



The story of Quest® Proganics® and the food industry's promising path toward a sustainable operation



## CREATING AN INDISPENSABLE PLAN FOR FOOD-SAVING ACTION

The food system in the United States is radically inefficient, allowing much of its food supply to go unsold and uneaten and into landfills (about 145 billion meals' worth annually). Additionally, customers demand practices with low environmental impacts and a variety and quality of readily available food. Therefore, it's straining food purchases, inventory management, and handling of waste streams.

Quest Proganics®, a customizable organics recycling and landfill diverting program developed by Quest Resource Management Group®, helps close the food waste loop for retail grocers and other facilities with high-volume food waste.



## THE ROTTEN TRUTH ABOUT FOOD WASTE

Grocers, manufacturers, and distributors operate in a consumer-facing marketplace, primarily selling produce and packaged food products.

Because of their central position in the supply chain, this market can:

- » Influence food waste reduction decisions
- » Generate sustainability trends
- » Meet consumer demands
- » Impact business workflow
- » Divert from the landfill

**How much food goes to the landfill?** Around one-third of all food produced is wasted each year, according to the Food and Agriculture Organization of the United Nations<sup>[1]</sup>. The United States has about **60 million tons** (or 120 billion pounds) of food waste yearly.

In fact, food is the single largest component taking up landfills, making up an estimated **24%**, according to the United States Environmental Protection Agency<sup>[2]</sup>. Food waste is approximately **\$230 billion** (or 145 billion meals)<sup>[3]</sup>.



## Of the 120 billion pounds of food that goes to waste each year, most is nutritious and perfectly edible

Despite the fact that food has the potential to be nourishment, food waste in landfills creates an environmentally-damaging gas called methane.

When food decomposes naturally, like in composting, microorganisms consume organic material and break it down into nutrient-rich soil. Sending organics to landfills doesn't allow the materials to break down, thus not creating healthy soil and further adding to the imbalance of the carbon cycle.

Even when food recycling is considered to divert organic waste from landfills, there are challenges to consider in collection and separation:

- » Does food recycling require multiple bins, multiple processes and significant dedicated space in back areas or fridges?
- » How can grocers and other facilities that generate food waste separate the plastic or paper bags, boxes and containers from the organic material?
- » Should employees of these facilities take on the added responsibility of separating biodegradable from non-biodegradable components?

Without a transformative step forward in the efficient aggregation and diversion of organics, packaging and ancillary waste, it's valuable time wasted and a risk of contamination.

## Recycled and Repurposed to Animal Feed, Compost and Waste-to-Energy.



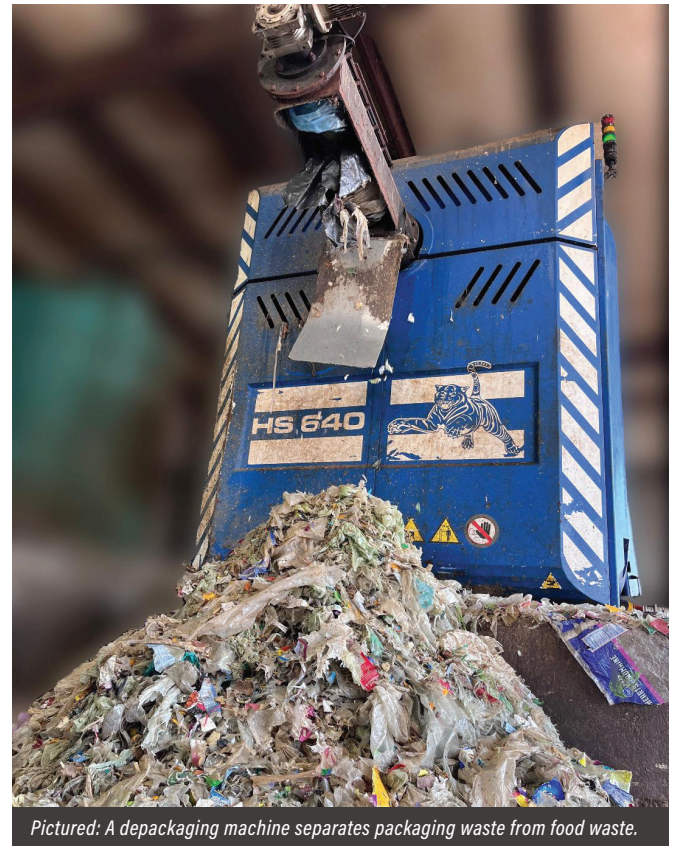
## QUEST PROGANICS®: FOOD WASTE CAN BE DIVERTED FROM LANDFILLS

If food waste were halved, research finds that it would remove nearly one-quarter of total greenhouse gas emissions from the global food system<sup>[4]</sup>. The good news is Quest Proganics® is an effective way to curb food waste and gain food recovery without the added worries.

Tailored for large-volume and multi-location businesses, Quest Proganics can have such impacts as:

- » Restoring nutrients and moisture to soils at farms and gardens (that may supply food stores)
- » Producing renewable energy to help methane emissions from landfills
- » Lowering carbon footprints
- » Providing a true closed-loop or circular process where food waste feeds the growing of new food

**The customized program enhances operational efficiencies and the recycling of organics and ancillary materials, ultimately improving bottom lines and helping reach business and sustainability goals.**



*Pictured: A depackaging machine separates packaging waste from food waste.*



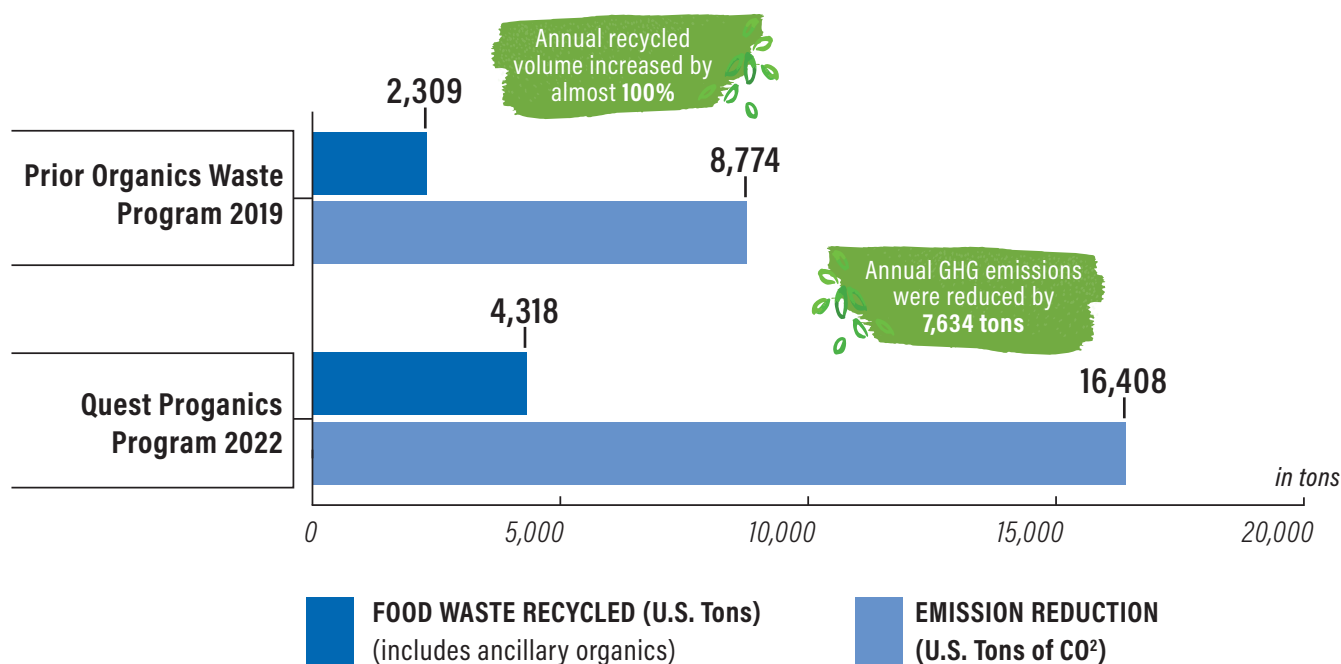
Quest Proganics is a single waste stream process that uses a single container for all organic waste and packaging. Whether food is packaged with regular or waxed cardboard or plastic, uneaten or spoiled organics can be captured in one bin, separated, recycled, and repurposed at a facility to create compost, biofuel, or animal feed. Additional facility waste can be included in the single-bin process including meat renderings, floral, and paper products such as office paper, newspaper and cardstock.

At the same time, the packaging materials can be used for waste-to-energy, a process that combusts the material and generates steam for electricity production. Through this, it's possible for food facilities to reach 95% organic landfill diversion and have comprehensive, interactive data reporting to make operational decisions and drive sustainability and ESG initiatives.





## PROGRAM RESULTS: A CLIENT'S TOTAL ORGANIC WASTE RECYCLED



This client is currently diverting 96% of all food and other organic material away from the landfill, which is 2-3 times more than similar facilities.

### Other Notable Benefits:

- » Reduced 50-60% of Solid Waste Spend
- » Eliminated current costs for meat rendering
- » The company claims its facilities are "cleaner" and "odor has been significantly reduced."
- » The program requires "less training and has reduced [their] total cost of operations."
- » The single bin/single process has reduced asphalt and concrete maintenance

## CUTTING TO THE CHASE OF FOOD WASTE

Wasting food has irreversible environmental consequences. It sees valuable items in the landfill and generates greenhouse gases, like methane and carbon dioxide, contributing to global warming.

Solving the increasingly growing problem of food waste calls for an upstream solution that digs into the root of the problem. The root is multifaceted and complex, with waste coming from grocery stores, restaurants, and food-service companies, where people throw out food — followed by farms and manufacturers, where too much food can be produced.

Quest Proganics® can keep food scraps, uneaten and spoiled materials, and related waste out of landfills and keep greenhouse gases from rising. With Quest's detailed data tracking of waste volumes, Quest Proganics is an operationally and economically efficient program that transforms food that would otherwise be disposed of into an upcycled product.

As a result, businesses can divert from landfills and help contribute to a circular economy.

**All of Quest's food waste solutions are fully aligned with the newly released 2023 EPA Wasted Food Scale.**



## REFERENCES

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- [2] National Overview: Facts and Figures on Materials, Wastes and Recycling | US EPA. (2022, December 3). EPA.  
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