



Food Waste
Funder Circle

Deal Flow Report:
Investment Opportunities
ISSUE 14

CO-FOUNDERS



UPCYCLED
FOOD ASSOCIATION

For more information, contact us



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Investment Opportunities

As a member of the [Food Waste Funder Circle](#), you will receive this monthly Deal Flow Report, which provides an overview of companies in the food waste sector that are currently seeking investment capital. **This month's report includes 27 for-profit companies and a total of USD \$12M in funding opportunities** (this information comes from self-reported data from solution providers who filled out our funding survey).

There is a companion deal flow report with nonprofit and for-profit companies seeking philanthropic funding, which you can find in the FWFC monthly email. You may see overlap between the two reports, as for-profits and nonprofits may be seeking a variety of funding types.

We're happy to provide any warm introductions to these solution providers if desired, otherwise we've included contact information for each company, so please feel free to reach out to them directly -- if you do make a connection as a result of this report, please keep us in the loop (sarah.munger@refed.org) so we know how valuable you find this report.

How to Read this Report:











- The first section provides a summary of each organization, and the subsequent pages provide more detailed information on each organization.
- The organization links in the overview table bring you to each respective organization's section of the report.
- Organizations are listed in alphabetical order within their **Key Action Area**.
- The **Key Action Areas** are a framework developed by ReFED that demonstrates the seven areas where the food system must focus its efforts to make a meaningful reduction in food waste across the food supply chain. Knowing the Key Action Areas can be helpful for funders to understand where an organization sits. You can learn more about ReFED's key action areas by referring to [Appendix A](#) at the end of the report and visiting ReFED's website [here](#).
- We've indicated which action areas each company addresses in the table of contents using the following icons:




















Note: The deals provided in this report are shared for informational purposes only. ReFED, Inc. is not a registered investment advisor and has not conducted any form of investment or other diligence on any of the organizations listed within.



Overview of Active Funding Opportunities

Page	ReFED Action Area	Organization	Org Type	Annual Revenue (USD)	Ask Amount (USD)	Capital Type	Equity Round in Raise (if applicable)
4.	 Optimize the Harvest	Miyonga Fresh Greens	For-profit	\$523,139	\$1,000,000	Equity, Venture debt, Grants	Series A
4.	 Optimize the Harvest	Ryp Labs, Inc.	For-profit	\$0	\$7,500,000	Equity	Series A
5.	 Optimize the Harvest	Transnational Technologies Pty Ltd	For-profit	\$1,000,000	\$8,000,000	Equity	Series A
5.	 Enhance Product Distribution	IoT Logistics, LLC	For-profit	\$35,000	\$1,000,000	Equity, Grants	Pre-seed
6.	 Refine Product Management	Foodshare Club	For-profit	\$0	\$250,000	Equity, Convertible debt, Venture debt, Senior and subordinated debt, PRIs, Grants, Guarantees / letters of credit	Pre-seed
6.	 Refine Product Management	GoodToEat	For-profit	\$0	\$250,000	Convertible debt, Grants	Pre-seed
7.	 Refine Product Management	Metafoodx	For-profit	0.01M	3M	Convertible debt, Grants / Donations	Pre-seed / Seed
7.	 Refine Product Management	Therma	For-profit	\$1,997,747	\$2,000,000	Equity, Grants	Series A
8..	 Maximize Product Utilization	EggTech Ltd.	For-profit	\$0	\$5,000,000	Equity, Convertible debt, Venture debt, Grants	Seed
8.	 Maximize Product Utilization	Matriark Foods	For-profit	0.5M	\$1.5M	Equity, Convertible debt	

Page	ReFED Action Area	Organization	Org Type	Annual Revenue (USD)	Ask Amount (USD)	Capital Type	Equity Round in Raise (if applicable)
9.	 Maximize Product Utilization	NETZRO_SBC	For-profit	\$250,000	\$1,250,000	Convertible debt	Seed
9.	 Maximize Product Utilization	Nutraberriy	For-profit	\$70,000	\$1,800,000	Equity, Convertible debt, Senior and subordinated debt, Grants	Seed
10.	 Maximize Product Utilization	Pulp Pantry	For-profit	\$1,000,000	\$1,800,000	Equity, Convertible debt, Grants, Guarantees / letters of credit	Seed
10.	 Maximize Product Utilization	Re:Bind Food	For-profit	\$0	\$1,500,000	Equity	Seed
11.	 Maximize Product Utilization	Renewal Mill	For-profit	\$1,500,000	\$2,500,000	Equity, Convertible debt, Venture debt	Series A
11.	 Maximize Product Utilization	SCO2	For-profit	\$500,000	\$2,500,000	Equity, Convertible debt, Grants	Seed
12.	 Maximize Product Utilization	TBI Gourmet	For-profit	\$1,700,000	\$2,200,000	Equity, Convertible debt, Venture debt, PRIs, Grants, Guarantees / letters of credit	Series A
12.	 Maximize Product Utilization	Upcycled Foods, Inc.	For-profit	\$103,000	\$5,000,000	Convertible debt	Seed
13.	 Reshape Consumer Environments	Silo	For-profit	\$0	\$2,500,000	Equity, Convertible debt, Venture debt, Grants	Series A
13.	 Recycle Anything Remaining	Advanced Resilient Biocarbon, LLC	For-profit	\$0	\$50,000,000	Convertible debt, Senior and subordinated debt, Grants, Guarantees / letters of credit	N/A
14.	 Recycle Anything Remaining	Blue Earth Compost	For-profit	\$1,250,000	\$400,000	Equity, Convertible debt, Grants	Series A

Page	ReFED Action Area	Organization	Org Type	Annual Revenue (USD)	Ask Amount (USD)	Capital Type	Equity Round in Raise (if applicable)
14.	 Recycle Anything Remaining	California Safe Soil	For-profit	\$3,695,693	\$10,000,000	Equity, Venture debt, Grants	Series A
15.	 Recycle Anything Remaining	FreezeM	For-profit	\$50,000	\$12,000,000	Equity, Venture debt, PRIs, Grants	Series A
15.	 Recycle Anything Remaining	Harvest Nano	For-profit	\$0	\$250,000	Equity, Convertible debt, Venture debt, Grants	Seed
16.	 Recycle Anything Remaining	Tommy's Compost Service	For-profit	\$32,400	\$42,000	Grants, Guarantees / letters of credit	N/A
16.	 Recycle Anything Remaining	Vivaria Ecologics LLC	For-profit	\$0	\$300,000	Grants, Guarantees / letters of credit, Low interest loans	Pre-seed
17.	 Recycle Anything Remaining	Wompost, LLC	For-profit	\$425,000	\$215,000	Venture debt, Senior and subordinated debt, Grants, Promissory Note (debt)	N/A



Nairobi • Founded: 2015 • Time on Report: Just Added
Contact: Yvonne Otieno, Chief Executive Officer, yvonne@miyongafreshgreens.co.ke

[Miyonga Fresh Greens](#) grows and processes horticultural products for the export market. The product line includes: Fresh produce, fruit powder, dried fruit. Miyonga empowers smallholder farmers in reducing post-harvest waste and losses while providing wholesome products that meet international standards. Additionally, it uses innovative agro-processing technology to add value to horticultural products for export and local consumption. Miyonga's innovation aims to decrease food waste which will in turn increase the revenue for smallholders. It also ensures an all year round operation addressing the challenges caused by the seasonality of fruits while creating employment in rural Kenya.

Financial and Fundraising Details

Current Annual Revenue: USD \$523,139

Org Type: For-profit

Ask Amount: USD \$1,000,000

Timeline: July 2024

Equity Round in Raise (if applicable): Series A

Product Stage: Currently selling

Use of Funds: For this fiscal year—2023— they have orders for and can fulfill 15 containers worth over \$1 million in revenue. While their existing farmer network could supply this larger amount of fruit, they are constrained by their processing capacity. Funds would facilitate investment in factory equipment. The breakdown is as below, purchase of additional dryers and construction cost at \$579,773. Purchase a truck for fruits collection - \$ 16,781, Lease -\$3,524, Increased OPEX to prepare organization for scale - \$ 284,922 and \$ 65,000 as working capital.

Capital Type: Equity, Venture debt, Grants

Expected Impact of Funding: 900 jobs created, and 7200 additional farmers livelihoods improved. Currently Miyonga's impact is: 30% reduction in food waste. 9,600 lives improved in FY2022 with better education, nutrition, and access to health services. 25% increase in farmer's recurring annual income. 40% women report greater empowerment & respect in family and community.



Seattle, WA • Founded: 2017 • Time on Report: Just Added
Contact: Moody Soliman, CEO & Co-Founder, moody.soliman@ryplabs.com

[Ryp Labs, Inc.](#) is an award-winning food and crop protection company developing and commercializing biomimicry solutions to put an end to global food waste, sustainably and safely.

Financial and Fundraising Details

Current Annual Revenue: USD \$0

Org Type: For-profit

Ask Amount: USD \$7,500,000

Timeline: January 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Ready to launch

Use of Funds: Commercial Launch, Build out the team, Scale Manufacturing

Capital Type: Equity

Expected Impact of Funding: For every 10,000 stickers/labels sold, they estimate that their customers will see up to \$3,250 added to their bottom line, save 2.25 metric tons of food from landfills and 1.24 metric tons CO2 from being release into the atmosphere, and Ryp Labs is committed to donating 10 meals to food insecure communities.



Malanda, Australia • Founded: 2020 • Time on Report: Just Added
Contact: Amit Thakur, Co-founder - Finance & Strategy, at@trasatec.com

[Transnational Technologies Pty Ltd](#) works on post harvest loss reduction food process technologies with on-Farm and industrial models. They specialize in digitalized refrigeration based low-temperature food dehydration systems build (proprietary technology) and also serve as system integrators and turnkey solution providers for other contemporary and emerging food processing technologies. TrasaTEC has helped food business operators to unlock niche innovative dehydrated products otherwise impossible with the existing technologies in the air-drying class.

Financial and Fundraising Details

Current Annual Revenue: USD \$1,000,000

Org Type: For-profit

Ask Amount: USD \$8,000,000

Timeline: March 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Currently selling

Use of Funds: Market Expansion to Americas, Africa & Asia

Capital Type: Equity

Expected Impact of Funding: Funding will help to reduce the post harvest loss. They have two major processes: a low-carbon footprint food dehydration system (and generating water as a byproduct) and a scaled-down integrated thermal processing system. Both of the process systems reduce material loss and also reduce the carbon footprint incurred during centralized processing.



Orlando, FL • Founded: 2018 • Time on Report: Just Added
Contact: Paige Donner, Owner, paigedonner@gmail.com

[IoT Logistics, LLC](#) provides emerging technology solutions and project management for public, private and nonprofit entities. Their focus areas are EdTech, Blockchain, Supply Chain, AgTech, Aerospace, Environment, Strategic & Crisis Communications, Interdisciplinary Collaboration, Technology Transfer & Commercialization. IoT reduces, minimizes and even eradicates food waste in the supply chain. They have licensed a NASA technology for vertical farming that uses little to no water/ electricity to establish a network of food hubs that can provide necessary fruits and veg in food desert communities.

Financial and Fundraising Details

Current Annual Revenue: USD \$35,000

Org Type: For-profit

Ask Amount: USD \$1,000,000

Timeline: April 2023

Equity Round in Raise (if applicable): Pre-seed

Product Stage: Ready to launch

Use of Funds: They aim to hire and deploy mini-teams (pods) in five areas in the US that are designated food insecure or food deserts. These pods will be tasked with implementing the fresh fruit and vegetable hubs in their community. Simultaneously they are developing and launching an app that allows participants to click & collect (modeled after the Too Good To Go app). This allows for credit to be added to accounts where need is demonstrated, thus allowing for a cashless experience for a percentage of participants in food deserts who can benefit from fresh fruit & veg assistance.

Capital Type: Equity, Grants

Expected Impact of Funding: Their desired impact is to eliminate food waste due to supply chain gaps and inefficiencies. After studying the fruit and veg landscape for 3 years, they concluded that the optimal supply chain is no supply chain. Impact: 100% efficiency and reduction in food waste.



Dorset, UK • Founded: 2020 • Time on Report: Just Added

Contact: *amerlanium@gmail.com*

[Foodshare Club Limited](#) is a simple and easy-to-use cross-platform mobile and web platform. The app allows users to post about food that could potentially go to waste and facilitates other users to pick it up for free. The scope of this extends to expiring, before-day and by-day food from local shops, even excess vegetables or baked goods from the local bakeries. To make a post about a product you want to share, just open the app, add a picture, a description, and when and where the product will be available for pick-up.

Financial and Fundraising Details

Current Annual Revenue: USD \$0

Org Type: For-profit

Ask Amount: USD \$250,000

Timeline: July 2023

Equity Round in Raise (if applicable): Pre-seed

Product Stage: Currently selling

Use of Funds: It would help the startup to build a team with key people with IT expertise, volunteering coordinators and an advisor.

Capital Type: Equity, Convertible debt, Venture debt, Senior and subordinated debt, PRIs, Grants, Guarantees / letters of credit



San Jose, CA • Founded: 2022 • Time on Report: Just Added

Contact: *Amrutha Ragavan, Founder, amrutha@good2eat.us*

[GoodToEat](#) is a digital marketplace for excess food where restaurants, grocery stores, cafeterias and bakeries can sell their food that would otherwise be landfilled.

Financial and Fundraising Details

Current Annual Revenue: USD \$0

Org Type: For-profit

Ask Amount: USD \$250,000

Timeline: Q12023

Equity Round in Raise (if applicable): Pre-seed

Product Stage: Prototype

Use of Funds: Funds will be used to acquire customers and build platform

Capital Type: Convertible debt, Grants

Expected Impact of Funding: Every sale on GoodToEat is a rescued meal. Hence, GoodToEat will help reduce overall edible food that is wasted.



San Jose, CA • Founded: 2021 • Time on Report: 1 Month
Contact: Fengmin Gong, CEO and Co-Founder, fengmin.gong@metafoodx.com

[Metafoodx](#) is a seed-stage Silicon Valley startup that helps foodservice businesses to prevent food waste and optimize production planning through an AI-powered SaaS solution. The leadership team shares the passion to help foodservice businesses and has great insights into food production challenges and AI amenability to solving the challenges. They remove the data gap between back-kitchen production and true consumption through an industry-first real-time consumption tracking. They deliver customer values by providing planning tools with actionable insights and by helping staff with automatic alerts and reminders. They intend to bring customers 10X ROI in cost saving from reducing food waste, lowering COGS, and increasing efficiencies. Today, they already have 1 signed LOI, 3 active POCs, and a pipeline of over 100 vetted contacts in university & corporate dining services.

Financial and Fundraising Details

Current Annual Revenue: USD 0.01M

Org Type: For-profit

Ask Amount: USD 3M

Timeline: December 2022

Maturity Stage: Pre-seed / Seed Stage

Product Stage: Ready to launch

Use of Funds: Official launch, 3 light-house customers in University and Corp dining, and \$600K ARR within 10 months

Capital Type: Convertible debt, Grants / Donations



San Francisco, CA • Founded: 2014 • Time on Report: Just Added
Contact: Manik Suri, Co-founder and CEO, Manik@hellotherma.com

[Therma](#) fights food waste and climate change by creating a more efficient global cold chain. Therma° uses IOT-enabled temperature, humidity, and equipment performance monitoring and controls to prevent inefficiencies and product loss in commercial refrigeration. Their reach includes any customer with commercial refrigeration needs, from small businesses to major enterprises, and includes food service, food retail, education, hospitality, cold storage facilities and more.

Financial and Fundraising Details

Current Annual Revenue: USD \$1,997,747

Org Type: For-profit

Ask Amount: USD \$2,000,000

Timeline: January 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Currently selling

Use of Funds: New funds will facilitate growth in two main aspects. 1) Therma will increase the reach of their monitoring product by expanding direct sales and marketing capacity, bringing their food waste reduction technology to a greater range of customers and verticals. 2) Therma will bring their cooling intelligence platform to market, which will allow the company to intelligently reduce and optimize the energy usage of commercial refrigeration.

Capital Type: Equity, Grants

Expected Impact of Funding: Based on customer testimonials and an analysis conducted by an external climate consulting firm, Impactable X, each location that deploys Therma saves an average of 1.52 metric tonnes of food waste per year. With the support of additional funding, Therma is expected to reach an additional 6,600 locations (2x current growth), preventing approximately 10,000 metric tonnes of additional food loss.



Toronto, Ontario, Canada • Founded: 2015 • Time on Report: Just Added
Contact: Mark Toman, Founder, mtoman@theshellproject.com

[EggTech Ltd.](#) has developed a patented process and utilizes an existing wastestream from a particular type of food processing operation in order to offset our need to mine for raw material and manufacture highly pure forms of calcium and membrane/collagen that have been tailored for supply into the human ingestible markets, including nutraceuticals/natural health, pharmaceuticals, food fortification, cosmetics and personal care. The material is an upcycled, eco-friendly, and sustainable alternative to the traditional mined resource material that is being used across these sectors currently.

Financial and Fundraising Details

Current Annual Revenue: USD \$0

Org Type: For-profit

Ask Amount: USD \$5,000,000

Timeline: July 2023

Equity Round in Raise (if applicable): Seed

Product Stage: Ready to launch

Use of Funds: Capital equipment to outfit the first EggTech commercial production facility. Also included in the use of funds is engineering, installation, general overhead, and lead-up to commencement of commercial production.

Capital Type: Equity, Convertible debt, Venture debt, Grants

Expected Impact of Funding: The technology would alter the landscape of the poultry and egg industry and the calcium nutritional marketplace, and provide a solution that is scalable and viable for global liquid-egg processing operations.



New York, NY • Founded: 2018 • Time on Report: 2 Months
Contact: Anna Hammond, CEO, ahammond@matriarkfoods.com

[Matriark Foods](#) upcycles farm-surplus and fresh-cut remnants into healthy products for foodservice and retail. They have created a supply chain from large fresh-cut facilities, aggregators, and farmers with all the traceability and food safety requirements to be able to manufacture at a large commercial scale into Tetra ReCart as well as Scholle bags and drums. Their pipeline includes Foodbuy (the largest GPO in North America) that services Compass Group and 80,000 additional members (from restaurants to foodbanks).

Financial and Fundraising Details

Current Annual Revenue: USD 0.5M

Org Type: For-profit

Ask Amount: USD 1.5M

Timeline: March 2023

Maturity Stage: Growth Stage

Product Stage: Currently selling

Use of Funds: To get to 2M in revenue in 2023 and 5M in revenue by 2024 they need: Inventory/Production costs - \$600K; Working capital - \$500K; Operations and staff - \$275K; Product development - \$75K; Marketing and branding - \$50K

Capital Type: Equity, Convertible debt



Minneapolis, MN • Founded: 2019 • Time on Report: Just Added
Contact: Sue Marshall, CEO, sue@netzro.us

[NETZRO](#) is a state-of-art food upcycling platform that helps power the safe capture and conversion of industrial food and beverage byproducts into new sustainable upcycled food ingredients at scale. The platform includes proprietary equipment, knowledge and connections in the upcycled food industry for the sale of upcycled ingredients. As an upcycled platform company, NETZRO is creating a new environmental and economic standard for reducing global food waste and has built an ecosystem of farmers, producers, distributors, retailers, restaurants, consumers and regulators, all working together to pioneer a circular food economy. Working with large and small-scale food producers across the country, NETZRO has created proprietary equipment that reduces wasted food and includes patent pending food technology process to recover food byproducts into nutritious, versatile upcycled functional ingredients that are good for the planet, for consumers and animals.

Financial and Fundraising Details

Current Annual Revenue: USD \$250,000

Org Type: For-profit

Ask Amount: USD \$1,250,000

Timeline: August 2023

Equity Round in Raise (if applicable): Seed

Product Stage: Ready to launch

Use of Funds: Design build engineering for next generation equipment; Separation equipment development; Supplies for storage; Wycliff Facility Food Safety Upgrade; Product/Market development; Calcium++ Cert Product/Market development; Software Development; Legal Fees: IP (data model) & Licensing; General Operating costs

Capital Type: Convertible debt

Expected Impact of Funding: Eggshell waste recovered from one egg producer equals 121 million pounds per year of upcycled calcium and collagen which diverts eggshell waste from being inappropriately land applied.



Seattle, WA • Founded: 2014 • Time on Report: Just Added
Contact: David Wishnick, Co-Founder, david@nutraberriinc.com

[Nutraberri](#) is a natural functional ingredient manufacturer of berry seed flours and oils. Consumers have a preference for seedless purées, and Nutraberri's business is built around making beneficial use of both berry seeds created during the production of seedless purées and juicing. One side stream, from seedless fruit purees, is referred to as 'seed cake' and the second is referred to as pomace that is a solid side stream of fruit seeds and skins created from the juicing process (i.e. Upcycling).

Financial and Fundraising Details

Current Annual Revenue: USD \$70,000

Org Type: For-profit

Ask Amount: USD \$1,800,000

Timeline: March 2023

Equity Round in Raise (if applicable): Seed

Product Stage: Currently selling

Use of Funds: Nutraberri is seeking funding to further develop its capabilities, primarily including a real estate purchase and facility upgrade & relocation. This specific initiative will allow Nutraberri to scale production of its current operation and better combat food waste. Nutraberri has self-funded the build-out of its current manufacturing plant over the past ten years and has seen the food waste initiative grow.

Capital Type: Equity, Convertible debt, Senior and subordinated debt, Grants



Los Angeles CA • Founded: 2015 • Time on Report: Just Added
Contact: Kaitlin Mogentale, Founder, CEO, kaitlin@pulppantry.com

[Pulp Pantry](#) creates value by transforming low-cost, produce-centric upcycled inputs into premium-priced, high-margin foods at scale. Their flagship product is a line of real veggie chips made from organic produce with meaningful nutrition.

Financial and Fundraising Details

Current Annual Revenue: USD \$1,000,000

Org Type: For-profit

Ask Amount: USD \$1,800,000

Timeline: May 2023

Equity Round in Raise (if applicable): Seed

Product Stage: Currently selling

Use of Funds: Seeking \$1.8MM in growth capital to complete core team, support omnichannel growth and fund marketing to support in-place demand and a growing retail pipeline

Capital Type: Equity, Convertible debt, Grants, Guarantees / letters of credit

Expected Impact of Funding: Their products have achieved 50% upcycled content, and they've upcycled over 100,000 tons of produce in the past 3 years with their line of Pulp Chips.



Israel • Founded: 2000 • Time on Report: Just Added
Contact: Yaki Harel, CEO, yaki@rebindfood.com

[Re:Bind Food](#) develops a beneficial, tasteless, better binder made of a food industry byproduct to replace harmful binders that exist today, like sugar eggs and other food additives like Methyl Cellulose.

Financial and Fundraising Details

Current Annual Revenue: USD \$0

Org Type: For-profit

Ask Amount: USD \$1,500,000

Timeline: January 2023

Equity Round in Raise (if applicable): Seed

Product Stage: Prototype

Use of Funds: Finalize the R&D towards production within 18 months

Capital Type: Equity

Expected Impact of Funding: They use a food industry side stream. The products that generate the side stream are produced globally and are not seasonal.



Oakland, CA • Founded: 2016 • Time on Report: Just Added
Contact: *Caroline Cotto, Co-Founder, caroline@renewalmill.com*

[Renewal Mill](#) is an upcycled food company fighting climate change and food waste by turning nutritious byproducts into upcycled ingredients and delicious plant-based products.

Financial and Fundraising Details

Current Annual Revenue: USD \$1,500,000

Org Type: For-profit

Ask Amount: USD \$2,500,000

Timeline: February 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Currently selling

Use of Funds: Over the last 4 years, they've grown to be a nationally-distributed CPG brand, while also supplying ingredients to some of the country's leading companies. They've done this all with 3 full-time staff members. Funds will be used to hire additional staff capacity in operations and sales, and also to support marketing efforts for their products at Whole Foods and ensure they are successful there in our first full year as a global retailer.

Capital Type: Equity, Convertible debt, Venture debt

Expected Impact of Funding: For every pound of soy milk or oat milk made, there is almost a pound of pulp waste created. Renewal Mill is bringing circularity to this process and ensuring that this pulp stays in the food supply chain. To date, they've diverted more than 650,000 lbs of food waste.



St Paul, MN • Founded: 2019 • Time on Report: Just Added
Contact: *Michael Sigel, CEO, michael@sco2.com*

[SCO2](#) leverages award-winning, patented, extraction technology to upcycle food and ag waste into high value oils, essences, flavors, etc. for use in food, cosmetic and pharmaceutical applications. Their mission is to build a robust, sustainable supply chain anchored by three major impact goals: 1. Capture lost value in food and ag waste and divert it from landfills; 2. Help growers and processors build a new, long-term revenue opportunity; 3. Leverage the buying power of industry players to purchase sustainably sourced products at scale and directly reduce the environmental impact. SCO2 is a seed stage company poised to ramp up operations. They have experienced leadership, the right technology, patents, test results, strategy, business model and our first customer (\$500k in revenue).

Financial and Fundraising Details

Current Annual Revenue: USD \$500,000

Org Type: For-profit

Ask Amount: USD \$2,500,000

Timeline: March 2023

Equity Round in Raise (if applicable): Seed

Product Stage: Ready to launch

Use of Funds: 1. Accelerate mapping the feedstock value chain, 2. Engage formulators / chemical engineers, 3. Advanced feedstock testing, 4. Sales Development, 5. Key hires

Capital Type: Equity, Convertible debt, Grants

Expected Impact of Funding: SCO2 Extraction Tech can scale to industrial size, processing 70 tons of material per hour which is unlike any other supercritical CO2 extraction capability. This means SCO2 can divert millions of tons of food waste from landfills and reduce transportation and handling impact.



Pottstown, PA • Founded: 2013 • Time on Report: Just Added
Contact: Michael Oraschewsky, CEO, mike@TBJGourmet.com

[TBJ Gourmet](#) makes specialty condiments and spreads from upcycled ingredients, starting with their trend-setting bacon jam made with upcycled bacon ends and pieces.

Financial and Fundraising Details

Current Annual Revenue: USD \$1,700,000

Org Type: For-profit

Ask Amount: USD \$2,200,000

Timeline: February 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Currently selling

Use of Funds: They are building a food processing plant and distribution warehouse to increase production capacity of their product lines, as well as offering co-packing and 3PL services to other upcycled brands.

Capital Type: Equity, Convertible debt, Venture debt, PRIs, Grants, Guarantees / letters of credit

Expected Impact of Funding: They will increase their primary upcycled ingredients from 40 tons to 80 tons in the first year. Considering that their primary UIs are meat ends and pieces with a high carbon footprint and low relative weight compared to other more common UIs, they consider this impact massive.



San Francisco, CA • Founded: 2017 • Time on Report: Just Added
Contact: Dan Kurzrock, Co-founder and CEO, dan@upcycledfoods.com

[Upcycled Foods, Inc.](#) powers the B2B upcycled food economy and has emerged as a leading ingredient tech venture. They utilize a patented food upcycling technology to valorize nutritious but overlooked materials like "spent" brewers' grains, creating nutrient-dense, low footprint ingredients that large consumer food brands are eager to innovate around.

Financial and Fundraising Details

Current Annual Revenue: USD \$103,000

Org Type: For-profit

Ask Amount: USD \$5,000,000

Timeline: February-March 2023

Equity Round in Raise (if applicable): Seed

Product Stage: Currently selling

Use of Funds: Monetizing extensive B2B pipeline, optimize and expand production capacity (incorporating additional waste streams, gluten-free ingredients, other R&D), integrating milling to optimize COGS, select key hires.

Capital Type: Convertible debt

Expected Impact of Funding: Annual U.S. impact potential includes 1.87M tons of food waste diversion, 4.85 metric tons CO2e emissions reduction, 446B gallons of water saving, 2.83k new jobs



Tel Aviv and New York • Founded: 2016 • Time on Report: Just Added
Contact: Tal Lapidot, Founder & CEO, tal@heysilo.com

[Silo](#) is on a mission to eliminate food waste in the home with its smart appliance and food-safe containers. With its patented simple vacuum technology, Silo extends the shelf life of food (up to 5x), effectively reducing the amount of food that spoils. The device also seals and tags your food using a built-in voice interface, and the accompanying mobile app allows you to track your inventory, receive notifications before food goes bad, and gain insights on how to optimize food storage. Silo offers a seamless solution to a major global problem – reducing the amount of food waste generated in households. By creating this industry-first dataset, Silo will have detailed data on what consumers store, how much of each item they have, and when those items will expire or run out. This information is crucial to building a truly smart kitchen and a game-changing dataset for food suppliers.

Financial and Fundraising Details

Current Annual Revenue: USD \$0

Org Type: For-profit

Ask Amount: USD \$2,500,000

Timeline: April 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Ready to launch

Use of Funds: The funds will be used to bring the product to market, including manufacturing and distribution efforts. This will allow the company to start selling products, validate the product-market fit, and develop and improve new and existing features. Funding will also help the company expand its reach and to continue developing the technology

Capital Type: Equity, Convertible debt, Venture debt, Grants

Expected Impact of Funding: They expect Silo to help save an average of 4 lbs per week, reducing waste by 20%-50% per household.



Cold Spring, NY • Founded: 2013 • Time on Report: Just Added
Contact: Marc Sabin, Chief Sustainability Officer, msabin@advancedresilientbiocarbon.com

[Advanced Resilient Biocarbon's](#) (ARB) clean technologies transform organic and inorganic waste into carbon-negative, environmental remediation-centered products. ARB creates joint ventures with local partners. Their partnerships address climate restoration and climate repair as triple-bottom-line businesses that provide a fair return on investment; quantitatively reduce environmental impacts— by improving soil health, reducing GHG emissions and cleaning water bodies; and quantitatively improve social impacts by creating well-paying green jobs, improving health facilities to their JV communities, and sponsoring higher education for JV employees. Their scalable, clean technologies deployed through their joint ventures meet 14 of the 17 UN Sustainable Development Goals, turning current “brownfield” operations into “greenfield” companies.

Financial and Fundraising Details

Current Annual Revenue: N/A

Org Type: For-profit

Ask Amount: USD \$50,000,000

Timeline: March 2023

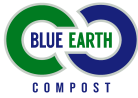
Equity Round in Raise (if applicable): N/A

Product Stage: Ready to launch

Use of Funds: ARB has received a confirmation of fit for a 500M EU Climate Bond. They are seeking a pre-issuance credit enhancement guarantor prepared to provide cash or cash equivalent of 50M EU for six months.

Capital Type: Convertible debt, Senior and subordinated debt, Grants, Guarantees / letters of credit

Expected Impact of Funding: ARB processes all forms of municipal waste into Elemental Chars™. In the case of organic waste, the processing generates biochar that can be used for soil enhancements and filtration media.



Hartford, CT • Founded: 2013 • Time on Report: Just Added
Contact: Samuel King, CFO, sam@blueearthcompost.com

[Blue Earth Compost, Inc.](#) exists to close the loop on food waste by providing food scrap collection services for homes, businesses, and municipalities in the communities they serve. The company is also an agent for change through helping consumers get high-quality soil and fertilizer products and by being an advocate on waste issues.

Financial and Fundraising Details

Current Annual Revenue: USD \$1,250,000

Org Type: For-profit

Ask Amount: USD \$400,000

Timeline: March 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Currently selling

Use of Funds: To build more capacity to divert food scraps away from landfills and incinerators and towards a better use. Funds will be used to purchase collection vehicles, hire drivers, and purchase equipment.

Capital Type: Equity, Convertible debt, Grants

Expected Impact of Funding: Every \$100,000 of investment equals about 1,000 tons of food scraps composted per year.



McClellan, CA • Founded: 2012 • Time on Report: Just Added
Contact: Dan Morash, CEO and Founder, dan.morash@calsafesoil.com

[California Safe Soil](#) (CSS) upcycles grocery produce and meat before it becomes waste to create highly valuable fertilizer and pet food products. CSS utilizes its patented technology of enzymatic digestion and proprietary processes while reducing GHG emissions. CSS's suite of fertilizer products provides healthier soil and a greater crop yield for organic and conventional agriculture. CSS's technology and processes also make a highly valuable pet food ingredient. The \$100B+ global pet food market is facing supply chain and pricing pressures. CSS has developed 4 pet food products that are higher performing with greater nutritional value at competitive pricing. CSS is working with a top pet food manufacturer to bring products to market by Q2 2023.

Financial and Fundraising Details

Current Annual Revenue: USD \$3,695,693

Org Type: For-profit

Ask Amount: USD \$10,000,000

Timeline: June 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Currently selling

Use of Funds: Funds will be used to immediately expand capacity in the current plant, bolster marketing and sales in line with current commercial partnership opportunities in both the fertilizer market which demand is expected to more than double next year as well as pet ingredients.

Capital Type: Equity, Venture debt, Grants

Expected Impact of Funding: For every ton of food waste that CSS recovers, CSS reduces GHG 1.3X. Today, CSS upcycles 5,000 tons per year. With additional investment CSS will reduce 30,000 tons of food per year in food waste by upcycling that food and converting to valuable fertilizer and pet ingredients.



Israel • Founded: 2018 • Time on Report: Just Added
Contact: Yuval, CEO, yuval@freeze-em.com

[FreezeM](#) is developing novel technologies that enable the creation of first-time stocks of ready-to-use suspended neonates and frozen eggs – a solution corresponding to agriculture seed production.

Financial and Fundraising Details

Current Annual Revenue: USD \$50,000

Org Type: For-profit

Ask Amount: USD \$12,000,000

Timeline: March 2023

Equity Round in Raise (if applicable): Series A

Product Stage: Currently selling

Use of Funds: The funds will be used to demonstrate their technology at scale by setting up a first-of-its-kind Black Soldier Fly (BSF) decentralized breeding hub and to support ongoing technology developments in genetics and breeding related solutions

Capital Type: Equity, Venture debt, PRIs, Grants

Expected Impact of Funding: Their 1st generation facility will enable the upcycling of 330,000 tons of organic waste per year into 26,000 tons of sustainable insect protein.



Ann Arbor, MI • Founded: 2022 • Time on Report: Just Added
Contact: Refael Aharon, CEO, raharon@protonmail.com

[Harvest Nano](#) develops proprietary technologies, equipment and processes for converting food waste (Dairy farms, cider mills) to nanocellulose compositions (NCCs) in order to meet a growing shortage and demand for cost-effective bioplastic alternatives. Farmers will benefit from a new revenue-generating process for disposing of agricultural waste, thus reducing environmental damage and economic reliance on petroleum-based plastic products. They are specifically targeting the dairy farms' agricultural waste and wastewater biosolids that are the most severe environmental challenge facing our planet today. Recycling those wastes back for human use will positively impact the environment dramatically. Dairy farms will be able to market themselves as more "green" to their clients.

Financial and Fundraising Details

Current Annual Revenue: USD \$0

Org Type: For-profit

Ask Amount: USD \$250,000

Timeline: April 2023

Equity Round in Raise (if applicable): Seed

Product Stage: Prototype

Use of Funds: 38% materials, equipment and supplies (e.g., Fabrication, design, chemicals, analytic sensors, filters, enzymes) for extracting nanocellulose from food waste; 11% indirect costs (e.g., office/lab space rental, utilities); 16% nanocellulose sample testing for quality and with compounders (clients) (e.g., Zeta potential, dynamic light scattering, tensile strength); 35% personnel costs (e.g., engineering and product manager, operations research analyst, mechanical engineer, environmental technician, chemist)

Capital Type: Equity, Convertible debt, Venture debt, Grants

Expected Impact of Funding: Food waste will be converted to valuable, profitable products that will benefit human and earth health.



Pittsfield, MA • Founded: 2021 • Time on Report: Just Added
Contact: Mary Stucklen, Owner & Operator, Hello@tommyscompost.com

[Tommy's Compost Service](#) provides an outlet for food waste for donation, animal feed, and composting for both residences and businesses.

Financial and Fundraising Details

Current Annual Revenue: USD \$32,400

Org Type: For-profit

Ask Amount: USD \$42,000

Timeline: April 2023

Equity Round in Raise (if applicable): N/A

Product Stage: Currently selling

Use of Funds: The purchase of a new truck with a dump body, which allows them to triple capacity without having to hire any staff or increase any overhead costs.

Capital Type: Grants, Guarantees / letters of credit

Expected Impact of Funding: Currently, they are able to haul up to 6 1/2 tons per week. With this new equipment, they will be able to handle at least 18 tons per week.



Pine Brook, NJ • Founded: 2022 • Time on Report: Just Added
Contact: Christina PioCosta-Lahue, President, christina@vivaria.eco

[Vivaria Ecologics](#)' mission is to reimagine food systems and how we approach food waste to create a more efficient, equitable and cleaner future. Recapture waste, revitalize the soil, renew our world. Vivaria Ecologics President and Founder, an urban planner by training, worked in food and agriculture for years at the intersection of planning, food systems and agricultural policy regionally and internationally. With a desire to establish a business focused on climate change mitigation in the food systems space, she developed the concept for a commercial scale food scraps composting facility. This pilot facility will be the first Class C Recycling Center (NJ Department of Environmental Protection designation) permitted to accept food waste in the state since the enactment of the Food Waste Recycling and Food Waste to Energy Production Law (P.L. 2020 c.24). This groundbreaking project will pave the way for the development of composting infrastructure in New Jersey.

Financial and Fundraising Details

Current Annual Revenue: USD \$0

Org Type: For-profit

Ask Amount: USD \$300,000

Timeline: March 2023

Equity Round in Raise (if applicable): Pre-seed

Product Stage: N/A

Use of Funds: They are seeking funding to cover ongoing costs for professionals and site development and equipment costs until the pilot site is operational and generating cash flow.

Capital Type: Grants, Guarantees / letters of credit, Low interest loans

Expected Impact of Funding: At full capacity, the Vivaria Ecologics Blau Road Farm Composting Facility will be diverting approximately 17,124 tons/year of food wastes from landfilling. The U.S. EPA Waste Reduction Model (WARM) results suggest that composting that food waste at the Vivaria site would produce a total GHG emissions savings of 8,357.4 MT of carbon dioxide-equivalent.



Aurora, CO • Founded: 2018 • Time on Report: Just Added
Contact: Carolyn Pace, General Manager, team@wompostcoop.com

[Wompost, LLC](#) is a compostable waste hauler. Their vision is to provide compost collection to every single person in Colorado who wants it.

Financial and Fundraising Details

Current Annual Revenue: USD \$425,000

Org Type: For-profit

Ask Amount: USD \$215,000

Timeline: December 2023

Equity Round in Raise (if applicable): N/A

Product Stage: Currently selling

Use of Funds: Refinance an expensive loan for a small trash truck, and purchase an electric pickup to reduce hauling emissions.

Capital Type: Venture debt, Senior and subordinated debt, Grants, Promissory Note (debt)

Expected Impact of Funding: Funding will allow them to grow their compostable waste collection from approximately 50 tons per month to 80 tons per month. The electric truck will reduce emissions, and reduce employee exposure to diesel fumes.

Appendix A: ReFED's Key Action Area Framework

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