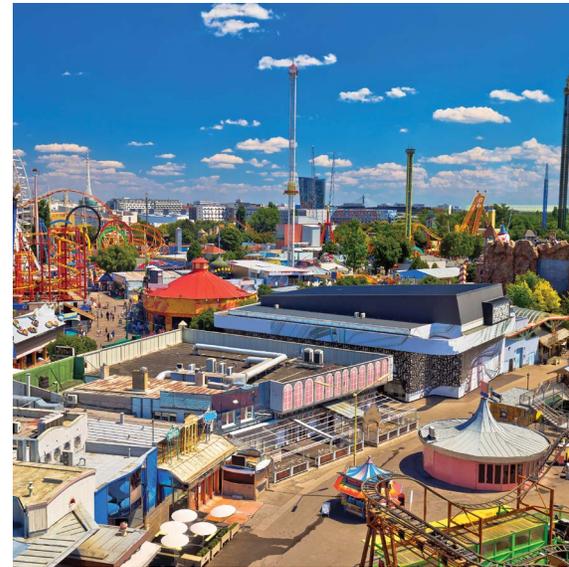




ENTERTAINMENT VENUES



When thousands, or even millions, of people attend a sporting event, concert, festival, amusement park or any large-scale event, there is one thing they produce a lot of — food waste. Too often, wasted food is thrown in the trash and hauled to a landfill, which is not the best solution for our environment.

There is a better way. Recycling wasted food reduces the need for landfills and produces valuable products. Denali is a national leader in organic waste recycling, diverting millions of pounds of material from landfills in U.S. cities, including Phoenix, Arizona.

Phoenix is one of several cities finding solutions to create zero-waste events so food is diverted from landfills. Denali is supporting this mission through technology and recycling opportunities.

There are two types of food waste generated at events: “back of house” (pre-consumer) and “front of house” (post-consumer).

Pre-consumer includes trimmings, leftovers that weren’t purchased, packaged food that is at the end of its shelf life, and used cooking oil and grease trap waste. All pre-consumer material is generated in the kitchen or prep areas before the point of sale.

Post-consumer includes wasted material after purchase and is more challenging than pre-consumer because of the mix of food and packaging, in addition to getting spectators to place material in the correct recycling bins.

REDUCE WASTE & DONATE

The first step in addressing event food waste is preventing the waste from happening when possible.

Controlled ordering, freezing items, carefully managing expiration dates, and utilizing certain 'prepare to serve' items can help **reduce** the amount of food waste generated in the back of house.

Then, establishing relationships with nonprofit organizations that feed hungry people to **donate** edible, unsold food to those in need.

RECYCLE

Recycling is the best option after reducing potential food waste and donating as much as possible. Pre-consumer food waste in kitchen or prep areas tends to be cleaner and typically doesn't include packaging, straws, napkins, or tableware. Employees handling food correctly is key to recycling food waste.

Managing post-consumer food waste is more challenging. Items like plastic spoons, cups, wraps, and beverage containers may end up in organic bins and contaminate recyclable material. When this happens, the waste is taken to a landfill instead of being recycled. The best solution for addressing post-consumer food waste is to encourage the right behavior by providing spectators with the correct bins, signs, and compostable packaging to help ensure a successful food recycling program.

Denali recycles all food waste, used cooking oil, and grease trap waste generated at events. After picking up the food waste items, Denali recycles the food into valuable resources by:

- Converting the material into animal feed
- Composting the material to provide a valuable soil amendment to grow plants



- Capturing the oils and fats from used cooking oil and grease traps for various items, including animal feed and biodiesel
- Placing the material into an anaerobic digester to produce energy and fertilizer

DID YOU KNOW? Mayonnaise is nearly 90% vegetable oil. Denali processes old mayonnaise, captures the oil, and uses it in products like biodiesel.

Certified compostable items should break down in select facilities along with food waste, making them valuable for this program. Technology that mechanically depackages and sorts material that contaminates food waste is a developing solution, although it does not solve the whole problem.



The depacker processes **15 tons** per hour.



DID YOU KNOW? Denali can provide data and insights about your food recycling methods to help identify the types of material recycled. This information helps identify opportunities for improved efficiency in ordering, preparing food, and donations. The data can also be combined with other landfill and recycling data to track your landfill diversion and ways to recycle more.

ZERO-WASTE EVENTS

Diverting food waste from landfills is just one part of a zero-waste event. Other waste streams generated at events include plastic and metal beverage containers, plastic film, cardboard, and paper items.

There are 5 steps to make your next event a zero-waste event:

- 1 Assess Your Waste Streams.**
 - a. Types of Food Waste.** Estimate the amounts and types of wasted food behind the kitchen (pre-consumer) and after purchase (post-consumer).
 - b. Other Packaging & Waste Streams.** What other waste streams are sold to spectators as single-use items? Examples include beverage containers, plastic forks/spoons, disposable plates, napkins, and other food packaging.
- 2 Reduce, Reuse & Recycle. Identify opportunities to divert more material from landfills.**
 - a. Reusable Containers.** Can reuse be encouraged while maintaining a safe environment for spectators? Example: Allow spectators to bring empty water bottles and refill them at the event. Are the utensils used corn-based or another material that breaks down in compost easily?
 - b. Eco-Friendly Substitutions.** Can you substitute plastic containers and tableware for more eco-friendly options?
 - i. Is this a controlled environment as far as waste, or can spectators bring in outside packaging and food?
 - ii. Food waste recycling and tableware in one recycling bin. Consider offering all compostable/ plant-based tableware rather than plastic packaging. This will make it easier for spectators to recycle.

3 Identify Recycling Service Providers.
a. Food Waste. There are specialty recycling service providers that can handle your food waste. Denali is a service provider and can also help with the program, bin, signage, and other setup to ensure a successful recycling program.

b. Green Waste. In many areas, Denali can also service and recycle green waste (trees, branches, clippings, and more). This green waste is converted into compost that can be used for gardens and landscaping.

4 Identify Your Data Needs.
a. Denali provides data by individual service for food waste and green waste.
b. Data categories include weights of material, type of waste, how it was recycled, and cost.

5 Consider Additional Opportunities. A zero-waste event can be beneficial to your brand.
a. Additional waste streams generated at large events include cardboard and plastic film. These recyclable commodities may be worth money.
b. Landfill space is becoming more limited in the U.S. Diverting waste from landfills helps the environment and converts materials into valuable resources instead of burying them in the ground.
c. Tell your story. Holding zero-waste events can help publicize your commitment to the environment — a great marketing tool to engage and attract supporters.

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