

# Systemic Investing to Tackle the US Food Waste Challenge - The Fink Family and ReFED

ALBAN YAU & JASON JAY

[MIT Sloan Sustainability Initiative](#)

This case study research is part of the [Owning Impact Project](#) at MIT, with funding from the [TransCap Initiative](#). Special thanks to all the research participants for their insights and assistance throughout all aspects of this study.<sup>1</sup>

---

In the United States, approximately 40 percent of all food produced is wasted.<sup>2</sup> This challenge spans the entire supply chain, from farms to supermarkets to our kitchens, resulting in millions of tons of discarded food each year. The environmental toll is significant, as the effort to produce and transport this discarded food contributes to greenhouse gas emissions and other environmental burdens of farming. Astonishingly, this excess coexists with widespread food insecurity, highlighting the paradox of the issue. The food waste problem has persisted for decades, and the causes are multifaceted, encompassing inefficient supply chain practices, consumer behaviors, and a lack of standardized policies and incentives for waste reduction. This challenge is thus systemic at its root and involves multiple stakeholders with different views on the problem.

Betsy and Jesse Fink first encountered this challenge at Millstone Farm, which they established in 2005 after Jesse's successful exit as the founding COO of Priceline. The two were frustrated to see how much of the fresh produce would get discarded out the back door of local markets and decided to investigate further. Little did they know, their curiosity would lead to a major effort of philanthropy, capital investment, and network building - a program of systemic investing with ripple effects far beyond their farm.

## The Finks' Journey from Tech to Climate Change to Food Waste

In the late 1990s, during the pivotal transition from analog to digital, Jesse Fink was COO at Walker Digital, an intellectual property think tank. When Walker Digital decided to spin out international travel site Priceline, Jesse jumped on board as the Founding Chief Operating Officer. The role made him intimately familiar with the complexities of driving innovation and solidified his belief that successful solutions required the integration of diverse elements into a cohesive whole.

In 1999, Jesse's decision to exit Priceline brought him good fortune and marked a turning point. Jesse and his wife Betsy, whom he met while they were studying at SUNY College of Environmental Science and Forestry (ESF) and who worked with him at Priceline, shared a passion for the environment. With a clear vision and a desire to channel their resources toward a meaningful cause, the Finks set up Marshall Street Management as a family office and established the Betsy and Jesse Fink Foundation. Collaborating with the Finks' professional investment manager, Mark Cirilli, they meticulously charted various global challenges on a whiteboard. Climate change captured their attention, aligning with their desire to foster a sustainable future. With this grand challenge in mind, the Finks were unsatisfied with the conventional foundation approach:

*We were new to wealth management. We realized that in the foundation world, typically 100% of a foundation's endowment is invested in traditional investments, and only 5%*

---

<sup>1</sup> AI usage: To assist with the writing of this case study, the authors fed draft paragraphs to ChatGPT 3.5 one at a time with prompts to improve writing quality for readability. The authors double-checked all information to ensure that AI hallucinations did not impact the veracity of the text, and the draft was further reviewed by interviewees for accuracy.

<sup>2</sup> <https://www.nrdc.org/sites/default/files/wasted-2017-report.pdf>

*goes to fund organizations and people in the sector, such as the environment, that align with the specific mission of the foundation. So, our whole quest was not to focus on diverting incremental amounts of the 5% to the causes we cared most about but to be a catalyst on the investment side, which could have a much greater impact. We thus embarked on a journey that continues today to find investments that can be aligned with the issues to which our philanthropic grants are allocated, and we called it “issue-based investing.”*

This led to their pioneering exploration of a new way of investing in 2002. Their climate-related investments mostly focused on clean technology infrastructures and environmental finance sectors, which yielded financial success and demonstrated the positive impact investment could have when the field of impact investing was still emerging. Core to the Finks' strategy, their impact investment approach incorporated five forms of capital: financial, intellectual, human, social, and spiritual. In all their endeavors, they utilized these five forms of capital to maximize the impact and results.

Driven by a desire to amplify their impact, Jesse established MissionPoint Capital Partners in 2006. Under the leadership of Mark Cirilli, Jesse Fink, and another professional partner, Mark Schwartz, they launched a venture fund, MissionPoint Capital Partners Fund I, aiming to steer the global economy toward a low-carbon trajectory. Unlike today, when the public generally considers climate change as an urgent issue, investors in 2006 hardly knew there was carbon in the economy. Thus, the team had to make an educational effort to get investors on board. The Fund successfully raised \$335 million from a diverse array of limited partners (LPs), including family offices, college endowments, and even some hedge funds, among others. The Fund invested in clean technology and energy companies with some meaningful, successful results. Subsequent to the Fund, the Finks created MissionPoint Partners to make direct investments within a syndicate model and advise other families and foundations who want to do a better job in impact investing.

Whenever a family was interested in a specific topic, the MissionPoint Partners team created a “Pathfinder,” a research document embedded with systems-integrated thinking that would dive deep into various aspects of the topic and ways to address them. Over fifty Pathfinders were created for different clients, and this model helped the Finks to scale their impact beyond what their resources could have had. Jesse made an analogy on this strategy, *“I felt like we were a tugboat, a small family office that got out and pulled larger family offices and larger asset holders into whatever we were doing once we had assessed and de-risked each opportunity to some extent. That has been a mantra for us from the beginning.”*

During the same period, the Finks' exploration of climate change led them to consider the broader puzzle, such as the critical role of land use in the climate equation. Betsy Fink's involvement on the boards of the American Farmland Trust and Wholesome Wave Foundation deepened her engagement in the agricultural realm. This exposure ignited a profound understanding of the complexities surrounding sustainable and regenerative agriculture. In 2005, the Finks established Millstone Farm in Connecticut, a real-world laboratory for them to learn and practice sustainable agriculture principles. Betsy created and managed the farm and immersed herself in the practicalities, developing an acute awareness of the challenges of growing and distributing organic, nutrient-dense crops. In an interview with Food Tank, Betsy shared her experience:

*I was seeing first-hand a tremendous amount of food left in the fields of some of our sister farms in Connecticut. As we know, at some point, the labor costs are too high or market demands are too low for farmers to harvest the full field of crops or produce the retailers might consider “seconds.”... When I would do deliveries for the farm, I also saw how much food and fresh produce was being discarded in the back of our local markets.*

*This made me think there was something more systemic about the problem—how large is the problem and what could we learn to drive solutions?*<sup>3</sup>

Through this realization at the farm, the Finks extended their impact to the realm of food waste by providing grants to nonprofits addressing the issue. Natural Resources Defense Council (NRDC), Harvard Food Law and Policy Clinic, Center for EcoTechnology (CET), Island Grown Initiative, and several local food banks received their support. They also emphasized the importance of human capital and invested in interns and fellows in these organizations. Jesse recalled an early observation from their initial foray into the food waste issue, “...we probably had a portfolio of ten nonprofits related to food waste, but they were each in their own silo, yet solutions in one area impacted initiatives elsewhere.” The Finks recognized that the effort needed some extra interventions to be effective. Strong believers in “ground truthing,” where top-down ideas can be tested and validated at the local level, and where great ideas at the local level can be replicated or scaled, the Finks are convinced that the success of a systems approach to impact investing relies on the vertical integration of ideas.

The Finks harnessed an unexpected resource at the Millstone Farm: the expansive tents leftover from hosting wedding celebrations. Betsy and Jesse gathered their grantees and relevant stakeholders at the farm under the big tents to engage in a meaningful discussion of the food waste issue. This unconventional setting became the backdrop for multi-stakeholder dialogues that transcended traditional boundaries. The Finks orchestrated facilitated interactions, inviting stakeholders from diverse sectors—from Harvard policy experts to grassroots farmers—to share their perspectives and insights. Jesse was amazed by the conversations in this setting:

*You could hear farmers talking to funders who thought they had the right idea of regenerative agriculture and the right technology. The farmer responded that their problem was actually a lack of labor due to immigration issues. The power of these discussions lies in their ability to bridge gaps and dissolve preconceived notions, sparking novel approaches to complex problems.*

Emerging from the dialogue was the need for a roadmap that aligns every stakeholder’s effort and breaks the silos.

Putting their climate hats on, the Finks realized that most food waste goes to landfills, creating methane and exacerbating climate change. Food waste is also the cause of other environmental issues, such as resource overuse (especially water and other inputs) and pollution from pesticides and other chemicals used in food production. They started looking for ventures diverting food waste from the landfills, but the field was far from established.

To help clarify the opportunity, MissionPoint Partners team members Sarah Vared and Adam Rein led a six-month research project in 2014 to create the food waste Pathfinder and laid the groundwork for a systemic investing approach: one that would integrate philanthropy (for consumer awareness and policy) and investment (for technology and infrastructure) to combat food waste across the value chain. One of the recommendations from the Pathfinder was a public-facing guide calling for collective action, something Adam emphasized as he recalled the challenge they faced in the early days:

*Jesse and Betsy asked us to identify a set of catalytic investments around food waste. But looking around, there was limited data on where to find the companies with the best economics or most impact, as the “food waste” sector was very fragmented across farms, manufacturers, grocery stores, restaurants, homes, composters, and anaerobic digestion.*

---

<sup>3</sup> <https://foodtank.com/news/2016/12/engaging-restaurants-and-markets-to-rebuild-a-regional-food-system/>

*So, we ultimately decided that the most catalytic thing to do before making investments would be a philanthropic initiative to rally leading stakeholders to build a Roadmap so that we and all capital providers could have the data to learn the most effective solutions.*

As a result, the seeds were sown for a national stakeholder engagement to create a food waste reduction roadmap that eventually led to the important foundation for change.

## **Building a Foundation for Change in the Food Waste Sector**

The early 2000s marked a time when food waste was neither a prominent public concern nor an established investment category. The scarcity of data on the issue compounded its obscurity, making it challenging to grasp the magnitude of the problem. The revelation that the United States wasted approximately 40% of food was a wake-up call. This staggering statistic first appeared in a 2009 study conducted by the National Institutes of Health (NIH),<sup>4</sup> which revealed a 40% discrepancy between the caloric content of the food system and people's caloric intake.

Dana Gunders emerged as a critical figure in the unfolding story of food waste. Armed with a background in earth systems with an emphasis on energy efficiency from Stanford University, Gunders pivoted to food waste in 2010 as a Senior Scientist at the NRDC, recognizing that energy efficiency principles could be applied to food efficiency. Gunders researched the issue, culminating in a public report released in August 2012. Titled "Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill,"<sup>5</sup> the report covered the efficiency losses in the whole value chain, and its profound impact resonated well beyond expectations. The report garnered widespread media coverage, landing Gunders on major news outlets and propelling her into the center of the food waste dialogue.

As the report spread, stakeholders from unexpected quarters took notice. The U.S. Department of Agriculture (USDA) and Walmart, among others, expressed interest in the findings. The report's impact was further magnified when a donor reached out to NRDC, demonstrating their support through a grant, which enabled Gunders to continue her focused work on the food waste issue. Following the report's success, NRDC convened a meeting in 2013 in New York, bringing together a diverse array of funders and stakeholders connected to the food waste challenge. It was here that Dana Gunders encountered Jesse Fink. The meeting served as a seed for their collaboration.

The United Nations Sustainable Development Goals (SDGs) creation in 2015 further galvanized efforts to address food waste. SDG 12.3, aimed at cutting food loss and waste in half by 2030, provided a global target that resonated deeply with those committed to driving change. The commitment extended beyond international aspirations; the U.S. administration pledged to halve food waste by 2030. However, Dana saw the gap between awareness and action, and the question of "how" started to emerge on the table:

*In the early days, it was a lot of me shouting from mountain tops, giving talks, and presenting this problem to people. But what I found was that it was not hard to convince people that there was a problem as the numbers around food waste were pretty compelling. What was challenging was that they didn't know what to do...People talk about food waste as if it's one thing, but tomatoes not being harvested on the farm are very different from sandwiches not being finished at the Deli. There are so many different aspects of it, and people become paralyzed.*

<sup>4</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2775916/pdf/pone.0007940.pdf>

<sup>5</sup> <https://www.nrdc.org/sites/default/files/wasted-food-IP.pdf>

Amid the prevailing uncertainty in 2015, the Finks decided to realize the idea of a national food waste reduction roadmap focusing on solutions and opportunities, building on the Pathfinder analysis Sarah and Adam at MissionPoint Partners had done. Sarah Vared first encountered Jesse through participating in the Finks-funded internship program while studying her Sustainability MBA at the Presidio Graduate School. She then secured a full-time position at MissionPoint Partners and took the lead in organizing the roadmap team. In line with their strategy of employing the five forms of capital in their journey to impact, the Finks recognized the need for social capital to catalyze the movement. The journey started with fundraising, not for the money itself, but for amassing support, credibility, knowledge, and convening power from these funders. The process, however, was not as smooth as Jesse initially expected:

*We approached climate funders and said, "Hey, we have discovered that food waste is a huge contributor to climate change. You're interested in climate change. Would you fund this report?" And almost all of them said, "Well, that's great! When the report is done, will you share it with us?" They were stuck in their silos and more interested in energy and renewables than food-related solutions to climate change. We were lucky to eventually get a handful of prominent national foundations to participate and coupled that with support from smaller foundations that were regional-based and focused on sustainable agriculture. Ultimately, we ended up with a terrific group of founding funders around the table, which provided the credibility, insights, and resources needed for a successful initiative.*

The roadmap team engaged various stakeholders, surveying diverse solutions in food waste prevention, recovery, and recycling solutions and assessing suitable financing mechanisms for each. Innovations in technology include, for instance, converting food byproducts into new ingredients through value-added processing and extending the shelf life of fresh food by applying natural barriers to prevent chemical reactions between food and the environment. Business model innovation also has a huge role in reducing food waste, for instance, through creating new channels for distributing surplus, off-grade, near-expiration, or imperfect produce that would otherwise be wasted.

Deloitte's involvement lent credibility to the data-driven approach, in which they created the cost curve to reduce food waste (see Figure 1) to help prioritize actions (borrowing the idea from the McKinsey cost curve for GHG abatement.<sup>6</sup>) Composting technology, for instance, has the highest food waste diversion potential but very little economic value per ton of food waste diverted because of its capital expenditure. On the other hand, redesigning packages or standardizing date labeling are low-hanging fruits that can cost-effectively reduce smaller amounts of food waste.

Furthermore, the Finks' emphasis on ensuring broad stakeholder input, including the incumbent food companies, was crucial. The roadmap team played a unique role in being a neutral group that could convene big food companies (e.g., Walmart, Sodexo), big NGOs (e.g., NRDC, WRI), and big government agencies (e.g., EPA, USDA), along with the innovators and capital providers. These organizations contributed their data and validated that the ReFED roadmap was the best available data source at the time, a key to getting buy-in. This process took much more effort than Sarah originally thought:

*When we started, I thought it would be 10 hours per week of my time because I was also working on other investment research and pathfinders in the MissionPoint Partner team. And very quickly, it became 100% of my time for the year and a half...When we started building out the Advisory Council of the roadmap, we were essentially nobody in the food waste world. It took tremendous time to establish relationships, get the first people involved, bring different perspectives to the table, and build a community. The systemic*

<sup>6</sup> <https://www.mckinsey.com/capabilities/sustainability/our-insights/a-cost-curve-for-greenhouse-gas-reduction>

*problem was also more nuanced than we initially thought; we wanted to be rigorous and review all the underlying assumptions.*

In addition to the intensive stakeholder engagement and rigorous data collection, the team ensured the roadmap was not just another academic report but something with actionable insights, beautiful charts, and eye-popping statistics. The final customized recommendations spoke vividly to all stakeholders, including producers, manufacturers, retailers, restaurants and food services, policymakers, and capital providers.

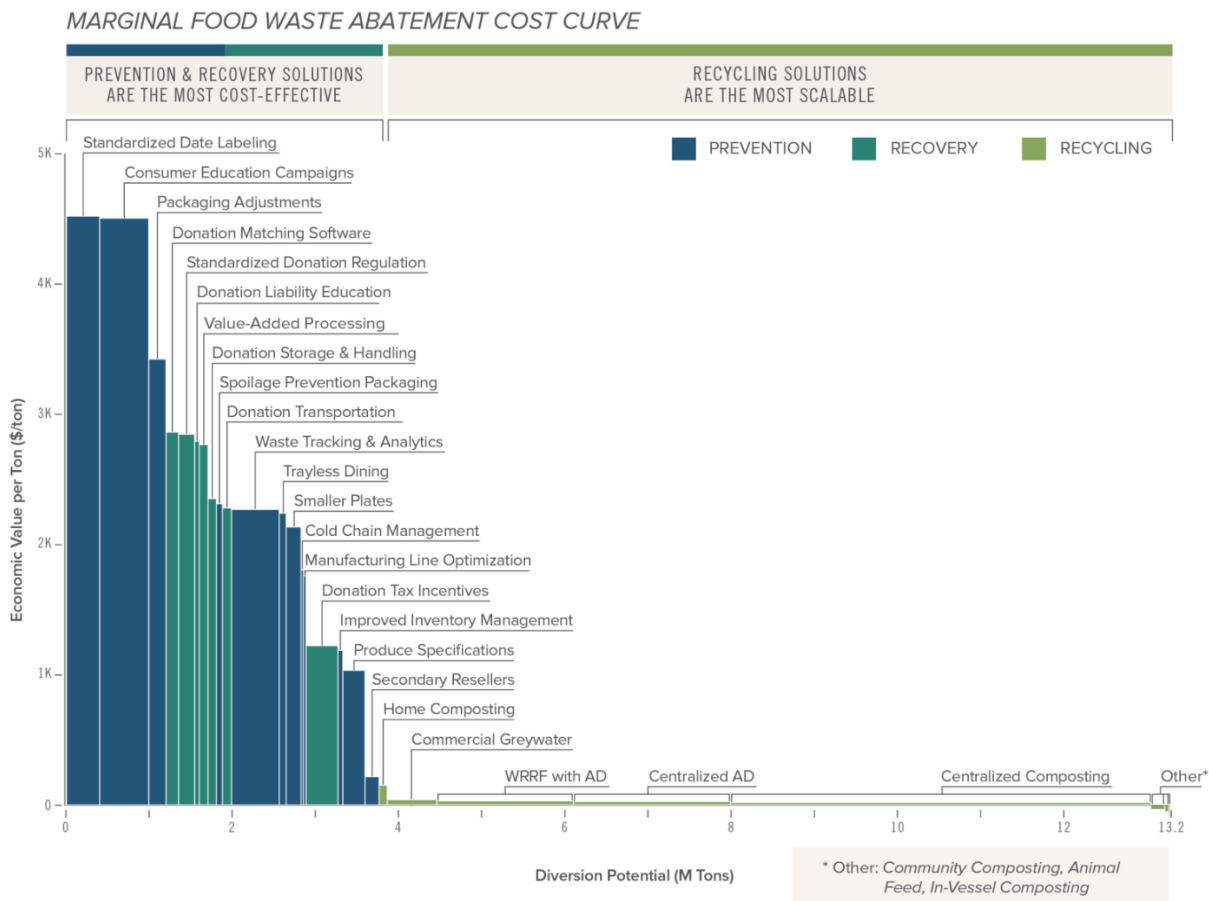


Figure 1. Marginal Food Waste Abatement Cost Curve in ReFED’s 2016 Roadmap (Source: ReFED. Note that data has been improved since then.)

The culmination of these efforts led to the launch of the roadmap under the ReFED (Rethink Food waste through Economics and Data) initiative in 2016 at the Stanford campus.<sup>7</sup> The roadmap suggested that the United States wasted more than \$200 billion in food and showed an achievable path to a 20% reduction of food waste in the coming decade that can avoid nearly 18 million tons of greenhouse gas emissions annually. The release of the roadmap sparked tremendous media attention and dialogue.<sup>8</sup>

<sup>7</sup> [https://refed.org/downloads/ReFED\\_Report\\_2016.pdf](https://refed.org/downloads/ReFED_Report_2016.pdf)

<sup>8</sup> See, for example, NPR – “These 27 Solutions Could Help The U.S. Slash Food Waste” (<https://www.npr.org/sections/thesalt/2016/03/15/470434247/these-27-solutions-could-help-the-u-s-slash-food-waste>) and Food Tank – “ReFED Roadmap Creates “Actionable Paths” Towards Food Waste Reduction” (<https://foodtank.com/news/2016/03/refed-roadmap-creates-actionable-paths-towards-food-waste-reduction/>)

The initiative's impact transcended a mere roadmap, however; it marked the inception of a freestanding organization as ReFED spun off into a fiscally sponsored 501(c)(3) nonprofit, with Jesse as the inaugural board chair and Sarah as the interim executive director. Alongside Jesse and Sarah were two key members of the founding team. Joan Briggs, Executive Director of The Fink Family Foundation, was responsible for sharing the message of ReFED with the philanthropic world. Eva Goulbourne was ReFED's first employee, coming from the World Economic Forum's food and agriculture team. Eva is credited with achieving wide distribution of the original ReFED Roadmap. Recognizing the need for focused action, ReFED adopted a unique strategy. The organization chose not to prioritize policy advocacy, nor did it take on the heavy lift of consumer education at first. Instead, ReFED positioned itself as a market maker, fostering a high tide that would lift all boats by focusing on capital and innovation. By identifying thought and market leaders in different opportunities in the roadmap, ReFED aimed to showcase the viability of a full spectrum of solutions. Avoiding being pigeonholed as an environmental nonprofit allowed ReFED to appeal to broader stakeholders. This was demonstrated in Jesse Fink's testimony before the House Committee on Agriculture hearing on food waste.<sup>9</sup> He embodied the voice of funders and businesses invested in food waste reduction alongside Dana Gunders from NRDC, Emily Broad Leib from the Harvard Food Law and Policy Clinic, and other stakeholders.

The testimony was a bonding moment for Jesse and Dana, as it fostered mutual respect, mentorship, and collaboration. Dana was on the steering committee of ReFED and then joined the board. When the first executive director of ReFED, Chris Cochran, left, Dana stepped in to lead the organization to overcome the challenges ahead. Jesse and Dana's own journeys intersected at a critical juncture, forging a partnership that united philanthropy, investment, and advocacy to combat food waste. As the national engagement process has built the foundation for a data infrastructure and a practitioner's network consisting of government agencies, large food companies, solution providers, farmers, and nonprofits, ReFED's effort laid the groundwork for system change to emerge.

## Facilitating the Growing Momentum

A pivotal early supporter in this domain was The Rockefeller Foundation, which stepped forward around 2015 with a substantial commitment spanning seven years to address the issue of food waste. This commitment encompassed financial support for various initiatives, including NRDC's "Food Matters" program, the production of the documentary "Wasted," and ReFED in its early days. The Finks also provided catalytic capital to ventures including Spoiler Alert, Divert, and Mori and brought other funders in through MissionPoint Partners. In addition, Project Drawdown's recognition of reducing food waste as a top climate change solution in 2017 garnered more attention and engagement, prompting new actors to join the conversation.

Nonetheless, despite the promising strides made by pioneering organizations and funders, investment in food waste solutions didn't gain the desired momentum. In the roadmap, ReFED estimated that it would require roughly \$2 billion per year over the next decade to achieve a 20% waste reduction, while only about \$200M was invested in food waste solutions in 2016. Innovative approaches by ventures, while holding transformative potential, had encountered challenges garnering the necessary attention and support. This underscored the pressing need for concerted efforts to further cultivate and facilitate the sector's burgeoning interest. ReFED continued its efforts on three key pillars they identified as leverage points in its Theory of Change (see Figure 2): data and insights, stakeholder engagement, and capital and innovation.

---

<sup>9</sup> <https://www.c-span.org/video/?c4599293/user-clip-jesse-fink-testiomny>



Figure 2. ReFED's Theory of Change in reducing food waste in the US (Source: ReFED)

**Data & Insights** One of the critical challenges in the food waste field was the absence of comprehensive data on both the problem and solution landscape. Through ongoing efforts to update, upgrade, and generate more granular data and insights, ReFED empowered stakeholders to make informed decisions based on quantitative analysis. The "Insights Engine"<sup>10</sup> launch in 2021, turning the static roadmap into an interactive data center, marked a significant leap. The food system is complex, adaptive, and embedded with uncertainties in technology evolution and human behavior, so the data and insights printed in the 2016 roadmap wouldn't be valuable to inform ongoing decisions as context changes. A more dynamic online interface allowed ReFED to continuously iterate the guidance when new evidence became available. In Dana's own words, it was analogous to the transition "from paper maps to Google Maps."

With over 60,000 users and thousands of use cases, this new platform allowed stakeholders to delve into nuanced solutions tailored to specific challenges. Leading retail giants, such as Amazon, Kroger, and Aldi, have harnessed ReFED's data to guide their explorations of innovative solutions that can tangibly enhance their financial performance by curbing food waste. The states of Washington and Oregon have used the Insights Engine in developing their state plan. Numerous publications have cited ReFED, underscoring its role as an authoritative source in the discourse on food waste. Startups also expressed that the insights provided by ReFED's data have proven immensely valuable in substantiating the existence of a viable market. Ricky Ashenfelter, founder of the food waste prevention technology company Spoiler Alert, commented on ReFED's influence on his company:

*In the early days, we relied heavily on the ReFED roadmap and resources for market sizing. At that time, our investors spanned three distinct categories: impact and sustainability, food and ag tech, and traditional software. Consequently, educating these investors on the market opportunity surrounding food waste was a big component of fundraising, and the ReFED resources proved instrumental in quantifying a compelling total addressable market.*

<sup>10</sup> <https://insights.refed.org/>



Besides data, ReFED generated original insights and publicly shared them. Through extensive interviews with subject matter experts within the food system and executing pilot initiatives involving distinct food companies, the valuable learning was meticulously synthesized and consolidated into comprehensive reports. The insights can range from industry best practices to a landscape assessment of the connection between food waste and diversity, equity, inclusion, and justice (DEIJ). ReFED aimed to transform the sector from acting on instinct to data and insight-driven decisions with this endeavor.

**Stakeholder Engagement** ReFED recognized that achieving systemic change in addressing food waste required collaboration across the entire food value chain, the “big tent” mantra they established at Millstone Farm. Through industry partnerships, advisory, programming, and networking events, ReFED fostered connections and cross-sector dialogue, such as the Pacific Coast Food Waste Commitment (PCFWC), the largest public-private partnership dedicated to food waste reduction. To help motivated companies advance their food waste reduction strategy efficiently, ReFED partnered with the Environmental Defense Fund (EDF) to launch a Climate Corps Food Waste Fellowship, training students to provide corporations with dedicated assistance. The program had deployed top-tier graduate students into more than 20 food brands, investment firms, and government agencies (such as Albertsons, Sodexo, Closed Loop Partners, and the New York City Housing Authority), helping solve the sector’s growing capacity-building need with expert human capital. Furthermore, formal partnerships were established with federal agencies like the U.S. Environmental Protection Agency (EPA), the U.S. Food and Drug Administration (FDA), and the U.S. Department of Agriculture (USDA), solidifying ReFED’s role as a trusted intermediary for collaboration and coordination. Their annual Food Waste Summit served as a focal point for these multi-stakeholder collaborative efforts.

Engagement with the incumbent was particularly crucial. Jesse’s earlier experiences in renewable energy investing taught him that transformative change inevitably encounters resistance from established players:

*Prior to our deep dive into the food waste sector, I witnessed first-hand how long it took for renewable energy solutions to gain traction. A big reason it took so long was that the incumbents were so powerful and fought changes they found threatening. I wanted to make sure we avoided the same situation with food waste solutions so that we could expedite the timeframe for widespread adoption from fifteen years or more to five years.*

To achieve this, ReFED dedicated extensive efforts to secure the involvement and support of major food industry entities like Walmart, General Mills, and Kroger, who have all become staunch advocates of ReFED’s mission. Nevertheless, the challenge remained that the food system, deeply entrenched in tradition, presents formidable barriers to entry due to its longstanding practices.

A notable endeavor ReFED started exploring involves the concept of a “Customized Roadmap.” In this initiative, ReFED utilized its database to develop a customized list of optimal solutions tailored to food companies who collaborate by sharing their private data. This comprehensive roadmap could include insights into the projected costs, food waste reduction, revenue generation, and greenhouse gas savings associated with implementing these solutions. This effort aimed to empower internal champions within food companies to secure leadership buy-in for implementing recommended solutions by equipping them with an analytical understanding of the suitable solutions. Furthermore, ReFED’s involvement facilitated connections between these companies and the solution providers that can help turn these strategies into actionable results.

**Capital & Innovation** Innovative solutions in food waste require financial support to overcome barriers and achieve scalability. ReFED convened and educated funders about emerging investment opportunities

in the sector to bridge this gap and helped large food companies host open challenges to stimulate innovation. On the solution provider side, ReFED aimed to empower innovators to scale their solutions through capacity-building initiatives like accelerators and networking opportunities with potential funders.

One achievement was the establishment of the Food Waste Funder Circle (FWFC),<sup>11</sup> which evolved from ReFED's early one-on-one funder advisory interactions. Growing to involve over 160 members, the funder circle had the potential to catalyze more than \$300 million of capital into the food waste sector. This collaborative platform provided funders with subject matter expertise, resources, and specific investment opportunities. The funder circle also enabled social learning and a supportive community, where investors learn from each other, collaborate on deal-sourcing and co-investing, and cultivate a feeling of being part of something bigger than themselves. Pete Oberle and Tripp Wall, Managing Partners at Trailhead Capital and members from the circle, shared the value this initiative brought to them:

*Trailhead Capital is excited to be both a member and ambassador of the FWFC, gaining access to an extensive network of partners and collaborators who are equally dedicated to targeting food waste challenges by working together to share and produce ideas and solutions... The deal flow reports, newsletters, and sponsored events help us aggregate this information in a substantive way, creating the network effect needed to deliver and capitalize on this catalytic opportunity.<sup>12</sup>*

In 2020, ReFED piloted a set of grants to 10 organizations selected to participate in its Nonprofit Food Recovery Accelerator program in partnership with Walmart.org, +Acumen, IDEO, and Feeding America. ReFED then ventured further into direct funding through a pooled fund approach, initially as a response to the emergency stemming from the COVID-19 pandemic. Amidst the onset of the pandemic, an urgent need emerged on the ground, prompting funders to seek ways to provide adequate support. Recognizing this need, ReFED took proactive steps by establishing a COVID fund that attracted a significant influx of new investors to the food waste sector and served as a means to regrant philanthropic capital to selected organizations.<sup>13</sup> The result was more than \$3.5 million raised and regranted to 37 for-profit and nonprofit organizations across the US, who in six months were able to prevent or rescue more than 90 million lbs of otherwise wasted food. Additionally, the fund helped catalyze more than 13x the original amount invested into the portfolio's grantees, of which 92% served BIPOC communities and 95% were led by diverse teams. The Finks played a pivotal role in this endeavor by contributing a grant to cover 100% of the administrative costs, allowing ReFED to assure donors that their contribution would be fully regranted to the intended recipients.

Building upon this learning experience, ReFED established a Catalytic Grant Fund to explore its unique position as a resource allocator by leveraging its data, insights, and network to identify crucial areas where catalytic change is most needed. Through its investments to date (September 2023), ReFED has grown to become one of the top five philanthropic funders of direct food waste work in the sector.

In 2023, the US food systems change was still an ongoing journey, not a finished job. But with this collective effort, the landscape of the food waste sector had been changed with emerging signs:

Startups in the sector, such as Apeel Sciences and Imperfect Foods (now acquired by Misfits Market), had gained traction, achieved significant valuations, and some already exited, underscoring the growing maturity of the field. Accelerator programs dedicated to food waste also emerged. The influx of investment in the food waste space had grown significantly over the years, over \$1 billion in both 2021 and 2022, as more impact investors recognized food waste solutions as a way to achieve their impact

<sup>11</sup> <https://refed.org/engage/food-waste-funder-circle/>

<sup>12</sup> <https://refed.org/uploads/refed-2022-annualreport-digital-final.pdf>

<sup>13</sup> <https://refed.org/uploads/refed-2020-covid-impact-report-final.pdf>

goals. Some prominent Silicon Valley technology investors who don't consider social or environmental impact in their investment decisions have also come to the table because the market demonstrated huge potential.

More than 50% of the market share of the Pacific Coast's food retailers had committed to sharing private data on food waste and collaborating to change, and the three largest food service companies and some upstream companies had joined the effort as well. Several large companies have reduced significant amounts of food waste compared with their baselines (for instance, 42% for Kellogg's, 36% for Campbell Soup Company, and 12% for Walmart.<sup>14</sup>) As the largest American retail company, Kroger, via its Zero Hunger Zero Waste commitment, shined a spotlight on the food waste issue. This commitment was followed by the launch of their innovation fund, a valuable avenue for startups to test their solutions in larger corporate pilots. Additionally, The Wonderful Company, a major agricultural producer, allocated \$1 million for a global open call to address their waste challenges in 2020. This initiative received 385 applications and ultimately funded two promising solutions, showcasing the growing appetite for food incumbent companies to change.

The food waste policy landscape has also undergone significant shifts across government levels. Notably, the bipartisan passage of the Food Donation Improvement Act in late 2022 was a milestone achievement. A remarkable surge of over 75 state-level food waste-related policies was introduced in 2022, demonstrating the growing recognition of food waste as a vital issue. Although not all proposed bills came to fruition, the mere inclusion of food waste in legislative dialogues signals progress. In January 2023, Representative Julia Brownley introduced the Zero Food Waste Act, which proposed grants for food waste prevention, rescue, and recycling projects at all levels and was under congressional consideration. In September 2023, another bipartisan bill, the No Time to Waste Act (New Opportunities for Technological Innovation, Mitigation, and Education To Overcome Waste), was also introduced to Congress and had the potential to provide the much-needed resources.

From Dana Gunders' perspective, the evolution of the food waste sector was evident in the sheer growth of organizations and actors involved. The sector, for which she could once remember every contact individually, had grown into a complex ecosystem of over 1,800 organizations and initiatives. Although it was difficult to attribute any of the changes above directly to the Finks, Dana, or ReFED because a lot of people worked hard to realize it, they had acted as a backbone and a catalyst for the movement. Their multifaceted efforts certainly contributed to the enablement and facilitation of stakeholders to take meaningful action in the fight against food waste and changed the system's dynamics.

## Zooming into Investor Levers: The Systemic Investing Play

*When you interact with a multitude of investors on a one-on-one basis, you start to realize that if you are trying to solve a systems-level problem using a variety of bespoke approaches, you could be creating negative consequences or shifting problems to other areas of the supply chain...Our job should be thinking holistically, figuring out how to put money to work on this problem through a systems lens, and even pushing beyond just capital to incorporate the non-financial support needed to make investments truly catalytic and impactful.*

— Alexandria Coari, Vice President of Capital, Innovation & Engagement at ReFED

---

<sup>14</sup> [https://champions123.org/sites/default/files/2023-10/2023%20Champions%20Progress%20Report\\_Oct.pdf](https://champions123.org/sites/default/files/2023-10/2023%20Champions%20Progress%20Report_Oct.pdf)

The systemic investing play can be seen in two parts in the US food waste challenge: the Finks' systemic efforts in the early days and ReFED's programmatic work in facilitating the system's capital flow, spearheaded by one of the organization's first full-time hires, Alexandria Coari, VP of Capital, Innovation & Engagement, and her team.

A brief review of what the Finks have done in addressing the food waste challenge with limited resources in a small family office and foundation (see Figure 3 and Appendix 1 for more information on financial investments): The Finks' capital allocation began with establishing Millstone Farm, where they experienced the issue first-hand and later became the essential space for multi-stakeholder dialogue. Their exploration then took shape through modest grants to various nonprofits, furnishing them with diverse perspectives on the issue—encompassing policy dynamics, pertinent data, potential solutions, and essential human resources. Embarking on early private investments, ranging from \$50k to \$250k each, in food waste reduction ventures aimed to experiment with for-profit solutions and showcase sector viability. These endeavors laid the groundwork for the Finks to discern emerging trends, bottlenecks, and sources of energy. The learning was solidified in the Finks' investment in Pathfinder research and the roadmap, which infused the field with crucial data and a network for collective action. Building upon this momentum, the Finks helped establish ReFED as a recognized food waste expert with robust data infrastructure, a strategic investment allowing the organization to effectively pursue its other two priorities: mobilizing stakeholders and capital. The incumbent companies came to ReFED due to its powerful insight, fostering a trust-based environment conducive to gathering more granular information and reinforcing ReFED's data and insight generation. These nuanced insights and the success stories of food waste ventures proved pivotal in attracting further funders. The Finks continue to play a catalytic role in funding ReFED experiments with new, emergent functions the field needs, such as the pooled fund and Climate Corps Food Waste Fellowship program.

### Food Waste Strategies (Finks)



Figure 3. The Finks' Strategy to Tackle Food Waste (Source: Jesse Fink)

The Finks could have focused their limited resources only on their private investment in food waste reduction ventures and giving grants to environmental nonprofits like many small family offices engaged in impact investing and grant-making. The concentrated capital might have a higher chance to build up a unicorn of a food waste prevention solution and change the US food system, but this would have assumed that:

- Incumbent food companies would adopt this particular solution
- The policy would support the solution development
- The startup could attract enough follow-on funding and human resources to scale to the whole U.S.
- The solution would be technically feasible and commercially viable to expand to cover the food waste generated in the whole supply chain
- It would continue to be effective on a larger scale and in a changing consumer environment.
- Once the success is obvious in the market, competition between ventures would be beneficial rather than destructive, and the unicorn would maintain its impact mission.

If an impact investor only cares about isolated outcomes, for instance, the food waste diversion in a particular stage, these assumptions might be less critical. Therefore, concentrating on venture capital investment seems rational. When an investor intends to change the system's structure as a whole, though, this single-asset investing paradigm becomes questionable. The Finks chose to use their resources differently, acknowledging that those assumptions were not likely to hold given their observation of the space. Instead, they sequentially invested in building stepping stones that enable future possibilities, understand the system holistically, and nested solution investments with sector-wise interventions such as human capital, data and knowledge, network orchestration, and established company engagement. These efforts eventually reinforced each other to form an ecosystem that helped change the sector's trajectory. Jesse commented on his philosophy of facilitating systems change, not aiming narrowly at the tons of food waste reduced but more broadly at the overall dynamics of the system:

*I was trying to prime the pump, getting more people to participate and more funders to make investments. As some of the first wave of start-ups in a space succeed, more and more entrepreneurs enter the fray. Stanford or MIT undergrads begin saying, "Hey, forget about Facebook. I want to work on food waste technologies." And business schools begin to say, "Hey, we should be really looking at food waste as something going on there." So, I'm really a momentum player. If you manage to get smart people and smart money coming into a new space like food waste, you end up with an innovation ecosystem that's going to feed on itself.*

On the other hand, ReFED, functioning as an intermediary entity, has played a crucial role in helping the system allocate its resources more effectively across the solution landscape. At its most passive, the interactive Insight Engine empowers resource owners to prioritize cost-effective solutions without direct ReFED involvement. An illustrative example is the U.S. Department of Agriculture, which employed Insights Engine data in its 2022 \$90 million funding announcement for food waste to shape fund allocation decisions. Being more proactive, Alexandria established ReFED's Food Waste Funder Circle to influence investors more directly. ReFED provided more up-to-date insights and sector trends through webinars and monthly ecosystem reports to educate investors in the network. The spotlight was cast on members' success stories, leveraging the platform for shared learning and encouraging collaboration in deal sourcing and co-investing. They bridged the capital demand and supply through deal flow reports (with more than \$1 billion shovel-ready investment opportunities tracked), pitch days, speed dating events, and field trips for funders to experience tangible impacts. By posing critical questions to investors, ReFED promoted consideration of investments' upstream and downstream effects, avoiding waste of capital to shift the food waste from one place to another. They facilitated synergy, recognizing that food companies

prefer streamlined solutions for issues across different stages rather than separate providers. Thus, integrating interoperability into an investor's multifaceted solution investments amplified overall adoption, generating more impactful outcomes than isolated endeavors.

Taking another stride forward, ReFED had advised more engaged funders to establish a more dedicated, customized, and systemic resource allocation approach to tackle the food waste challenge and achieve their unique goals. A prime example lay in ReFED's collaboration with The Kroger Co.'s Zero Hunger | Zero Waste Foundation, where they harnessed the Insights Engine to fashion a funding strategy for their innovation fund. This initiative catalyzed a substantial \$10 million, bridging the philanthropic funding gap for food security and food waste solutions. The Posner Foundation of Pittsburgh, another strong advocate for addressing food waste as a critical issue, also benefited from ReFED's help. Ida Posner, a Strategic Advisor to the Foundation, shared her perspective:

*What drew me to ReFED was its systemic approach to the problem of wasted food, combined with an actionable plan to address it. We're a small foundation with just a few decision-makers, which allows us to be nimble and make decisions quickly. On the other hand, we don't have the capacity to do heavy diligence on the solution landscape or every project that may or may not bear fruit. So, it's been really helpful to have partners like ReFED that support our strategy development, help us to continuously learn, and facilitate relationships.*

As a result of this intermediary support, the Foundation focused a significant portion of its \$4 million funding on a cohort of organizations reshaping consumer environments, one of the top priorities ReFED advised them on. These initiatives span expertise in behavioral economics, exploring the intersection of criminal justice with nutrition and food waste in prison settings, and working within school cafeterias.

Engaging in their most intricate endeavor, ReFED delved into its second funding vehicle, an evergreen, pooled fund with an investment strategy developed using a data-driven approach informed by ReFED's own Insights Engine. While demanding more staff time and exerting influence on a more concentrated amount of capital than the Food Waste Funder Circle, this initiative grants ReFED greater control and certainty over the allocation of resources across the system. Extensive research enabled ReFED to establish a comprehensive framework detailing the required funding magnitude, solution impact potential, and appropriate matching between solutions and distinct types of capital.<sup>15</sup> For instance, enhanced demand planning software for retailers can be financed with venture capital, while buyer specification expansion solutions<sup>16</sup> might be more suitable for corporate finance and spending. Philanthropic grants are great for improving the distribution of food donations by increasing local transportation infrastructure or long-haul transport capabilities, and government project finance is needed for centralized composting facilities.

Additionally, the Food Waste Capital Tracker,<sup>17</sup> one of the databases in the Insight Engine, allowed ReFED and all investors to monitor the flow of capital within the sector, identifying areas of scarcity, high momentum, and opportunities to collaborate. These groundworks laid the foundation for the implementation of a pooled fund. The ReFED Catalytic Grant Fund,<sup>18</sup> the product of this endeavor, began dispersing both recoverable and non-recoverable grants in 2023 to for-profit companies and nonprofit organizations operating across the spectrum of food waste solutions while also covering emergent needs and providing support to "initiatives including but not limited to research, technology, general operations,

---

<sup>15</sup> <https://refed.org/stakeholders/capital-providers/#capital-types>

<sup>16</sup> According to ReFED's definition, a buyer specification expansion is the "Adjustment of purchasing specifications that allow for a greater variety of product grades into sales and recipes while still ensuring that specs do not lead to in-house waste."

<sup>17</sup> <https://insights-engine.refed.org/capital-tracker/>

<sup>18</sup> <https://refed.org/our-work/initiatives/catalytic-grant-fund/>

capacity building, and pilots with food businesses.” The first open call of the Catalytic Grant Fund, with \$1.25M from Google (anchor with \$1M), Fink, and Posner, received 280 applications worth \$99M. An independent review committee was set up to incorporate external inputs to make funding decisions using insights from industry-leading subject matter experts across the food system. The evolution of ReFED into a resource allocator has had positive ripple effects. Beyond the demonstration effect of encouraging other funders to establish more capital dedicated to food waste solutions, this getting-hands-dirty approach has provided ReFED insights into the practical challenges, fostering a deeper understanding of the field's dynamics and struggles in capital allocation. This experiential learning, as ReFED's VP of Capital, Innovation & Engagement Alexandria reflected, has equipped ReFED as a more effective enabler in facilitating the system's capital:

*We have gotten feedback as a systems-level organization that if you want credibility and drive influence, you can't just talk about data and theoretical strategies. You sometimes have to take the lead yourself. Being in the shoes of the investors we're trying to activate and sharing what we've learned has helped build trust, allowed us to reduce real and perceived risks felt by other asset owners, and driven new, additional funding into the sector...Something that would have been much more difficult to achieve if we were just a think tank.*

In contrast to normal thematic impact investing approaches, ReFED's systemic investing approach didn't just finance the technology or business model innovations in addressing the food waste challenge. They aligned the originally siloed actors with coherent system analysis, coordinated investments across asset classes to where the capital demand profile matched supply, and leveraged philanthropic capital to build critical public goods that create enabling conditions for solution providers and other actors. This fundamentally different resource allocation mindset shifted the investors' role from capturing value in innovation to facilitating socio-technical system transition.

In 2023, Jesse Fink, who still served as an active board member at ReFED, looked back on this fulfilling journey that no one had expected:

*Since we first engaged with the issue, we've invested millions of dollars, and now, collectively, over \$10 billion has been invested by all types of funders of food waste solutions over the last decade. We helped launch dozens of new organizations and new initiatives at existing organizations, and now there are more than 1,800 organizations, big and small, leading efforts in the space. There are so many other people involved, and we don't know what would have happened if we hadn't shown up. But it's satisfying to think our limited resources might have contributed to a reinforcing cycle here. The sector has evolved from where the food waste issue was overlooked or unattractive to where it is widely recognized as a leading solution to climate change and worthy of considerable amounts of human and financial capital. I can't begin to express how excited and fulfilled I am to see large philanthropic funders, commercial investors, and other institutions and organizations engaging in food waste solutions. Really, we are going to need a bigger tent, and that's just great.*

## Critical Questions Moving Forward

As the US food system change adventure continued with a growing ecosystem, some questions remained to be explored and critically examined.

**Resource Usage** The systemic investing approach involves allocating resources to a portfolio of interventions with suitable capital across the return spectrum. ReFED, as a backbone organization itself, is one of the interventions, thus also requires resources to keep the momentum going. The question about what kind of capital is most suitable to support ReFED started to cross Dana's mind:

*One key challenge we face is around earned income and whether that's something we should pursue. The puzzle is that either we can continue to make everything open source and free and be entirely grant-funded, or we can charge for some of the services we provide and not rely on grant funding. Some people look at us and say, "Oh, my gosh! You're sitting on tons of data, other people would have charged a ton of money for that!". We also do a lot of advisory work, and it's something a big consulting firm could make significant money from. However, charging for services creates a barrier for organizations to engage with us. We don't have a right answer for this. Our board has been really clear that we're mission first, so we don't want the goal of earning money to take over what our actual mission is. We're trying to be really careful about that.*

The use of philanthropic funding in systemic investing should also be taken cautiously, as organizations that allocate money for charitable purposes with tax-exempt benefits undergo increased scrutiny regarding the utilization of their financial resources. Private foundations and 501(c)(3) nonprofits would have to make sure the funding can't directly or indirectly benefit a "disqualified person" (who has substantial influence over the organization) to prevent the act of "self-dealing."<sup>19</sup> Some exceptions include "if the same goods, services, or facilities provided are made available to the general public on at least as favorable a basis," and can be seen in Dana's comment:

*... the private foundations from the food industry have played a role in funding ReFED. Because of the self-dealing rule, their giving can't be directly tied to something they get in return, so they like the fact that we are serving the larger food industry.*

**Stakeholder Conflict** The systemic effort focused on reconfiguring the current demand-driven food system to reduce food waste by, for instance, optimizing harvest, maximizing product utilization, reshaping the consumer environment, and strengthening food rescue. One of the key goals was to push the current food companies to change operational practices, as illustrated by Ricky at Spoiler Alert:

*We spent the first few years of our business talking almost exclusively to individuals with Sustainability in their titles about food waste initiatives at major corporations. While those individuals offered helpful perspectives for us, the real inflection point for us came when we shifted our go-to-market motion and focused on engaging Supply Chain, Sales, and Finance operators instead. In our journey, those functions have had significantly more influence and budget to procure, implement, and finance emerging solutions like ours. Ultimately, my bias is that the industry needs functional leads outside of Sustainability to get more engaged in adopting innovative solutions, and climate-motivated entrepreneurs need to tailor their narrative accordingly for these audiences.*

On the other hand, some more radical food system transformation advocates argued that a bottom-up transition to agroecology or a model that aligns demand to seasonal and local supply is required, and the food challenge can't be solved by top-down solutions led by large corporations or institutional actors who are more likely to maintain, consciously or unconsciously, the status quo of exploitative capitalism.<sup>20</sup> This perspective was different from the "big tent" philosophy the Finks and ReFED had adopted to include

<sup>19</sup> For more detail, see IRC 4941 - THE NATURE OF SELF-DEALING ([www.irs.gov/pub/irs-tege/eotopicq85.pdf](http://www.irs.gov/pub/irs-tege/eotopicq85.pdf))

<sup>20</sup> See *Rethinking Food and Agriculture Ch17 - Social movements in the transformation of food and agriculture systems* for example. (<https://doi.org/10.1016/B978-0-12-816410-5.00017-7>)



anyone motivated to reduce food waste, regardless of the perspective from the bottom-up or the top-down. The critical question is about what role systemic investors choose to play: When the goals of different stakeholders conflict, should systemic investors be neutral and promote all while bearing the risk of dissipating resources and energy in different directions, or should they pick a stance and align the resource toward one direction while unavoidably disregarding the voice from some? Or, to avoid the dichotomy, is there a way to sit in between?

**Impact Measurement** ReFED has been helping stakeholders understand their impact through the Insight Engine, and the team has also paid a lot of attention to understanding their own impact. Beyond the quantity of capital or people flowing into the food waste sector described earlier, ReFED is also dedicated to measuring the quality of those numbers, such as the engagement level of the funder network or connections enabled by ReFED that lead to real investments. However, as a system-level organization, most of ReFED's effort is not directly "contributing to solutions" but "creating enabling conditions," which only indirectly influences the ultimate outcomes as measured in tons of food waste reduced or greenhouse gas avoided. It is difficult, if not impossible, to attribute change in outcome to an indirect intervention with high confidence in a complex adaptive system. This challenge to demonstrate impact demands different accountability frameworks in the systems change work: how can we best conceptualize the contribution of systemic investors, and how might we measure them?

These questions will continue to shape the evolution of ReFED's pioneering work as they work to drive innovation and impact in the relentless fight against food waste. They will fuel the ongoing inquiry of those directly involved in this transformative journey, those keenly observing the trajectory of ReFED, and the broader field of systemic investing.

**Appendix 1. Finks' Select Financial Investments in Food Waste Through its Philanthropic Entities.**

(Source: Jesse Fink. Note that this excludes other non-financial efforts highlighted in this case study.)

Recipient	Activities Funded
Ample Harvest	General Operating Support
Borderlands Food Bank	Nogales Produce Importation
Center for EcoTechnology	Fellows and Interns; General Operating Support
Common Ground - New Haven Ecology Project	Interns; Gleaning; Composting
CommonWealth Kitchen	Food Incubator
Community Food Bank of Southern Arizona	Nogales Produce Importation
Community Plates	Staffing and Interns
Conservation Law Foundation	Fellows
CT NOFA	Convening
Daily Table	General Operating Support
Divert	Direct Investment
Environmental Defense Fund	Food Waste Solutions
Feeding America	Food Waste Solutions
Food Corps	Fellows and Interns; Gleaning
Food Recovery Network	General Operating Support
Food Rescue US	Staffing and Interns; Food Recovery Efficiency
Food Tank	Convening; Food Waste Track
Harlem Grown	Fellow; Food Recovery and Food Access; Community Gardens
Harvard Food Law and Policy Clinic	Fellow; Regional Collaborative
Island Grown Initiative	Fellows and Interns; Gleaning; Year-Round Apprentices; Compost; General Operating Support; Consumer Awareness
Just Food	CSA; Food Education
Misfit Foods	Program Related Investment
Mission Investors Exchange	Convening; Fellows
Mori	Program Related Investment
National Council for Science and the Environment	Food Waste Forum
Natural Resources Defense Council	AdCouncil; Food Waste Law Fellow; Regional Collaborative
New Venture Fund	Initial Fiscal Sponsor for ReFED
OpenIDEO	Food Waste Solutions Challenge
Our Community Foundation	Regional Food Access
Presidio Graduate School	MBA Interns
Rachel's Network	Convening
Re-plate	General Operating Support

ReFED, Inc.	Initial Seed Funding and Ongoing Support
Rockefeller Philanthropy Advisors	Peer Outreach
Spoiler Alert	Program Related Investment
Stone Barns Center for Food and Agriculture	Convening
Sustainable Agriculture and Food Systems Funders (SAFSF)	Convening
Sustainable America	General Operating Support
University of Arizona	Nogales Produce Importation
Upcycled Food Association	Fellow; Grant; Program Related Investment
Warehouses4Good	Recoverable Grant
Wholesome Wave Foundation	General Operating Support
World Wildlife Fund	Food Waste Solutions
Yale University	Interns; Convening

<b>Financial Capital Overview</b>	<b>Amount</b>
Direct Investments / Program Related Investments	\$1.6M
Grants	\$3.8M
Total	\$5.4M