

## INDUSTRY INSIGHTS

# From Port to Plate: A Scalable Model for Surplus Recovery



*This Industry Insights report comes from the U.S. Food Waste Pact, a collaborative initiative led by nonprofits ReFED and WWF. These documents are retrospective reviews of completed projects on the part of Pact signatories and other partners. They are meant to showcase projects or pilots that have successfully prevented or reduced food waste and serve as guidance for other food businesses to take action.*

## Executive Summary

Fyffes, a major tropical fruit importer, successfully partnered with Sharing Excess, a nonprofit food recovery organization, to prevent food waste at ports in the United States. Together, they have rescued more than 11 million pounds of produce, providing 9.2 million meal equivalents<sup>1</sup> and preventing 40.5 million pounds of CO<sub>2</sub>-equivalent emissions.

This collaboration demonstrates a scalable, time-critical model for diverting perishable surpluses, especially bananas, away from landfills and toward communities in need. Through agile coordination and shared sustainability goals, the Fyffes-Sharing Excess model offers a blueprint for port-based food recovery systems nationwide.

## Introduction

Through their participation in the U.S. Food Waste Pact, businesses work to reduce food waste by collaborating on prevention, recovery, and recycling strategies and solutions. As part of the initiative, Pact representatives studied Fyffes and Sharing Excess' partnership to understand how surplus fruit at ports can be recovered efficiently and at scale. Both companies collaborate nationwide using the assessed model, but the following analysis is focused on their work in Philadelphia, PA.

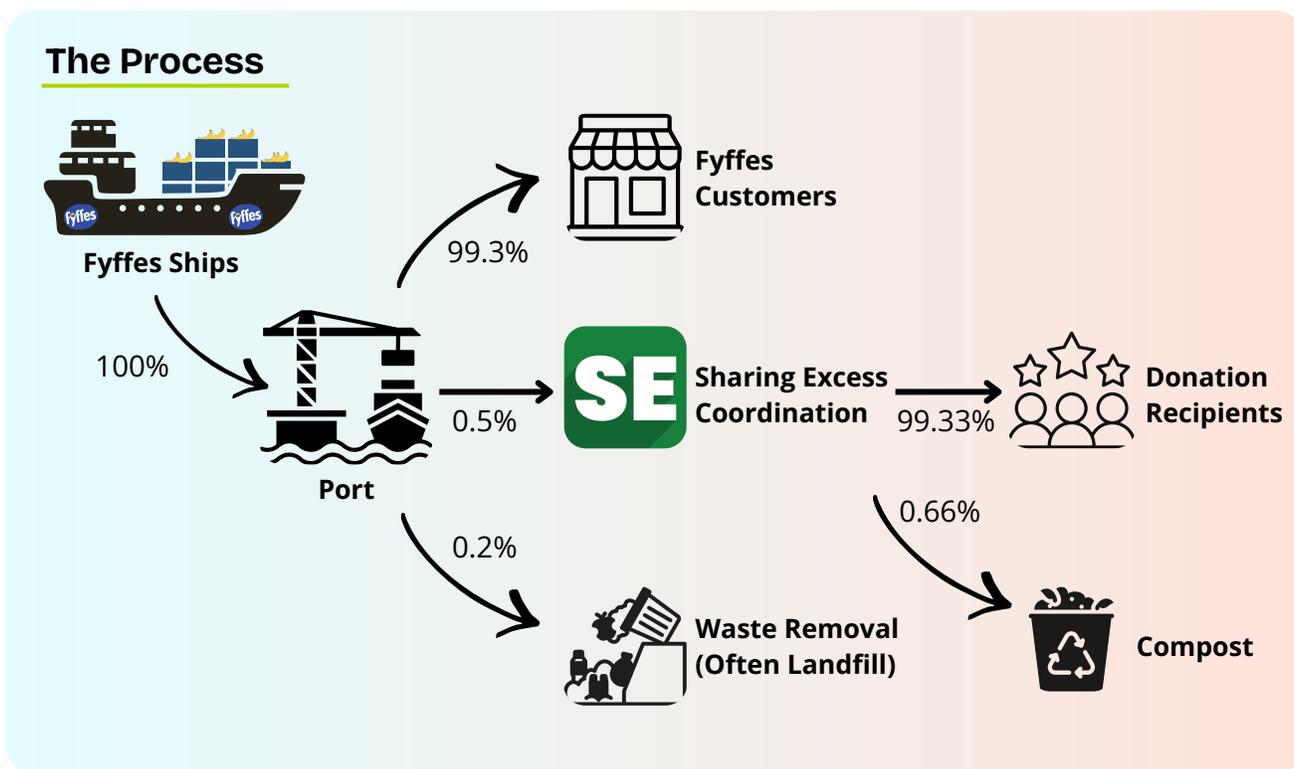
<sup>1</sup>ReFED. "Meal Equivalents." *Insights Engine documentation*. [https://docs.refed.org/methodologies/solutions\\_database/meal\\_equivalents.html](https://docs.refed.org/methodologies/solutions_database/meal_equivalents.html)

An initiative of



Fyffes, which imports tropical fruit into the United States, faces inevitable surpluses from over-ripening, transport delays, or minor cosmetic imperfections. Rather than discard these products, Fyffes donates them to Sharing Excess, which coordinates rapid redistribution to food banks, schools, and community organizations.

The study's findings show that even when food waste represents a minimal fraction of inventory—just 0.7% of Fyffes' imports (0.5% donated, 0.2% discarded)—the absolute impact is immense. As a result of this partnership, **11 million pounds of produce** have been recovered, helping create **over nine million meal equivalents**.



### Understanding the Scale

Bananas make up over 95% of the recovered produce by weight. The scale of these donations (mostly yellow bananas) is remarkable.

- 1 case ≈ 40 pounds ≈ 100–110 bananas
- 1 pallet = 48 cases ≈ 1,920 pounds ≈ 4,800–5,280 bananas
- 1 pallet of donations = 40 cases ≈ 1,840 pounds ≈ 5,520 bananas

A donation of 20 pallets would be more than 110,000 bananas, or more than one person would eat in 1,300 years based on the U.S. average of 27 lbs / year.<sup>2</sup>

*Note: The remaining weight of donations are Fyffes plantains, melons, pineapples, avocados, and other tropical produce.*

<sup>2</sup>Dorfner, M. "Go bananas for...bananas." Mayo Clinic. April 4, 2017. <https://newsnetwork.mayoclinic.org/discussion/go-bananas-forbananas/>



# The Challenge

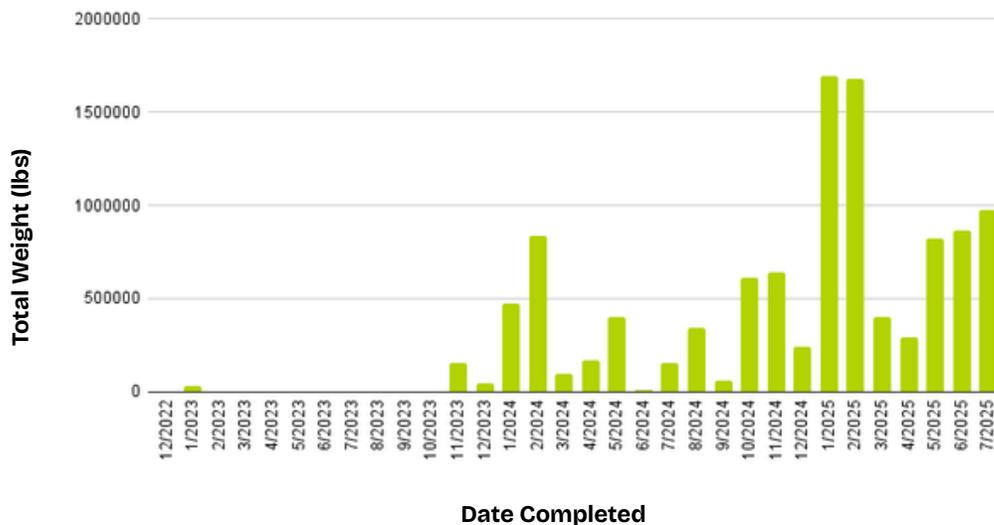
## Time-Critical Logistics

Port-based food recovery operates under unique constraints:

- **Extremely short windows:** Produce often has just 1.5 to 5 days to be collected and consumed before spoiling.
- **Unpredictable supply:** Donations can range from 20 to 180 pallets in a single day, with short notice.
- **Cold storage limitations:** Large, sudden surpluses often exceed the capacity of individual food banks.

Despite these hurdles, the Fyffes-Sharing Excess partnership proves that rapid coordination can turn highly perishable goods into community assets.

**Fyffes Donations (Weight over Time)**



### Findings & Insights

- 99.3% of Fyffes' imports are sold to retailers, wholesalers, and other customers.
- Of the remaining 0.7%, 0.5% is donated and 0.2% is discarded.
- The discarded volume is primarily inedible and goes to waste disposal at the port.

While 0.7% seems small, Fyffes moves enough produce that even a fraction represents tens of thousands of pounds of edible food.



# Value Chain: At the Port

## Why Surpluses Occur

Upon arrival at the Port of Philadelphia, Fyffes' fruit is unloaded, inspected, and distributed to customers. Any fruit that fails to meet strict quality standards, often for cosmetic or ripeness reasons, is evaluated for donation.

Because Fyffes sells only green bananas, even slight yellowing can make them unsellable but still perfectly edible. By identifying such surpluses quickly, Fyffes' commitment to minimizing food waste ensures that any unsuitable fruit is made ready for donation rather than disposal.

<u>Reason for Unsold Produce at Port</u>	<u>Percentage by Weight</u>
Ripe and Turning	51%
Chill Damage	25%
Carry Over / Lack of Sales	9%
Pallet or Fruit Damage	6%
Other	10%



# Donation: From the Port

To work with the unpredictability and urgency of port-based food donations, Sharing Excess has developed an efficient, highly adaptable recovery system. This allows them to quickly respond to sporadic, massive, short-notice donations to ensure they get to local food banks.

## Sharing Excess' Process

Sharing Excess manages the recovery process through a flexible, decentralized logistics network:

**The Call:** Fyffes emails donation alerts with quantity, location, and quality photos once surplus is confirmed. Quantities can range from **20–200 pallets in a single day.**



**Coordination:** Sharing Excess contacts partners who can collect directly or arrange pick-up using refrigerated trucks. In either case, once a call is made, flexibility typically ensures a **pick-up happens within the day.**



**Distribution:** The organization matches donations with food banks and community groups based on storage capacity and need. In some cases, they will **drive hours away to find enough capacity for large donations.** The chart below outlines the distribution of produce across the network.

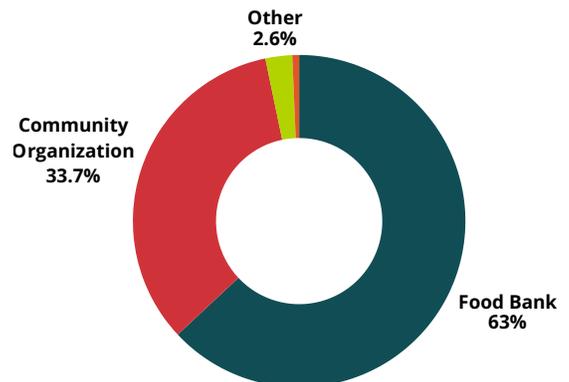


**Waste Minimization:** Any remaining unsalvageable produce is diverted to animal feed or compost, never to landfill.

Through this system, Sharing Excess can often collect and redistribute donations within 24 hours, ensuring maximum freshness and minimal waste.



Recipients of Fyffes Donations



## Total Partnership Impact to Date (since 2023)

- 11 million lbs of produce rescued
- 9.2 million meals distributed
- \$12.5 million worth of food recovered
- 40.5 million lbs of CO<sub>2</sub>-equivalent emissions avoided

## Lessons Learned

### ***Flexibility is Essential***

Port donations are unpredictable, but responsiveness ensures success. The ability to adapt to fluctuating volumes, short lead times, and multi-location pickups is crucial for maintaining freshness and preventing spoilage

### ***Data and Coordination Drive Efficiency***

Fyffes' real-time inventory tracking allows instant notification to Sharing Excess. This transparency minimizes delays and enables accurate planning for large-scale recoveries.

### ***Shared Incentives Sustain Partnerships***

Both partners benefit: Fyffes reduces waste and costs, while Sharing Excess gains access to fresh, high-quality produce. This mutual value creates a sustainable collaboration model.

### ***Replication Potential***

Many U.S. ports still landfill edible food. Replicating this model across other entry points could prevent millions more pounds of waste. Aligning with state composting mandates, such as California's SB 1383, and expanding donation networks are key next steps.



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## Conclusion

Fyffes and Sharing Excess exemplify how business-nonprofit partnerships can overcome the complexities of food recovery in high-pressure environments. Their rapid recovery model works because it accommodates infrequency and variability, turning sporadic, unpredictable surpluses into consistent community benefit.

By combining efficiency, flexibility, and shared purpose, this partnership transforms potential waste into nourishment and provides a scalable framework for other organizations seeking to reduce food waste from port to plate (e.g., 300,000 ripe bananas with less than five days to reach people).

**“This rapid recovery model works because it accommodates infrequency and variability, turning sporadic, unpredictable surpluses into consistent community benefit.”**

## Next Steps

Although California mandates composting, many other ports across the country continue to landfill significant volumes of food waste with no clear food donation program. Given the environmental consequences of organic material in landfills—particularly methane emissions—addressing this gap is a logical and necessary next step. In addition to expanding donation partnerships, such as the collaboration between Sharing Excess and Fyffes, it is imperative that companies and port authorities implement systems to ensure food waste is composted whenever feasible.

## Acknowledgments

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## About the U.S. Food Waste Pact

The U.S. Food Waste Pact is a national voluntary agreement that uses the "Target, Measure, Act" framework to reduce food waste across the supply chain. The Pact works with waste-generating food businesses to collect and analyze data about food waste in their operations, share best practices through precompetitive working groups, and test and scale solutions through intervention projects. The Pact is an initiative between nonprofits ReFED and the World Wildlife Fund.

[usfoodwastepact.org](https://usfoodwastepact.org)



## Join the U.S. Food Waste Pact

*Ready to address food waste through collaborative action?*

Join food businesses from across the supply chain to catalyze change and reduce food waste. Reach out to Kristen Lee at [kristen.lee@refed.org](mailto:kristen.lee@refed.org) or click "Join" below to fill out our contact form.

**JOIN**

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