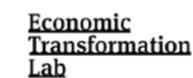




Peeling Back the Layers:

Learnings from the Circular Food Innovation Lab

Executive Summary



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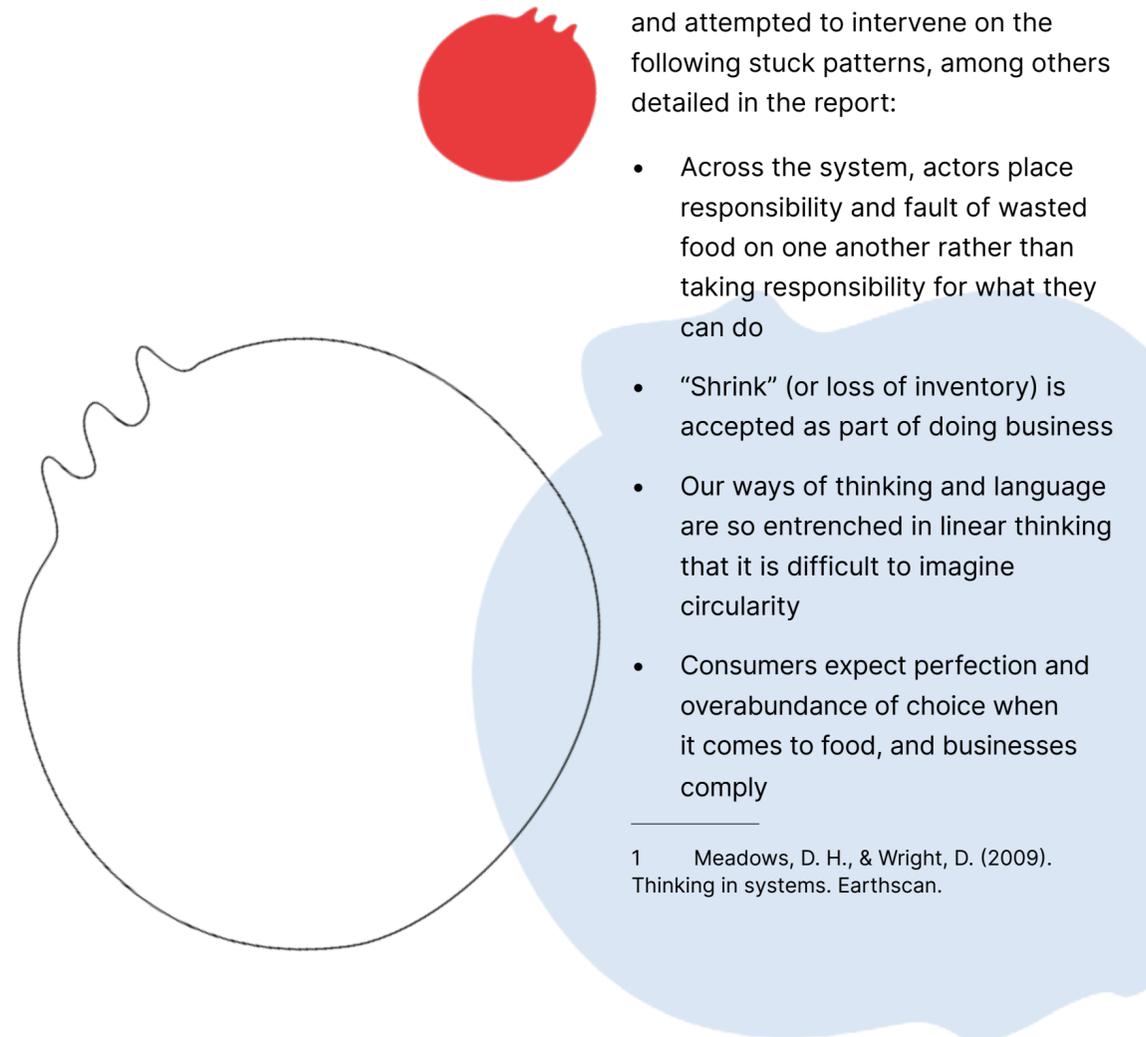
The current dominant economic structure is stuck in a linear pattern of ‘extract-produce-consume-dispose’. As our world’s biggest challenges grow increasingly complex, circularity poses promising pathways to ecological and social transformation. A major barrier to achieving a circular economy of food is the persistence of practices within the food industry that are so widespread and familiar they have essentially become invisible. In order to shift our food system, our mindsets and practices need to shift throughout the food sector, from production and operations to consumption and waste.

This report is a synthesis of the insights and learnings from the Circular Food Innovation Lab (CFIL), which undertook an innovation process to more deeply understand and experiment around the complex challenge of reducing wasted food and increasing circularity in Vancouver’s food sector.

About CFIL

The [Circular Food Innovation Lab](#) (CFIL) was a project co-led by the City of Vancouver, the Vancouver Economic Commission’s (VEC) Economic Transformation Lab, Emily Carr University of Art + Design, and 18 Vancouver-based businesses and organizations working in the food system. For 10 months, participants worked alongside design researchers from Emily Carr University to co-design and prototype potential solutions to reduce and prevent wasted food, and increase circularity.

The Circular Food Innovation Lab took place on the unceded, unsundered, and ancestral homelands of the Hə́n̓qə́mih̓ə́m and Sk̓wx̓w̓ú7mesh Sníichim speaking peoples of the xwmə̀θkwə́yəm (Musqueam), Sk̓wx̓w̓ú7mesh Úxwumixw (Squamish Nation) and sə́ilwə́təʔ (Tseil-Waututh) peoples. CFIL was funded by the Carbon Neutral Cities Alliance and Mitacs.



Stuck patterns

A key idea in working with systems is that durable and effective systems change is only possible if deeply embedded patterns can be made visible and then shifted.¹ Through systems mapping, action research and design approaches, CFIL participants identified and attempted to intervene on the following stuck patterns, among others detailed in the report:

- Across the system, actors place responsibility and fault of wasted food on one another rather than taking responsibility for what they can do
- “Shrink” (or loss of inventory) is accepted as part of doing business
- Our ways of thinking and language are so entrenched in linear thinking that it is difficult to imagine circularity
- Consumers expect perfection and overabundance of choice when it comes to food, and businesses comply

¹ Meadows, D. H., & Wright, D. (2009). Thinking in systems. Earthscan.

Prototyping: Peeling back the layers

The more we experimented, the more we were able to peel back the layers to gain deeper insights into the mindsets and structures that perpetuate the current problem, and to identify promising, high-impact interventions. We developed and iterated **9 prototypes of potential solutions**. The report provides a recap of the key learnings, insights and significant shifts that occurred from these prototypes:

1. Nourishing Staff Engagement: Collaborating to explore circular solutions and shift work culture
2. Circular Entrepreneurship: Innovating with spent grain
3. Reframe: Changing our lenses to make different choices
4. Measure What Matters: Changing actions to change values
5. Peer to Peer Network: A community, driven by purpose
6. Co-Creating Collaborative Responsibility: Shared accountability across the food system
7. Learning Journey: Place-based sensing of the system and circularity
8. Last Call: Shifting culture and practices to prevent surplus
9. Tracing Foodsteps: Improving food sorting procedures in the back-of-house

Executive Summary

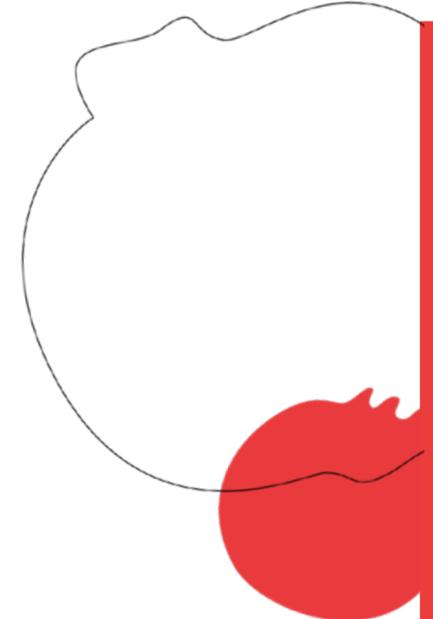
Outcomes

From prototyping:

- Businesses are now taking initiative to reframe customers' expectations of overabundance and perfection.
- Frontline food staff are innovating and building their leadership in circularity.
- New relationships have formed between businesses to further explore circular solutions.
- Businesses are making it easier for their food recovery partners to pick up donations by placing more attention and care into their food-sorting practices and spaces.
- Development of the CFIL Prototype Collection, a set of promising tools and practices for reducing wasted food and increasing circularity.

From the overall lab:

- Connecting the dots in the system by bringing businesses and government together, which not only revealed patterns in what actors had experienced as discrete unconnected causes for food wastage, but also shifted some of these patterns and assumptions.
- Illuminating roles for city governments and institutions in enabling transformation and incentivizing circularity, including policy creation and investing resources to create space for collaborative discussions, innovation and learning to happen.



[Access the CFIL Prototype Collection](#)

Includes helpful tools such as:

- **Informative display signage** to educate customers on re-valuing imperfect produce and food preservation
- **Interactive materials for increasing seasonal awareness** for staff and customers
- **Decision-making and spatial organization suggestions** for sorting unsold food
- **Measurement activities** to increase transparency and attention on measuring wasted food
- **Workshop template** to collaborate with staff to explore circular solutions

Next steps

Many participants are identifying how to scale these interventions in the form of more formalized practices and operations, as well as deeper shifts in personal mindsets and workplace culture, for both their own contexts as well as others. Some businesses continue to do higher fidelity prototyping, testing more components of these potential solutions over a longer term.

The City of Vancouver, the Vancouver Economic Commission and many of the business collaborators are continuing to shape a network focused on growing the circular economy of food in Vancouver. The network hopes to set new industry standards, continue to learn together and contribute to shifting the current culture and paradigms that perpetuate the challenge of wasted food.

An invitation: Re-patterning

Since our food system exists by design, it can be re-designed. Intervening on stuck patterns requires ongoing effort, and the report details calls to action for creating deep impact:

- Revamp work culture by building leadership, responsibility and accountability for sustainability and circularity. Embed these values in operations, products, team structure, ownership models, and so forth

- Relate to land and food as kin, treating food as a gift to be conserved, with leadership and guidance from Indigenous knowledge-keepers, other beings, and people working hands-on with food
- Celebrate and amplify what's working well, by cultivating reciprocity, ease, joy, collective experiences, care and readiness for systems change
- Embrace small and meaningful actions, which all make a huge impact in the greater picture
- Take action that connects circularity to the food recovery industry, preservation of industrial and agricultural lands, housing security, a livable wage, and other interrelated issues
- Practice seeing the system, observing how we and others are showing up to our work, what choices we are making, mapping connections, challenging assumptions (including our own), and stretching our ability to imagine something different

We invite everyone in the food system, from individual consumers to government practitioners, business owners to researchers, farmers to line cooks, produce managers to food rescuers, to see themselves as a part of the system, and therefore a part of being able to transform it. The time is now for us to collaborate, co-create, try new things, take some risks, and make an impact. So let's dig in.

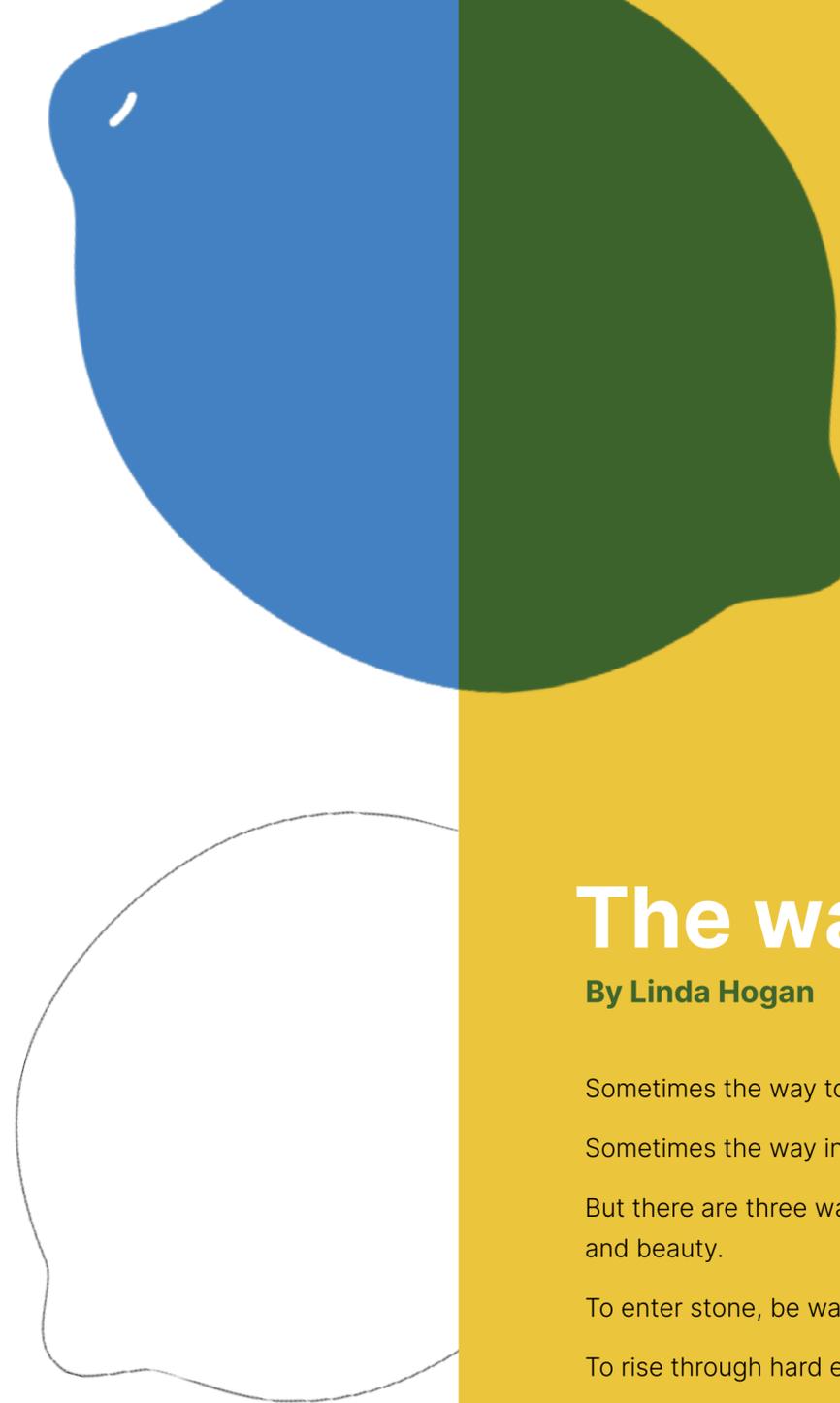
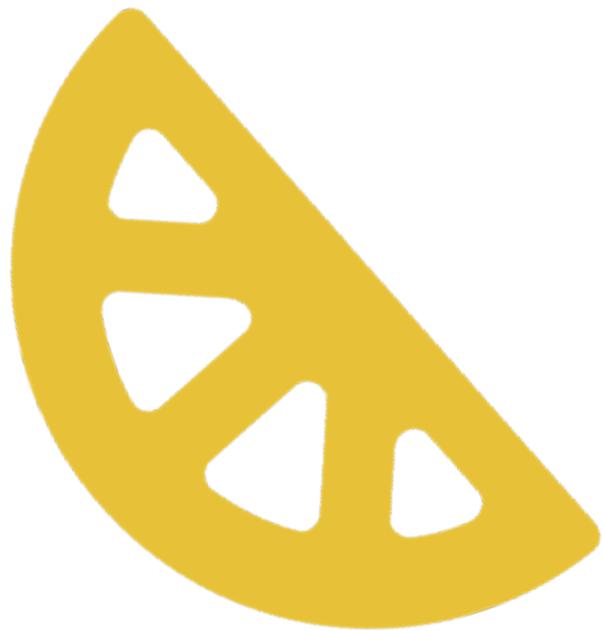
In Closing

May we continue to experiment our way to the food futures we imagine.

May we continue to peel back more and more layers, to see the complexity of our system and be able to dance with it.

May we continue to see ourselves in the system, challenge our assumptions, and take accountability for where we have agency to do something bold and different.

May we embrace new practices and processes that fuel creativity and connection to each other, food and land.



The way in

By Linda Hogan

Sometimes the way to milk and honey is through the body.

Sometimes the way in is a song.

But there are three ways in the world: dangerous, wounding, and beauty.

To enter stone, be water.

To rise through hard earth, be plant
desiring sunlight, believing in water.

To enter fire, be dry.

To enter life, be food.

Project Participants

Lab Team

Lily Raphael, Solutions Lab, seconded to Solid Waste Strategic Services - City of Vancouver

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Anthony Sullivan, IGA Robson

Craig Sheridan, Legends Haul

Emily Ko, Berrymobile Fruit Distribution

Miguel Santos, Save-On-Foods

Kendall Owen, TurF Kitslano

Andrea Scott, SPUD

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David Speight, UBC Open Kitchen

Laura Smit, Vancouver Farmers Market

Monika Chowdhry, Vancouver Farmers Market

Andrea Cárdenas, Vancouver Farmers Market

Diana McKenzie, Callister Brewing Co.

Kelly Chow, Dollar Food Manufacturing

Bryan Wong, Pacific Fresh Produce

Hugo Mak, Pacific Fresh Produce

Chef Kunal Dighe, JW Marriott

Nicholas Czekurlon, JW Marriott

Learning Journey Hosts

Louise Schwarz, Recycling Alternative

Carla Pellegrini, Food Stash Foundation

Marc Wandler, Susgrainable

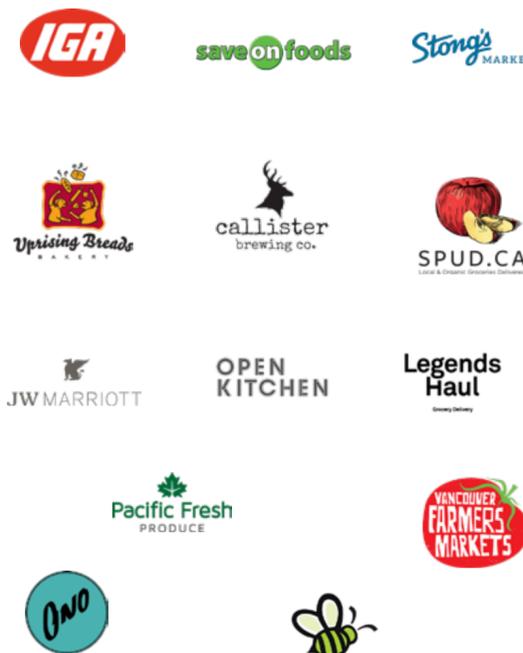
Leona Brown, Chéhchenstway Healing Garden

Guest Facilitators

Naomi Devine, Persuasive Storytelling Workshop

Martin Gooch, Value Chain Management International, Value Chain Management Workshop

Keith Renfrey, CSH Projects, Value Chain Management Workshop



Project Partners

The City of Vancouver, Solid Waste Strategic Services

Solid Waste Strategic Services (SWSS) is a branch of Solid Waste Management and Green Operations at the City of Vancouver. SWSS creates policy, plans and programs, and manages major projects supporting Transfer & Landfill Operations and the City's,

[Zero Waste 2040 strategic plan](#)

The branch works closely with Metro Vancouver on long-range planning for effective solid waste management in the region, and engages with other levels of government on zero waste policy and regulation.

City of Vancouver, Solutions Lab

The [Solutions Lab \(SLab\)](#) is a public sector social innovation lab inside the City of Vancouver that began in 2016. We work with greenest city, healthy city, climate emergency, reconciliation, and equity policies and programs. Our approach draws from design, social innovation, systems thinking, and visionary futures. We bring City staff and community collaborators together in creative, experimental, and learning-oriented processes to seek transformative solutions to some of the most complex challenges facing Vancouver.

Emily Carr University of Art + Design, The Shumka Centre for Creative Entrepreneurship

The [Shumka Centre for Creative Entrepreneurship](#) creates programs and partnerships that help artists and designers realize their ideas in the world. Since its inception in 2018, the Shumka Centre has a history of producing major social innovation and partnered research projects, including Fibreshed Fieldschool (2020-2021), the Art Apprenticeship Network (2019 - 2022) and the Circular Economies and Local Ecologies Project (2021 - 2022).

The Vancouver Economic Commission, Economic Transformation Lab

The Vancouver Economic Commission's (VEC) [Economic Transformation Lab \(ETL\)](#) is a research program developed by the VEC to prepare Vancouver's economy for global trends anticipated to impact the region within the next 15 years. By leveraging academic and industry collaborations, ETL aims to produce research that results in actionable goals, best practices, and insights that inform policy advocacy or programs to build Vancouver's economic resilience.

Gratitudes

A stylized illustration on the left side of the page. It features a large, thin-lined hand reaching upwards, holding a yellow circle. Inside this circle are four smaller, solid yellow hands arranged in a cross pattern. The background is white.

Thank you to the land and kin.

for your nourishment, shelter, teachings, curiosity and joy. Thank you to Indigenous knowledge and cultural keepers and land/water protectors who are safeguarding and reviving food systems rooted in circularity, care and well-being for all beings.

Thank you to food.

It isn't an overstatement to say that nothing would be possible without food. Thank you for fueling life, for creating togetherness, for your generosity.

Thank you to participating businesses

for your patience, for trusting us, for making time to try something new, for venturing into the unknown, for your brilliant ideas and enthusiasm.

Thank you to the project partners

for making this lab happen. Thank you for staying with it, for your openness to discomfort and growth, for your commitment to the greater good.

Thank you to the Design Team

for your courage, your openness. Thank you for showing up with a different kind of leadership, fueled by curiosity, persistence, imagination and joy.

Thank you to our funders

the Carbon Neutral Cities Alliance (CNCA) and Mitacs, whose commitments to transformative climate action and to funding innovative research enabled this work.

