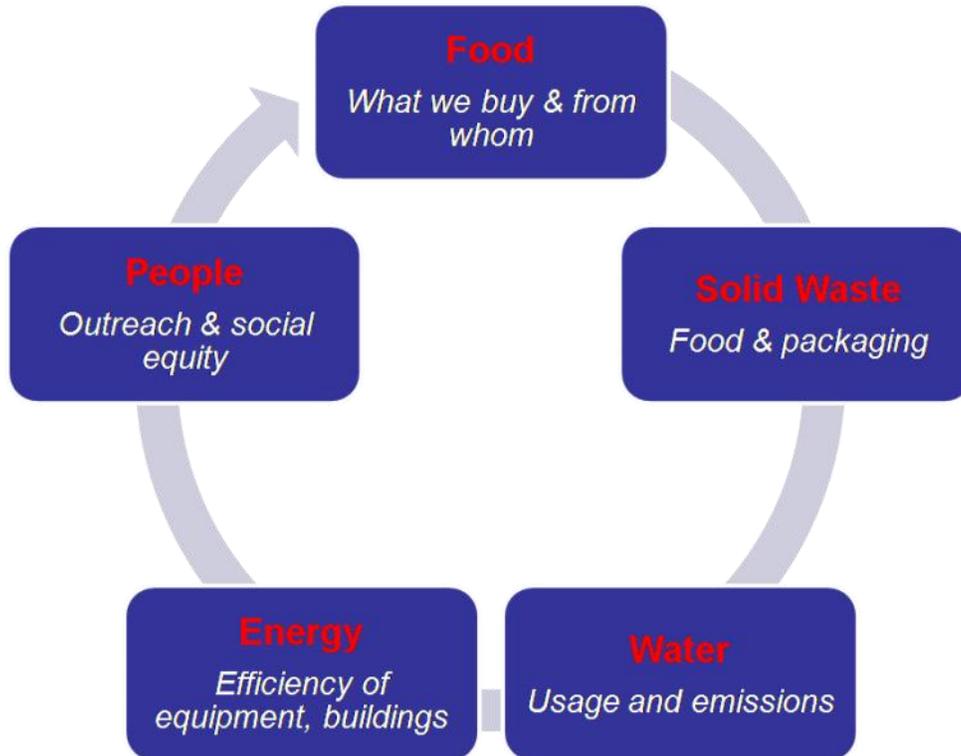
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Framework for Sustainability—Waste Management is a Key Element

Sustainable foodservice is a goal which many operators are pursuing aggressively. However, there are many opinions about what constitutes sustainability in foodservice. LeanPath has identified a five-part framework which encompasses all types of sustainability initiatives we have observed in foodservice:

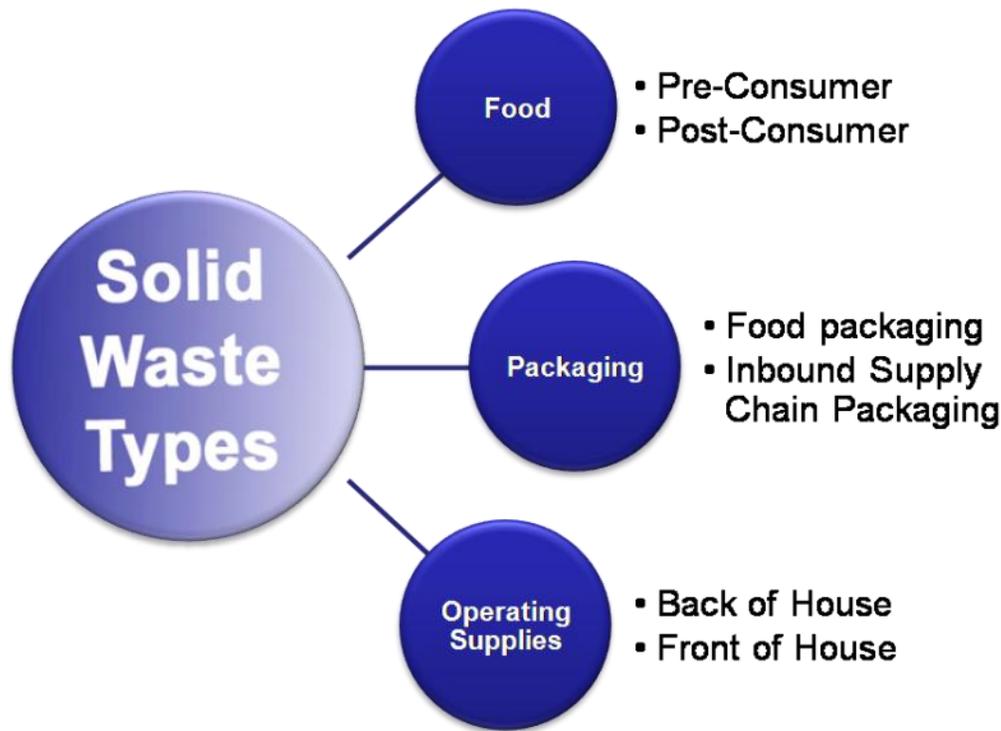


Framework for Foodservice Sustainability

- **Food.** *What we buy and from whom.* This element includes local sourcing, organics, fair trade products, cruelty-free options, and avoidance of toxics.
- **Solid Waste.** *Food & packaging.* This element includes food waste, to-go containers, service ware and the packaging manufacturers use in shipping and packaging our supplies.
- **Water.** *Usage and emissions.* This element includes water conservation and water pollution, with particular attention to how we choose green chemicals.
- **Energy.** *Equipment & Buildings.* This element includes efforts to procure energy efficient equipment as well as green building projects (i.e. LEED certifications).
- **People.** *Outreach & social equity.* This element includes efforts to educate and raise awareness about sustainable living, as well as initiatives to ensure that everything we do in foodservice is fair to the people touched by our operations. This might include fair wages, and healthcare benefits

Foodservice Waste

What type of waste do foodservice operations generate?



Food Waste

- **Pre-Consumer Food Waste** is food waste discarded by staff within the control of the foodservice operator. This includes all waste in the back of the house including overproduction, trim waste, expiration, spoilage, overcooked items, contaminated items, and dropped items. It also includes all waste in the front of the house that has remained under the control and custody of the foodservice operator, including items on cafeteria stations such as salad bars, steam wells, self-serve deli stations, misordered product (e.g. erroneous grill orders never served), and expired grab & go items. Leftover catering items would be pre-consumer waste if they remain on the catering line and have not been received by an individual customer. If an item has been sold or served to a customer and is then discarded it is no longer pre-consumer waste. Pre-consumer waste offers opportunities for waste reduction and cost savings.
- **Post-Consumer Food Waste** is food waste discarded by customers/guests/students/patients/visitors after the food has been sold or served. This waste is sometimes referred to as "plate waste" or "table scraps" and the decision to discard it (or leave the food on the plate) is made by the consumer rather than the foodservice operator. Postconsumer food waste can be reduced through smaller portions and awareness programs.

Foodservice Waste (continued)

Packaging Waste

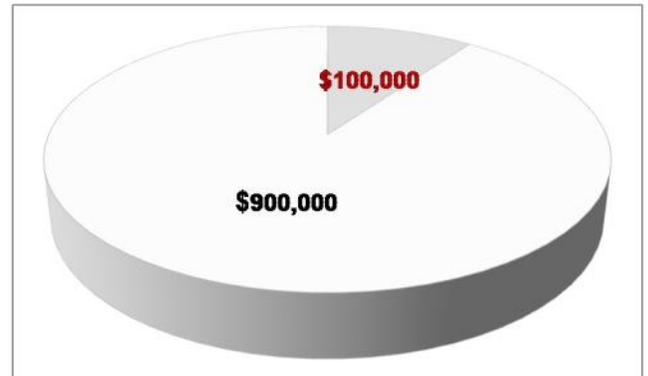
- **Inbound Supply Chain Waste**. Inbound supply chain waste refers to pallets, cans, cartons, plastic wrap and other materials used to package supplies and food.
- **Packaging Waste** is waste associated with packaging and serving food to guests. Common wasted items are clam shells, hot and cold cups, and disposable trays.

Operating Supplies

- **Front of the House**. Front of the house operating supply waste can include napkins, disposable cutlery, portion-controlled condiments, and table linens
- **Back of the House** Back of the house operating supply waste can include towels and rags, expired seasoning, and paper.

Why does food waste management matter?

1. **Save Money**. Waste reduction allows you to save money on commodities, labor, energy and disposal costs. When you consider that 4-10% of the food you purchase will become pre-consumer waste before ever reaching a guest, it becomes clear that waste reduction should be one of the first and easiest ways to control costs (and hedge food cost inflation!)
2. **Help the Environment**. Waste leads to significant carbon emissions. In the case of food waste, farm inputs, transportation, and storage each require petroleum inputs. And landfill disposal often leads to production of methane gas, a greenhouse gas which is over 20 times more potent than carbon dioxide. By reducing foodservice waste, you can make a real environmental difference.
3. **Community Engagement**. Engage staff, guests and community members by showing that waste reduction is achievable and makes a positive difference for all of us.



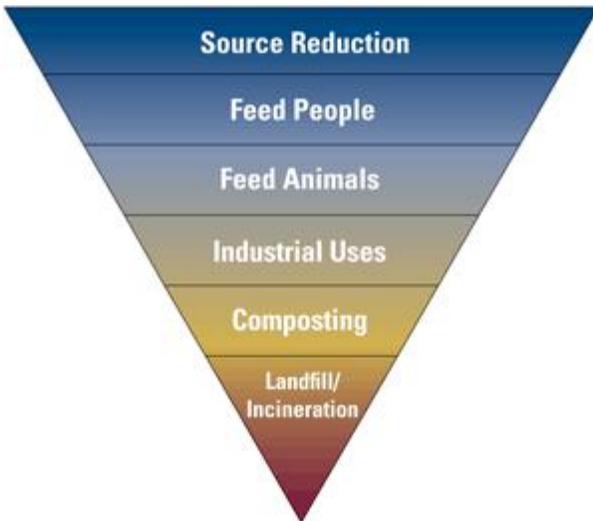
4-10% of all food purchases become pre-consumer food waste. Imagine \$100,000 in waste per \$1 Million spent on food.

The Waste Management Hierarchy in Foodservice

Most foodservice operators are familiar with the phrase “**Reduce, Reuse, Recycle**” which has been used for many years to describe waste control options other than straight disposal. What many people do not realize is that this phrase represents a *hierarchy* of activities, starting with the most beneficial and moving to the least attractive.



1. Reduce. Source reduction is the most powerful and effective thing we can do to manage waste. By designing systems and policies to prevent, minimize, or avoid waste in the first place, we have an opportunity to save food and labor dollars while making the largest positive impact on the environment. When we prevent waste, we aren't spending money on raw materials that would otherwise go in the garbage. At the same time, we're saving money on labor costs associated with handling or processing these materials. We're also avoiding hauling and landfill fees (and carbon emissions) associated with recycling, composting or disposing of the waste.



2. Reuse. Reuse is next best option after source reduction. With reuse, you find a secondary way to obtain value from an item that would otherwise be wasted. In foodservice, the most common reuse opportunities involve 1) redeploying overproduced food elsewhere on the menu (provided you comply strictly with food safety guidelines) and 2) donating to a food recovery program that will provide it to those in need. In certain jurisdictions, food can also be donated to feed animals provided it is handled and treated correctly.

3. Recycle/Compost. Recycle/Compost is the final good option prior to disposal. By recycling or composting, you divert the waste from the landfill or elsewhere in the solid waste stream and ensure ongoing value when the item is converted into something useful, such as a soil amendment with composting.

Ideas to Reduce, Reuse & Cycle Food Waste

Starting Points

- Conduct an audit of PRE-consumer waste (overproduction, expired, trim waste, spoilage, contamination, overcooked, etc.) to determine a baseline. Remember, pre-consumer waste can occur at any point prior to selling food, from the point when you receive product, through prep and production, to service whether it be on a hot line, a deli area or a salad bar.
- Conduct an audit of all POST-consumer waste to determine a baseline.

Food Waste Reduction / Minimization

Pre-Consumer Food Waste

- Establish tracking/control systems (**such as LeanPath's ValuWaste tracking system—see last page**) to measure pre-consumer food waste on an ongoing basis. Determine areas of greatest areas of loss to waste.
- Establish staff action teams to review waste data, set waste minimization goals and develop revised procedures, policies or menus. Discuss waste at some point every day and at a team meeting at least weekly.
- Review menus to identify and reduce/eliminate frequently wasted items.
- Pre-plan secondary uses for certain menu items in the case of overproduction, paying close attention to food safety guidelines.

Post-Consumer Food Waste

- Are your guests eating all of the food you're serving? Review portion sizes.
- Managers should monitor staff compliance with portioning standards and proper service methods (spoon size, slice count, ounces, etc.).
- Conduct a "Waste Awareness Drive" with both Staff and guests. Part of this drive may also involve a Suggestion Box for additional ideas and new concepts, which may lead to additional reduction ideas.

Food Waste Reuse

- Participate in a food recovery/donation program to re-use product safely.

Food Waste Recycling/Composting

- Discuss a collection program for pre-consumer and post-consumer food waste with your local hauler. If available, begin separating compostable food waste for pick-up by the off-site composter.
- If a local off-site option is not available, evaluate on-site composting solutions such as waste digesters or dehydrators (e.g. Somat's ecoRect system).
- Explore options to sell used fryer and cooking oil to bio-fuel producers.

Ideas to Control Packaging Waste & Operating Supplies

Inbound Supply Chain Waste

- Work with suppliers to minimize inbound packaging waste, and evaluate use of products from manufacturers who have implemented packaging reduction processes.

Food Packaging & Operating Supplies

- Change policies to place emphasis on reusable service ware.
- Shift to environmentally-friendly disposables and establish an appropriate collection program to route the product to commercial composting partners if necessary. Balance environmental benefits with ability to offset higher costs with higher prices.
- Configure PC utensil dispensers to discourage dropping and excessive usage.
- Evaluate use of bulk products for condiments as opposed to individually wrapped, or PC's (PC's will get mixed into wet trash and cause challenges with pulping, composting, etc.).
- Explore options to recycle cardboard boxes and trays and generate revenue.
- Explore filtering or bottling your own water for conferences and events (or use only pitchers of water instead of bottles).

Food Waste Tracking Systems

LeanPath is the creator of the ValuWaste food waste tracking system. This patent-pending toolkit (software and hardware) makes measurement of both pre-consumer and post-consumer food waste fast, easy, and powerful.

Using touch-screen terminals connected to scales near pot-wash areas, the ValuWaste system records detailed information about all food waste prior to disposal, in lighting speed.



The system helps operators understand what they are throwing away, why, when, who's discarding the items, and what the item is worth. This data enables chefs to develop better systems, policies, procedures and training while raising awareness and care about waste among the entire foodservice team. By tracking, teams begin to control and minimize waste, allowing themselves to save 2-4% of food costs.

To learn more, please contact us at (877) 620-6512 or e-mail sales@leanpath.com.

About LeanPath

LeanPath, Inc. (www.leanpath.com) is a technology company providing cost control and sustainability solutions to the foodservice industry. LeanPath partners with leading foodservice organizations at sites in more than 22 U.S. states, with customers including ARAMARK, Sodexo, Compass Group, Guckenheimer and MGM Mirage.