OMNI HOTELS & RESORTS

Host a Green Event at the Omni Boston Hotel at the Seaport

Our hotel is equipped with Grind2Energy®, a food waste recycling system by InSinkErator®. This system provides a tool to calculate carbon emissions, improve sustainability, and illustrate how natural waste from your event has been used to support our local community and farmers.

What's the problem?

When food waste goes to the landfill, it's like tying food in a plastic bag; the nutrients never return to the soil. The food simply rots and produces methane gas, a potent greenhouse gas that contributes heavily to global warming. Each year, the EPA estimates over 80 billion pounds of food waste goes to landfills. Grind2Energy is designed to help businesses recycle this material into renewable energy.

How does it work?

The Grind2Energy System is engineered to process all types of wasted food including raw meats, bones, oils, and pre- and post-consumer food scraps. The wasted food is converted into an energy-rich slurry and transported to a nearby anaerobic digestion facility where methane is extracted for energy production. During the anaerobic digestion process food and other organic material is broken down by micro-organisms. The micro-organisms release methane that is harnessed and processed into renewable energy in the form of heat, electricity, or renewable natural gas. The remaining bio-solids can be used as a nutrient rich soil amendment.

What does it mean?

Many local dairy farms have built anaerobic digesters to efficiently turn cow manure, and outside food scraps, into biogas for energy production. When you host an event, all unavoidable food waste is processed through the Grind2Energy System. This energy rich slurry is pumped to an onsite sealed holding tank for storage. Once the tank is full the slurry is pumped out and delivered to one of these nearby dairy farms. When we divert food scraps from the waste-stream we reduce our carbon footprint by reducing the number of trash pick-ups and by eliminating wasted food from rotting in a landfill. This solution benefits the local community and provides a convenient and hygienic solution for sustainably managing food waste. After your event, we can provide a sustainability report, outlining the direct positive impact of your event.

How can I view the impact?

Grind2Energy's easy-to-read sustainability reports, provided by the Omni Boston Hotel at the Seaport, provide you and your attendees applicable data for the waste usage during your stay. The sample report on the following page represents the impact of one year's worth of average food waste.



Sustainability Report

Example Annual Report:

Diverting 120 Tons of food scraps for processing through anaerobic digestion will create the following renewable energy benefits!





Energy

Your slurry was used to generate 21,865 kWh of additional electrical power

CO2 Reduction

By diverting your waste from landfills, you reduced carbon emissions by 82 tCO2e





Bio-solids for Fertilizer

The remainder of the slurry after extracting the energy yielded 6.8 tons of fertilizer

Technical References:

- Carbon emissions and heat generated from EPA Waste Reduction Model (WARM), assuming national average for landfill gas recovery, no curing of digestate after - Carbon emissions and near generated non-Entropy and digestion and digestate land application - Typical food waste mix adopted: Beef 9%, Poultry 11%, Grains 13%, Fruits and Vegetables 49%, Dairy Products 18% - Miles from EPA's Greenhouse Gases Equivalencies Calculator

 Miles from EPA's Greenhouse Gases Equivalencies Calculator

- Heat to electricity conversion efficiency adopted of 44%
 Average Household consumption from U.S. Energy Information Administration (EIA)
- Fertilizer based on 0.19gTS/gTSfw & 30%TS, Kim et al. 2016. Synergism of co-digestion of food wastes with municipal wastewater treatment biosolids. Waste Management.

