Following the Roadmap to 2030 Discussion Series

Reshape Consumer Environments

SEPTEMBER 22 | 1:00 P.M. ET

ReFED

In partnership with **foodtank**
THE THINK TANK FOR FOOD

Who We Are

ReFED is a national nonprofit working to end food loss and waste across the food system by advancing data-driven solutions to the problem.

Our Vision

A sustainable, resilient, and inclusive food system that optimizes environmental resources, minimizes climate impacts, and makes the best use of the food we grow.

DATA & INSIGHTS

Leveraging data and insights to highlight supply chain inefficiencies and economic opportunities

CAPITAL & INNOVATION

Catalyzing capital to spur innovation and scale high-impact initiatives

STAKEHOLDER ENGAGEMENT

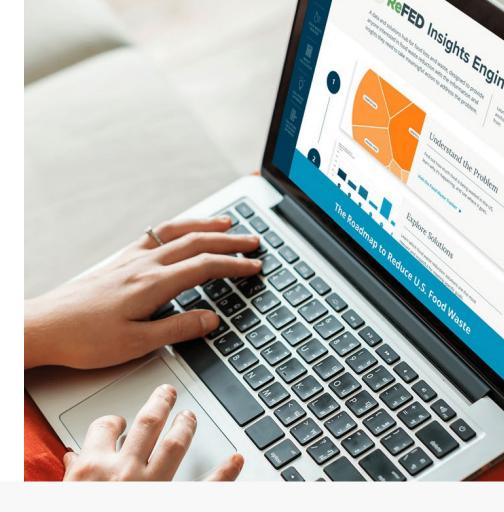Mobilizing and connecting supporters to take targeted action

ReFED Insights Engine:
Your Source for Food Waste Data and Solutions

A knowledge hub for food loss and waste, designed to provide anyone interested in food waste reduction with the information they need to take meaningful action.

Insights Engine tools let users:

- **Understand the Problem**

- **Explore Solutions**

- **Find Solution Providers**

- **Calculate Impacts**

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Roadmap to 2030:
A Blueprint for Action

The *Roadmap to 2030* looks at the entire food system and provides a framework to focus waste reduction efforts. Powered by the Insights Engine, the *Roadmap to 2030* is an indispensable resource for reaching our 2030 goal.

7 ReFED outlined seven key action areas for the food system to focus its efforts over the next ten years to *prevent*, *rescue*, and *recycle* food at risk of going to waste.

PREVENTION **RESCUE** **RECYCLING**

Optimize The Harvest

Enhance Product Distribution

Refine Product Management

Maximize Product Utilization

Reshape Consumer Environments

Strengthen Food Rescue

Recycle Anything Remaining

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Action Areas

OPTIMIZE THE HARVEST
Avoid over-production, then harvest as much as possible. For wild caught products, source only what is needed.

ENHANCE PRODUCT DISTRIBUTION
Leverage technology to create smart systems that help efficiently move products to maximize freshness and selling time.

REFINE PRODUCT MANAGEMENT
Align purchases with sales as closely as possible and find secondary outlets for surplus. Build out systems and processes for optimal on-site handling.

MAXIMIZE PRODUCT UTILIZATION
Design facilities, operations, and menus to use as much of each product as possible. Upcycle surplus and byproducts into food products.

RESHAPE CONSUMER ENVIRONMENTS
Drive consumers towards better food management and less waste by creating shopping, cooking, and eating environments that promote those behaviors. Shift culture to place more value on food and reduce waste.

STRENGTHEN FOOD RESCUE
Further the rescue of high-quality, nutritious food by increasing capacity, addressing bottlenecks, and improving communication flow.

RECYCLE ANYTHING REMAINING
Find the highest and best use for any remaining food or food scraps in order to capture nutrients, energy, or other residual value.

Modeled Solutions
Unmodeled Solutions
Best Practices

OPTIMIZE THE HARVEST	ENHANCE PRODUCT DISTRIBUTION	REFINE PRODUCT MANAGEMENT	MAXIMIZE PRODUCT UTILIZATION	RESHAPE CONSUMER ENVIRONMENTS	STRENGTHEN FOOD RESCUE	RECYCLE ANYTHING REMAINING
Buyer Spec Expansion	Decreased Transit Time	Assisted Distressed Sales	Active & Intelligent Packaging	Meal Kits	Donation Coordination & Matching	Centralized Anaerobic Digestion
Gleaning	First Expired First Out	Decreased Minimum Order Quantity	Manufacturing Byproduct Utilization (Upcycling)	Buffet Signage	Donation Education	Community Composting
Imperfect & Surplus Produce Channels	Intelligent Routing	Dynamic Pricing	Manufacturing Line Optimization	Consumer Education Campaigns	Donation Storage Handling & Capacity	Centralized Composting
Partial Order Acceptance	Temperature Monitoring (Pallet Transport)	Enhanced Demand Planning	Edible Coatings	K-12 Lunch Improvements	Donation Transportation	Co-digestion at Wastewater Treatment Plants
Field Cooling Units	Reduced Warehouse Handling	Increased Delivery Frequency	Improved Recipe Planning	Package Design	Donation Value-Added Processing	Home Composting
In-Field Sanitation Monitoring	Advanced Shipment Notifications	Markdown Alert Applications	In-House Repurposing	Portion Sizes	Blast Chilling to Enable Donations	Livestock Feed
Innovative Grower Contracts	Early Spoilage Detection (Hyperspectral Imaging)	Minimized On-Hand Inventory	Precision Food Safety	Small Plates	Donation Reverse Logistics	Waste-Derived Agricultural Inputs
Labor Matching	Inventory Traceability	Temperature Monitoring (Foodservice)	Discount Meal Plates	Standardized Date Labels	High-Frequency Reliable Pickups	Insect Farming
Smaller Harvest Lots	Modified Atmosphere Packaging System	Waste Tracking (Foodservice)	Employee Meals	K-12 Education Campaigns	Established Relationships with Businesses	Rendering
Improved Communication for Planting Schedules	Vibration & Drops Tracking	Low Waste Event Contracts	Larger Quantities for Take Home	Trayless	Culling SOPs	Waste-Derived Processed Animal Feed
Sanitation Practices & Monitoring	Optimized Truck Packing, Loading & Unloading (e.g., Cross-Docking)	Direct to Consumer Channels	Small and Versatile Menus	Home Shelf-life Extension Technologies		Waste-Derived Bioplastics
Optimized Harvesting Schedules	Enforcing Cold Chain SOPs	Online Marketplace Platform	Sous-Vide Cooking	Smart Home Devices		Waste-Derived Biomaterials
On-Farm / Near-Farm Processing	Regular Maintenance on Refrigerated Trucks	Online, Advanced Grocery Sales		Waste Conscious Promotions		Enabling Technologies (e.g. depackaging and pre-treatment)
Local Food Systems	Cross-Docking	Precision Event Attendance		Frozen Value-Added Processing of Fresh Produce		Separation & Measurement
Clear Product Ownership		Repackaging Partially Damaged Products		Customizable Menus/ Options		Relationships with Waste Haulers
		Retail Automated Order Fulfillment		To-Go Offerings		Waste Audits by Waste Haulers
		SKU Rationalization		Free Items Offered Upon Request (e.g., bread, chips)		
		Markdowns		Storytelling (e.g. product impact, source, upcycled ingredient components)		
		Optimal Storage				
		Reduced Displays				
		Optimized Walk-In Layouts				

"Reshaping consumer environments" means driving consumers toward better food management and less waste by creating shopping, cooking, and eating environments that promote those behaviors, as well as shifting our culture to place more value on food and to make sure that people understand the implications of food waste.

ACTION AREA #5

Reshape Consumer Environments

Residential
30M Tons - 37.2%

Farm (Produce Only)
16.7M Tons - 20.8%

Foodservice
12.7M Tons - 15.8%

Source: ReFED Insights Engine

ACTION AREA #5

Reshape Consumer Environments

KEY INDICATORS (ANNUAL)

7M
FOOD WASTE TONS DIVERTED

$27.4B
NET FINANCIAL BENEFIT

$1.4B
INVESTMENT NEEDED

34M
MT CO2E REDUCTION

1.6T
GALLONS WATER SAVED

RESIDENTIAL

FARM

RETAIL

FOODSERVICE

MANUFACTURING

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TOTAL

$1.4B

PUBLIC

🟨 Government Grants - **$104.0M**

PHILANTHROPIC

🟦 Non-Government Grants - **$54.9M**
🟦 Impact-First Investments - **$29.0M**

PRIVATE

🟩 Venture Capital - **$166.4M**
🟩 Private Equity - **$165.4M**
🟩 Corporate Finance & Spending- **$908.2M**

ANNUAL INVESTMENT NEEDED

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Source: ReFED Insights Engine

Brett Jenks

President & CEO

RARE

![ReFED logo]

Richard Swannell

International Director

WRAP

ReFED

Priyanka Malhotra

Senior Brand Manager

HELLMANN'S

ReFED

Sophie Egan

Co-Director

MENUS OF CHANGE UNIVERSITY RESEARCH COLLABORATIVE

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Following the Roadmap Webinar Series:

Strengthen Food Rescue

OCT, 20 | 1:00 P.M. ET

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Stay Connected!

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Food Waste Action Network: bit.ly/JoinReFEDFWAN