

Connecting the Dots

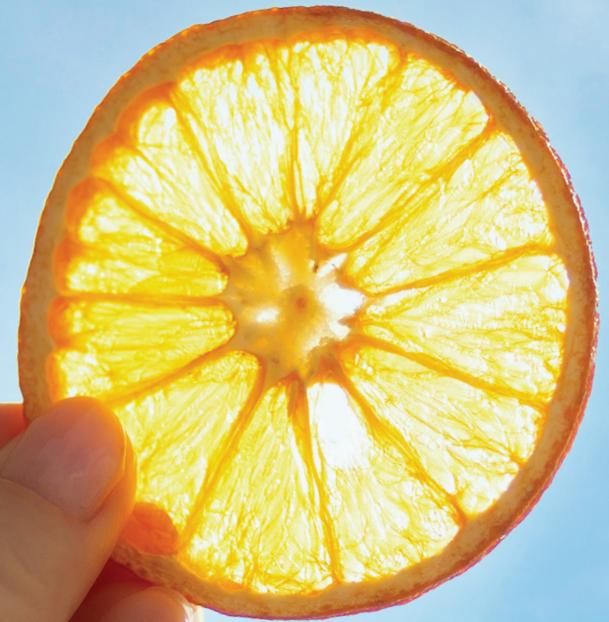
Local government and community
collaborating toward a circular future

Annual Report 2022
January 2023

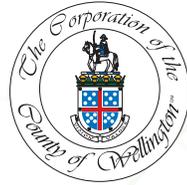
OurFoodFuture
Guelph-Wellington



**Circular Opportunity
Innovation Launchpad**



An Initiative of



Lead Funders



Corporate Funders



Delivery Partners



Moving from challenge to action

In 2018, Infrastructure Canada issued a challenge: cities were invited to submit bids to adopt a smart cities approach to improve the lives of their residents through innovation, data and connected technology. Winning submissions would receive funding to help put those ideas into action.

The opportunity ignited a bold vision in Guelph and Wellington County to tackle climate change by reimagining our food system. We would draw on our century-long strength as the place where food problems are solved to create Canada's first modern circular food economy – an essential driver for global climate action. Resources and people were mobilized, conversations and consultations were conducted across the food system, robust plans were drawn, and our proposal was submitted. Following a highly competitive process, in late 2019, Guelph-Wellington was one of just a handful of winning submissions: we were awarded \$10 Million to bring our circular ideas to life.

Our Food Future is a place-based urban-rural testbed launched in January 2020, a collaboration of more than 100 community organizations including local government, business, research, and academia. Despite challenges due to COVID-19 and redeploying some resources to address urgent food security needs during the pandemic, we have been implementing a robust circular economy in Guelph-Wellington and beyond, guided by four focus areas:

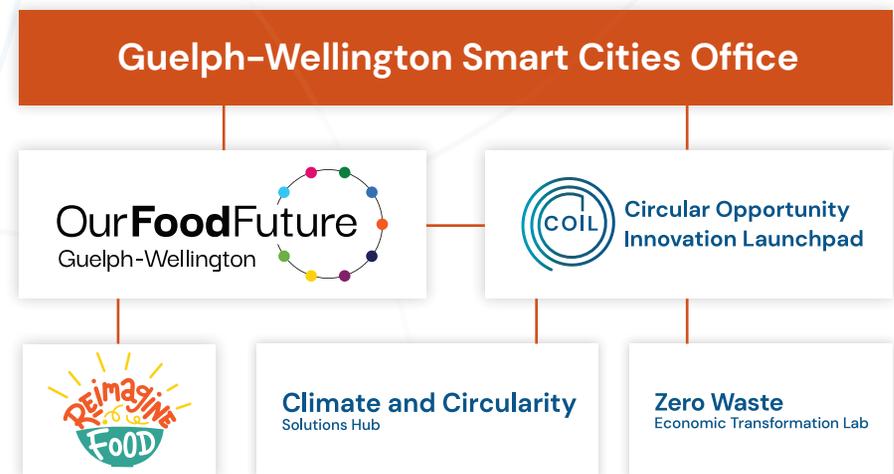
1. Reduce food waste
2. Increase food access
3. Drive circular businesses and collaborations
4. Lead systems-level change

Extensive research, engagement, pilot projects and funding dozens of community-borne circular initiatives has led to a rich repository of best practices, learned lessons, and discovered obstacles that are pinpointing waste hotspots, activating incredible

ideas, and forging new levels of collaboration amongst businesses and community agencies with a mandate for change.

The work has attracted millions of dollars in new funding, including a nearly \$5-million Government of Canada investment through the Federal Economic Development Agency for Southern Ontario (FedDev Ontario) to help launch the **Circular Opportunity Innovation Launchpad** (COIL) in April 2021. COIL is a platform and network aimed at developing, proving, and scaling transformative solutions that will move Canada toward a prosperous, low-carbon and circular economy. COIL is broadening our scope to other critical industries such as construction and demolition, where waste is considerable, with no sign of the momentum slowing down.

This annual report highlights just a few of the stories and successes that are hallmarks of this exceptional effort. It also sets the stage for long-term impact through three comprehensive action plans that together will drive the principles and practices forward, and scale these learnings for other communities across Canada and beyond to put these ideas into action.



Together, we're building a movement, and the world is watching

In 2021, the Ellen MacArthur Foundation — a global circular economy authority — reported that while moving to renewable energy sources can address 55% of global GHG emissions, if we are to achieve United Nations climate goals, it is imperative to tackle the remaining 45% by adopting circular practices in our use of land and resources.

The global food system was identified as one of five critical focus areas: their research shows that designing out waste, keeping materials in use, and regenerating farmland can reduce global emissions related to our food by 9.3 billion tonnes.

Clearly, as we face the overlapping crises of climate change, pollution and biodiversity loss as well as food insecurity and economic instability, the only way forward is a transition to a circular economy. Cities and regions are well suited to tackle these issues, and Guelph-Wellington is well known as the place where food problems are solved.

With this report, we conclude our third of four years leading Guelph-Wellington to a circular economy, and we're seeing impact and opportunity abound. The work is showing local results, scaling to other municipalities, receiving global recognition, and expanding beyond food into other critical sectors like construction, renovation and demolition.

Working together across our community has proven to be the secret recipe for success. A growing list of collaborators are stepping up with funding commitments, coaching companies eager to embed circularity into their practices, identifying waste hotspots through deep data analysis, and engaging the public to explore community-led solutions. Local governments are sharing resources and responsibilities, companies are working pre-competitively to find solutions, and charities are pooling their energies to address systemic issues that affect food security.



International circular economy organizations are acknowledging our work. An Our Food Future project co-led with the Circular Innovation Council to divert food waste from the industrial, commercial and institutional sector received Special Mention from the Milan Urban Food Policy Pact in October 2022. See story "Addressing food waste in large food operations" on page 12.

A legacy of leadership

This year, we celebrated the retirement of Barbara Swartzentruber. Barb has been Smart Cities Office's visionary leader and a passionate guiding force since day one. Her exceptional intellect, boundless curiosity, and especially an unbending belief in the power of our work to make a real difference has motivated our staff and community collaborators to be creative, consultative, and persistent.

While Barb leaves immense shoes to fill, the great news is she isn't exactly leaving — Barb will continue to be involved in the circular economy development and lend her creativity and energy to our work. For getting us here, we're grateful.



These efforts are working. In 2020–2021, nearly 87,000 tonnes of food were diverted from landfill (equal to about 575 million apples), 7,800 people saw increased access to affordable, healthy food, and enough GHG emissions were cut to remove more than 25,000 cars from the roads for a year. And this past year we have moved the dial further on all of these metrics, plus helped accelerate over 100 circular businesses across southern Ontario, rescued the equivalent of over 37,000 meals in the Industrial, Commercial & Institutional waste diversion pilot and more... clearly, we're making progress.

As we move into our final year of the \$10 Million investment in our work by Infrastructure Canada's Smart Cities Challenge,

our attention will shift to activating the action plans outlined in this report — embedding long-term systems, pursuing new funding, supporting other regions to join the circular movement, and helping our communities reimagine food for years to come.

David Messer

Executive Director
Smart Cities Office

Shifting to a Circular Food Economy



In our current food system, we tend to use a 'take-make-waste' model: we take resources from the earth, we make and market products, and when something reaches the end of its useful life — whether it's a few seconds or a few decades — we send it to landfill. Everything flows in one direction: production, processing, distribution, consumption, and ultimately, disposal.

Because this approach fails to recover the nutrients in food by-products and waste, it is expensive both financially and environmentally. In fact, if just one quarter of the food currently lost or wasted globally could be saved, it would feed 870 million people. Food systems account for up to one-third of human-linked greenhouse gas emissions. In Guelph-Wellington, one in six families experience food insecurity, and the cost of healthy food is getting further out of reach for many people. Meanwhile, half of the food we produce is thrown away. Much of that ends up in landfill, where it creates the greenhouse gases that drive climate change. These are harsh statistics we're working to improve.

Circular food systems seek to design out waste and pollution and improve production practices, value chains, and collaborative networks to keep nutrients cycling through

the system. As a result, they reduce the need for virgin inputs and potential waste. This allows the same area of farmland to feed more people, while curbing greenhouse gas emissions and reducing the pressure on municipal landfills. The circular food system we're building through Our Food Future and the Circular Opportunity Innovation Launchpad (COIL) in Guelph-Wellington works to reduce waste by keeping as much energy, nutrients, and materials as possible in play, reducing the need to use as many virgin resources.

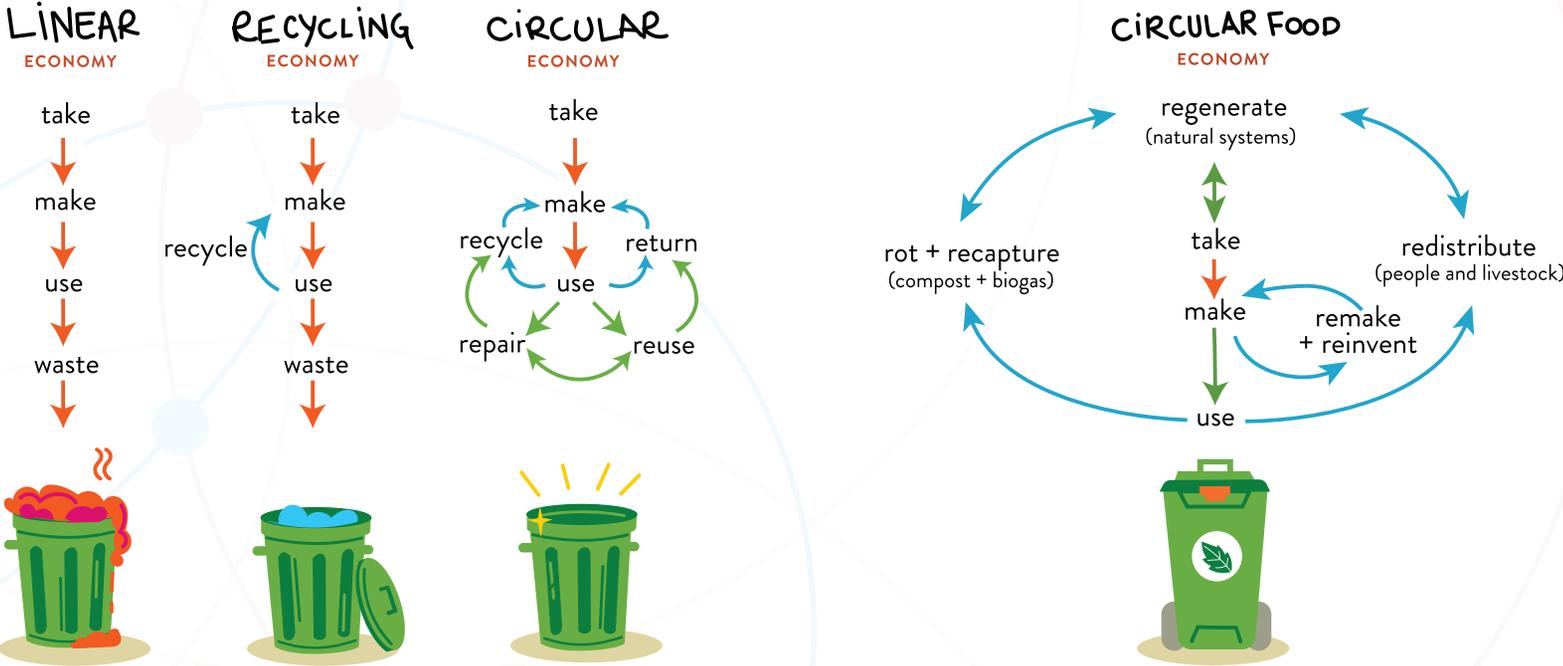
We're rethinking everything from how we produce food to how we distribute, sell, and consume it, as well as our broader responsibility to build a community where everyone has access to healthy food.

We envision a circular food economy that:

- Values, shares, and celebrates a diverse variety of affordable, nutritious, and culturally relevant foods that support a healthy, resilient community
- Inspires and creates a thriving, circular, and regenerative economy
- Respects planetary boundaries by recognizing the impact of wasted resources and the value of what's being thrown away
- Enables the systems change required for a circular regional economy, beginning with the food system, through collective knowledge, governance, and action

In three years, we've made great progress — as the following pages will demonstrate — and we're just getting started.

The circular food economy strives to shift from the current, linear system to a circular approach that keeps materials in use, and out of landfill. Learn more by watching the video at ReimagineFood.ca.



In October 2022, Our Food Future launched Reimagine Food, a campaign that invites community members to explore how we're connected through the food system, why it's ripe for reimagination and how we can adopt new habits to contribute to a more sustainable food future.

Reimagine Food aims to simplify the story of the circular food economy, create opportunities for the public to sample upcycled food products, provide information and support for reducing household food waste, and celebrate the local food culture.



Learn more at ReimagineFood.ca

Celebrating achievements: building healthy communities, reducing waste, fostering innovation

Drop by The SEED warehouse on Guelph's Huron Street on any given day and the chances are good you'll encounter a high energy group of staff and volunteers loading trucks to distribute food to local food security charities or packing food boxes, including delicious upcycled meals, to deliver directly to people's homes. If you visit their Shelldale location in the growing season, you would see families connecting and growing food in the raised beds at Shelldale Farm Park, or participating in community programs in the kitchen.

The SEED is a program of the Guelph Community Health Centre with a vision of a Guelph-Wellington community where everyone has access to healthy food. To realize this bold goal, organizers have embraced a full spectrum approach to addressing food insecurity,



while using the social enterprise model. The cornerstone of this work is Good Food Distribution, which facilitates bulk purchasing, aggregation and distribution of donated nutritious foods for more than 30 food access organizations in Guelph-Wellington. Building on this foundation is Groceries from The SEED, Canada's first sliding scale online grocery store that sells staples and fresh produce and allows shoppers to pay full retail price if they can, or a reduced cost that fits their budget. Customers of all income levels can access a free food section of the store to complement what is purchased at a discount, with more than \$10,000 of food from this section delivered weekly to customers' homes. A regular presence at the Guelph Farmer's Market provides the market's first pay-what-you-can access to fresh fruit and vegetables.

Through this work, The SEED is committed to moving past conventional approaches to addressing food insecurity and are instead embracing participatory and circular principles to redirect food from waste, reduce their carbon footprint, and improve community access to healthy food. The SEED centres an equitable and dignified experience for all customers and participants, no matter their income or walk of life. Another example of this commitment is the Upcycle Kitchen, where the team accepts donations of high-quality food from farmers and commercial food operations, including their own warehouse. These ingredients that would otherwise be wasted are instead turned into delicious meals and products, which are then sold at sliding scale prices to further increase access to food.

Our Food Future has been honoured to participate by contributing funding, expertise, ideas and promotional support. Read more about some of the other achievements of our work, and that of our partners.



The Circular Economy is Healthy Communities



126,984
Meals distributed to community members



Individuals with increased access to affordable, nutritious foods
7,836



Value of supports for NGOs
\$3,046,868



Value of edible food recovered
\$641,467

Food Equity with Dignity

Photo Credit: Toque Ltd.



Finding purpose for surplus fresh food before it spoils can be a challenge for food businesses. Guelph chef Yasi Zorlutuna saw an opportunity to prevent avoidable food waste while supporting food access. Community FEWD (Food Equity With Dignity) was granted \$75,000 in start-up funding by Our Food Future. The program uses donated food to make hot, nutritious and delicious meals, and sets up pop-up food stands to provide take away meals to communities identified as food insecure. The cost? Whatever anyone can contribute – if anything at all. Between May and October, FEWD served 6,500 meals, prevented 1,800 kgs of food from being wasted, generated \$2,350 in donations, and provided 1,000 volunteer work hours providing valuable skill development. Community FEWD offers for-profit catering, too, bringing revenue into the program and showcasing the quality of foods that can be produced – exactly the type of social enterprise we strive to create in our local circular food system.

Circular Food Systems Curriculum Connected Learning



Our Food Future worked with educators at Centre Wellington District High School (CWDHS) and John Galt Public School's "Seeds to Connect" program to support

existing circular food activities with funding and lead classroom learning about food waste, composting, regenerative agriculture practices, and the role of the circular economy. Elementary school students linked their food growing project in a hydroponic tower garden donated by Good Leaf farms, with vermicomposting and outdoor gardening. High school students piloted a circular food system challenge to integrate circular ideas and regenerative practices into designs for the outdoor space at CWDHS that includes a food and pollinator garden. Teacher Heather Cameron boasted that through the program, students in her classroom had "a greater appreciation for all the food in the store." The next iteration of this challenge will be implemented in 2023 in elementary and high school classrooms.

Sparking great ideas for food access

The Nutritious Foods Workstream funded small-scale food access initiatives in Guelph and Wellington County through a call for project ideas to encourage access to nutritious foods and help households reduce food costs. This program, called Spark Grants, awarded a total of \$51,500 to 11 initiatives across the City and County. Projects included a Community Builders Lunch & Learn program to provide food skill education and leadership skill development, expanding Guelph Food Bank's hub-and-spoke pilot project to decentralize food distribution, and Big Brothers Big Sisters Centre Wellington's youth food growing and food literacy initiative.



Building food security and community resilience in Onward Willow

Our Food Future is partnering with local neighbourhood groups to create a robust food landscape for all community members. The Shelldale Gateway in Guelph's Onward Willow Neighbourhood increases access to nutritious food for residents, brings community members together to share food skills (like growing and cooking), and builds resilience and social engagement. The project started in 2021 with a robust community engagement process, followed by rehabilitating and animating its community garden and community

kitchen in 2022 to include accessible raised beds, a composting area, and picnic tables. Residents are now creating a long-term plan for the site that best meets the needs of the community, exploring ideas like a market, four-season commercial greenhouse, year-round hydroponic growing container, outdoor pavilion, walking trail, naturalized playground, rain water harvesting demonstration, and more.



The Circular Economy is Innovative Businesses



Value saved and/or earned by shifting to more circular business practices

\$1,247,409



Business collaborations strengthening the circular supply chain

308



Value of supports for businesses and social enterprises

\$2,028,505



Businesses that established or expanded their circular practice

243

Expanding our circular reach



Zero Waste
Economic Transformation Lab

COIL launched the Zero Waste Economic Transformation Lab in 2022 to help embed circular economic practices in the

construction, renovation & demolition (CRD) sector. With funding from Co-operators, our effort has two focus areas: increase CRD diversion from landfill, and create a market demand for the recovered materials. To begin, we completed a Material Flow Analysis (see [page 28](#)) with support from Metabolic and Dillon Consulting that provides insight into how materials move through the sector, and where waste may be generated. A systems map was prepared that outlines the economic, societal, and policy hurdles that currently prevent more CRD materials from being diverted and recycled. This work identified that a lack of source-separation (separating of different materials) of materials on construction sites was a major hurdle to recycling and reuse. We funded two companies: The Better Bin Company and AET Group with \$15,000

each to test improved source-separation practices over six months. With the goal to divert more CRD materials from landfill, all practices developed and lessons learned during the pilot will be shared across the sector.

Fostering learning and leadership



Climate and Circularity
Solutions Hub

We know that a transition to the circular economy is essential to meet net-zero targets. To support this, we launched the COIL Climate and Circularity Solutions Hub. It provides expertise, research and strategy to help regional businesses and community organizations adopt circular economy actions to reduce carbon emissions and tackle climate change. The Hub's three focus areas are: create a carbon-negative innovation zone; new climate-smart circular indicators; and education, training & engagement. Already, we've launched a new Circular Leadership Program with financial support

from Desjardins, while Scotiabank's Net-Zero Research Fund has funded in part a new CE-assessment methodology research and development project to be piloted in the agriculture sector.

Scaling a Friendlier business



Demand for reusable packaging, containers and plastic alternatives is skyrocketing as the federal single-use plastics ban came into effect this year. Friendlier, launched

with support from Our Food Future programs in 2019, is Canada's fastest growing reusable container company. They work with food businesses and national grocers to introduce more sustainable practices to takeaway containers. Friendlier handles all reverse logistics including delivery, sanitization, pick-up, and refunding customer deposits, as well as sharing data with retailers to support their market research. Friendlier has been a participant in COIL's

Activate Accelerator and two COIL CoLab challenges to help them expand to new sectors including food security and cannabis.

Accelerating Circular Innovators

To create a circular economy we don't just need great ideas, we need entrepreneurs who can turn them into successful businesses. Through COIL's Activate Accelerator, Innovation Guelph is supporting circular enterprises across Ontario. Participants receive grants and financing, provided by FedDev Ontario and delivered through IOC's Harvest Impact Fund, and expert support from Innovation Guelph's circular business mentors. Participants also work through a globally connected circular economy to further strengthen their companies and help build thought leaders and ambassadors for the circular economy movement. To date, 63 companies have participated in Activate programs, and the fall 2022 program intake received 125 applications from across the province, a 391% increase from the previous cohort!



Focusing on soil health in farming



Nathan is a seasoned farmer who has seen an increase in crop loss due to heat stress, and has been keeping an eye on the emerging strains of winter cereals. Putting

two and two together, he's decided to invert his growing year and test an all-winter crop rotation, feeding the soil during the summer by using a cover crop — a key part of regenerative farming.

It's why he joined Our Food Future's Experimental Acres pilot with 14 other farms to explore climate friendly farming techniques that emphasize conservation and rehabilitation to strengthen the health of farm soil. Each farm has a unique goal, and accessed expertise, financial support, soil testing, and community building events. The Experimental Acres project will expand in 2023 and include farms in both Dufferin and Grey Counties, meeting a program goal to scale beyond Wellington County.

Setting the Table: Food Equity & Community Resilience



Held in partnership with Our Food Future, the Food System Resiliency Table, and Toward Common Ground, the 'Setting the Table' series was co-designed with the community to bring community

members, community builders, change-makers, leaders and decision-makers together to:

1. Learn about and 'experience' community resilience, food equity, and how the two topics relate.
2. Understand the role we all have in promoting community resilience and food equity where we live, work, learn, heal and play.
3. Equip participants with knowledge and skills so they can promote and create the conditions for food equity to build community resilience.
4. Inspire a movement by helping members learn about the role we play in nurturing resilience and creating the conditions for and promotion of food equity.

In addition to hosting events and discussions, \$20,000 in community funds are available to support community members interested in organizing their own events that promote food equity and community resilience.

Guelph Farmers' Market revitalization



Farmers' Markets are one of the community's oldest gathering places about food. Our Food Future partnered with the Economic Development and Tourism department to design and

implement a public call for proposals from potential partners to augment the continued success of the Guelph Farmers' Market. Our Food Future collaborator 10C was chosen to assume management of the market building and create a market that is thriving with new partnerships, with a goal that it is actively used seven days per week. 10C is leading new programming like weekday markets and fresh food vendors providing sliding-scale pricing to position healthy food, food access, and circular socio-economic principles at the centre of the market. In April 2022, the Federal Economic Development Agency for Southern Ontario awarded 10C \$709,576 to continue to improve the Guelph Farmers' Market, including a new community kitchen and expanded operations.

Addressing food waste in large food operations



Sixty-five per cent of food waste that could be eaten is produced by the industrial, commercial & institutional (IC&I) sector — restaurants, day cares, hospitals, retirement homes, grocery stores, and the like — and nearly all

of the waste ends up in landfill where it produces methane that contributes to climate change. It's currently unaffordable for most IC&I businesses who manage their own waste to divert organic waste to compost. A pilot project conceived and led by Circular Innovation Council (CIC) and funded in part by Our Food Future is creating a scalable, cooperative routing system that is helping 45 IC&I businesses across Wellington County and Guelph divert organic waste to compost at a reasonable cost. This innovative approach has resulted in the diversion of 318 tonnes of organic waste to compost, avoiding 413 tonnes of CO₂e. The pilot also connects participants to food rescue organizations, so food rescue can become a deliberate part of their waste management strategies, resulting in the recovery of over 37,000 meals.

The Pilot is a finalist for Agriculture and Agrifood Canada’s Food Waste Challenge and CIC will launch a second pilot in western Canada. The project was recognized as a global leading practice at the Milan Urban Food Policy Pact, a global network of 250 mayors committed to creating sustainable food systems.



Circular farming and the carbon economy



Agriculture is undergoing a transition. Farmers are shifting practices to align with climate goals, but these shifts may increase costs or introduce the risk of the unknown. At scale, the results of climate friendly farming are strong enough to qualify for the carbon markets – but how do the small and medium sized farms realize value from the work they are undertaking? We are developing a LEED-style framework which will allow the

carbon economy to come to the farm. By gathering indicators for regenerative and circular practices we will construct a rating system which maps to existing support programs and can provide assurance to funders that they are investing in a climate-friendly value chain. This is where the circular economy meets the carbon economy, and will be a way in which we can help our farmers thrive.

Carbon currency



Carbon credits are an emerging financial tool that will play an important role helping the transition to the net zero economy by allowing organizations that can't reduce emissions to fund transitions for other organizations

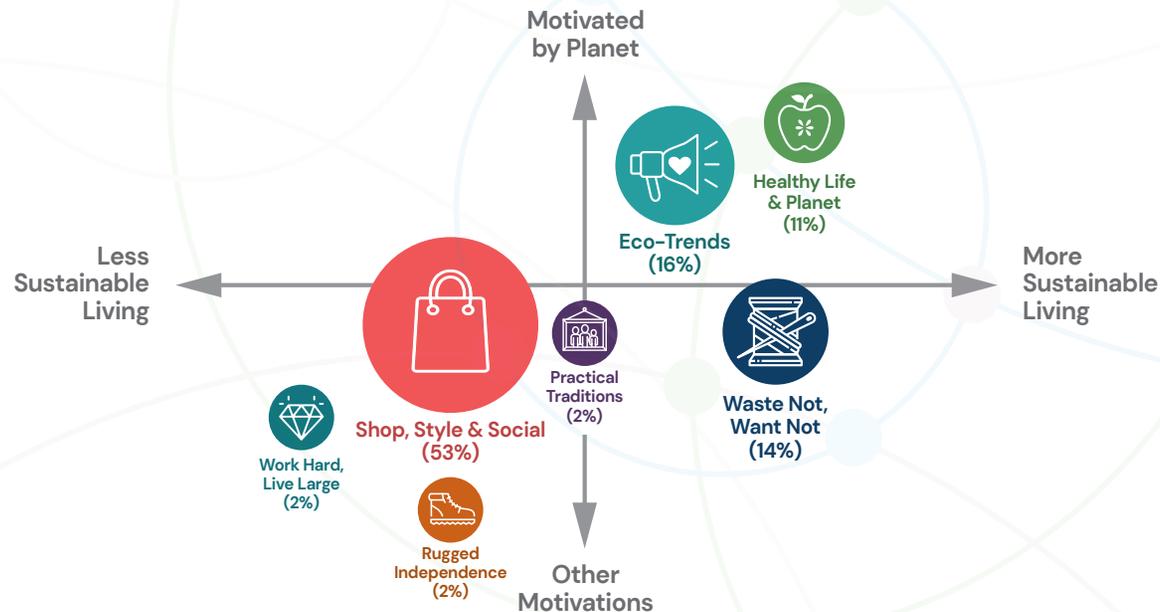
that can. But how can this model of carbon credits support climate action at the local level? Through the Carbon Currency Pilot, the City of Guelph is working with a start-up to test the use of a local digital currency to incentivize behavioural changes that reduce emissions and support the circular economy. In spring 2023, residents will be able to join the beta test to track their activities that reduce emissions, starting with transportation. The program will reward these climate positive actions with credits that can be redeemed with local circular businesses.

Understanding consumer motivations

In 2022, Our Food Future contracted OneEarth Consulting to lead research to help us understand the diverse motivations that lead people in Guelph-Wellington to engage in climate – and planet-friendly behaviours. These behaviours include supporting circular products and services, actively reducing food waste, and other sustainable actions. Through a quantitative survey and qualitative in-depth interviews, we identified four main Motivations for lighter living actions in Guelph-Wellington: Shop, Style & Social (53%), Eco-Trends (16%), Waste Not, Want Not (14%), and Healthy Life & Planet (11%). With these insights, we can better target communications to guide behavioural change.

Behavioural Insights Waste Reduction Initiative

This project seeks to understand how to apply behavioural insights to reduce household food waste with a focus on designing and testing interventions as part of the Reimagine Food campaign and Waste Action Plan. Applied behavioural science offers a practical approach to identifying the behaviours required to achieve a certain goal, understanding what is limiting these behaviours, and developing scalable solutions. Behavioural science can help reduce food waste at each stage of the food production and consumption process. A workshop and pilot project intervention is planned for 2023.



These highlights represent just a small sampling of the many stories and examples of how Our Food Future and COIL are bringing the circular economy to life across Guelph and Wellington County. Visit our websites to read more!



FoodFuture.ca



COIL.eco

Co-operators commits \$350,000 funding for ZWETL



Traditional Indigenous Medicine Bundles funded \$30,000 to support food access



Upcycled Food Certification program launches in Canada



Community Agriculture Grants announced totaling \$20,000



Spark Grants awards total \$51,500 to support local food access initiatives



Fresh Food Prescription nutrition health program funded \$30,000



Scotiabank commits \$100,000 for COIL climate action programming



Desjardins commits \$250,000 to COIL Climate and Circularity Solutions Hub



2022: The Year in Review

Jan.

Feb.

Mar.

Apr.

May

June

July

Aug.

Sept.

Oct.

Nov.



community FEWD FOOD EQUITY WITH DIGNITY

Community FEWD receives \$75,000 grant to further circular food security work



First ever soil health webinar led by Wellington County and Our Food Future



Experimental Acres regenerative agriculture pilot project launches with 15 farms representing 150 acres



Food Day Canada tour celebrates local food history



Reimagine Food launches year-long community engagement campaign



IC&I pilot receives international award from **Milan Urban Food Policy Pact**



Milestone! 100 businesses supported by COIL



Our Food Future work is presented at **COP 27 Egypt**

Three Action Plans to guide our future work

2022 marked a year of accomplishment as well as a view of our collective future.

Throughout the year, all three workstream groups — representing City and County staff and a broad range of collaborators from the food, business, community benefit and research sectors — worked on strategic planning for the next three years, framing out clear action plans until 2025.

This process involved a small group of leaders in each workstream, mapping out the goals, objectives, and some key actions to propose to a larger group. From there, a day-long facilitated session of our program delivery group added more depth and discussion to the actions, helped prioritize our efforts, and outlined implementation steps for the next three years, and well as identify key partners to move this work forward.

To help make it visual for each workstream, an illustrative 'placemat' was created to identify the strategic priorities and their connections to the work, as seen on the following pages.

The Action Plans are being highlighted in the forthcoming staff reports for the City, County, and Wellington-Dufferin-Guelph Public Health to support alignment and a community-integrated approach to their implementation.

The emphasis of the Nutritious Foods, Waste as a Resource, and Circular Business and Collaboration workstreams in 2023 will be to start implementing their strategic priorities, and some have already begun!



Nutritious Foods Workstream

Food Security Action Plan

The Nutritious Foods Workstream is a collaboration of social agencies, community groups, local government, academic researchers, and healthcare system leaders with a shared goal of increasing access to affordable nutritious foods in Guelph–Wellington. This goal can be achieved by improving physical and economic access to nutritious food, increasing opportunities for nutrition education and skill-building, and improving promotion of nutritious foods.

With food insecurity on the rise across the region, escalating food costs contributing significant stress for many people, and an overburdened healthcare system, the workstream recognizes that nutrition plays a major role in growth and development, mental health, and preventing lifestyle-related chronic diseases.

The Workstream seeks to ensure that:

- Everyone can access nutritious, affordable, and culturally relevant food
- Food is valued, celebrated, and shared
- Circular business models support regenerative farming practices
- Urban agriculture increases local food security
- Community members are informed and empowered

In June 2022, following two years of extensive research, pilot project funding, community engagement, and planning, key partners gathered in facilitated meetings to prioritize actions that will contribute to the goal. Members of Our Food Future's Business and Waste Workstreams were also in attendance.

Six strategic priorities for future food access initiatives emerged:

Strategic Priority #1:

Food Access & Healthcare

Outcome: Increased distribution and utility of healthy food prescriptions and vouchers by health and social service agencies.

Establish a regional coordinated healthy food prescription program (e.g., Fresh Food Rx, Market Bucks) where various agencies would provide prescriptions for fresh food to food insecure individuals in Guelph–Wellington, who would then obtain healthy food and access other supports to assist with preparing and consuming healthy meals.

Strategic Priority #2:

Local Food Infrastructure

Outcome: Increased food infrastructure for food storage, processing, distribution, and community building.

Implement food hub(s) that are integrated within the commercial sector. While the vision and financing for a centralized facility is being pursued, the community could leverage existing infrastructure in a hub and spoke strategy to support a variety of pick-up and distribution locations to increase access, increase the capacity of emergency food providers, and create shorter supply chains.

Strategic Priority #3: **Building a Circular Food Movement**

Outcome: Increased awareness about the importance, value, and right to healthy food for everyone

Build upon the momentum generated by Our Food Future's outreach and connections into many organizations such as schools, libraries, businesses, and communities. Partners could continue to seek opportunities to increase awareness about food system issues, support collaborative food access, facilitate individuals with lived experience to lead system change, and encourage a culture of community care.

Strategic Priority #4: **Integrated Funding**

Outcome: Coordinated funding strategy that results in reliable funding sources for local food system to support both service delivery and system innovation.

Create an integrated funding plan and advocacy strategy to support the Action Plan and future food system work in the region. This includes coordinating funding applications and designing a range of short-term and long-term funding streams that contribute to a sustainable funding model.

Strategic Priority #5: **Community Food Growing Strategy**

Outcome: Increased public land used for food growing and retail opportunities for growers.

Develop a Community Food Growing Strategy in Guelph-Wellington that explores use of public land for growing (e.g., edible landscapes), allows for food growing on a small-medium scale in non-agricultural areas, and identifies retail opportunities for growers (e.g., farm incubators).

Strategic Priority #6: **Regenerative Agriculture**

Outcome: Increased regenerative practices used in food production, with greater understanding of the value of these ecosystem services.

Encourage regenerative farming practices, build soil quality, prepare for climate-stress resiliency, and reward best practices through a mechanism which values ecosystem services and circularity.

Guelph-Wellington Food Security and Health Action Plan

Through stakeholder consultation and visioning, the following strategic priorities for future food access initiatives emerged.

6. Regenerative Agriculture

Outcome

Increased regenerative practices used in food production, with greater understanding of the value of these ecosystem services.

Connections/Relationships

- 18 urban agriculture projects funded by Our Food Future
- Food from Home = Food for Home project
- Medicine Bundles
- Cultural Meals Social Enterprise project
- Kids Get Growing
- Junction Food Network
- Wellington North-Growing Healthy Rural Communities
- Collaborative Learning Community from Seed to Plate in the Town of Erin



5. Community Food Growing Strategy

Outcome

Increased public land used for food growing and retail opportunities for growers.

Connections/Relationships

- 18 urban agriculture projects funded by Our Food Future
- Food from Home = Food for Home project
- Medicine Bundles
- Cultural Meals Social Enterprise project
- Kids Get Growing
- Junction Food Network
- Wellington North-Growing Healthy Rural Communities
- Collaborative Learning Community from Seed to Plate in the Town of Erin



4. Integrated Funding

Outcome

Coordinated funding strategy that results in reliable funding sources for local food system work to support both service delivery and system innovation.



1. Food Access and Healthcare

Outcome

Increased distribution and utility of healthy food prescriptions and vouchers by health and social service agencies.



Connections/Relationships

- Medicine Bundles Nimide Wayan project
- Farmers Market Refresh
- Onward Willow Co-Design Project
- Groceries from The SEED
- Emergency Food Home Delivery program
- Local Food Procurement for Non-Profit Programming

2. Local Food Infrastructure

Outcome

Increased food infrastructure for food storage, processing, distribution and community building.



Connections/Relationships

- Hub and Spoke Collaborative Pilot Project and Expansion
- Groceries from The SEED
- Emergency Food Home Delivery program
- Two Rivers Neighbourhood Group Community Market
- Local Food Procurement for Non-Profit Programming
- Making the University of Guelph Campus a Hub for Food Initiatives
- Kitchen Connection

3. Building a Circular Food Movement

Outcome

Increased awareness about the importance, value and right to healthy food for everyone.



Connections/Relationships

- Food Equity with Dignity (FEWD) project
- Upcycle kitchen
- Farmers Market Refresh
- Groceries from The Seed
- Guelph Film Festival Tiny Food Docs
- Making the University of Guelph Campus a Hub for Food Initiatives
- Community Builders Lunch & Learn
- Food Equity and Community Resilience Events
- Food System Resiliency Table

Waste as a Resource Workstream

Waste as a Resource Action Plan

The Waste as a Resource Workstream is made up of participants from the Smart Cities Office, the City and County Solid Waste and Environmental Services Departments, and various organizations involved with waste reduction and circularity in the region. The goal of the Waste as a Resource Workstream is to increase circular economic revenues by 50% by recognizing the value of waste.

The objectives of the Waste as a Resource Workstream are:

- To ensure that communities understand the true cost of food waste
- Develop new collaborations to foster environmental and economic benefits across the supply chain
- Support innovative business models to reduce waste
- Conduct research, demonstration projects, and generate data to drive change

In October of 2022, key partners gathered in facilitated meetings to prioritize actions that will contribute to the goal of reducing food waste and repositioning waste as a resource. Members of Our Food Future's Nutritious Foods and Business Workstreams were also in attendance. During these meetings, partners discussed opportunities with momentum and synergy that could be priorities over the next three years.

Five strategic priorities for future food waste reduction initiatives were advanced:

Strategic Priority #1: **Food and Food Waste Flow Analysis – Opportunities for Intervention**

Outcome: Increased understanding of food waste hotspots in the system, and a comprehensive strategy and resources to target interventions at those hotspots.

Seek funding to continue to develop pilot projects in three intervention areas identified in the 2021 Food and Food Waste Flow Study. Focus on building out primary material flow data collection methodology, and a mechanism for updating the data.

Strategic Priority #2: **Behaviour Change Strategies in Household Food Waste Interventions**

Outcome: Food waste programming incorporates validated behaviour change strategies to reduce household food waste and improve diversion.

Develop an understanding of behaviour change strategies (Behavioural Insights, Motivations for Lighter Living, etc.) and how they can be applied to food waste reduction and diversion programs. Implement a pilot program targeted at reducing food waste, developed using behavioural insights.

Strategic Priority #3:

Local Food and Diversion Infrastructure – Secondary Distribution Network and Hubs

Outcome: Increased capacity and collaboration in food rescue logistics, processing, and storage.

Leverage ongoing work and learnings from the Nutritious Food Workstream and Guelph–Wellington’s Food Hub Study to further understand the barriers and benefits of developing additional local food infrastructure and capacity. Build a model of a feasible and sustainable secondary distribution network and hub(s).

Strategic Priority #4:

Leverage Data and Technology to Support Waste Interventions

Outcome: Household and IC&I waste data can be collected accurately and efficiently, and used to provide timely feedback on waste intervention efficacy.

Work with Artificial Intelligence companies on a pilot to assess food waste at the time of curbside collection to link interventions to changes in food waste behaviour. Establish partnerships with the business sector to pilot sensors that can help provide reliable, timely data on the waste produced by businesses, and leverage that data to test behavioural and economic strategies to encourage waste reductions by participating businesses. Continue the piloting of local carbon currency technology as a strategy to encourage sustainable living behaviours among residents and build market share for circular businesses and products.

Strategic Priority #5:

Waste to Value: IC&I Sector Innovations and Interventions

Outcome: The IC&I has efficient and economically feasible options for management of food waste and the infrastructure required for connecting with other businesses and organizations to evaluate repurposing or food rescue opportunities.

Map out further objectives for improving food waste diversion and management in the IC&I sector. Work with businesses to identify potential clean waste streams that could support business innovation where waste can be transformed into a resource.

Waste as a Resource Workstream Development

Through stakeholder consultation and visioning, the following strategic priorities emerged to contribute to a circular, waste system.

1. Food and Food Waste Flow Analysis – Opportunities for Intervention

Outcome

Increased understanding of food waste hotspots in the system, and a comprehensive strategy and resources to target interventions at those hotspots.

Connections/Relationships

- City of Guelph Solid Waste Management Master Plan
- City and County Solid Waste Audits
- R-Purpose Circular Mindset and Food Loss and Waste Prevention
- Geospatial Mapping – Waste, Rescue & Processing Sites
- Behavioural Insights Pilot
- COIL Co-Lab
- IC&I Pilot



5. Waste to Value: IC&I Sector Innovations and Interventions

Outcome

The industrial, commercial and institutional sector has efficient and economically feasible options for management of food waste and the infrastructure required for connecting with other businesses and organizations to evaluate repurposing or food rescue opportunities.

Connections/Relationships

- R-Purpose: Circular Mindset and Food Loss and Waste Prevention
- Food Material Flow Study
- Geospatial Mapping – Waste, Rescue & Processing Sites
- ReSource Exchange Marketplace
- Re(Purpose) Incubator



2. Behaviour Change Strategies in Household Food Waste Interventions

Outcome

Municipal food waste programming incorporates validated behaviour change strategies to reduce household food waste and improve diversion.

Connections/Relationships

- City of Guelph Solid Waste Management Master Plan
- City and County Food Waste Audits
- County Curbside Green Bin Collection
- Residential Waste Data Challenge
- Circular Meal Pilot
- Reimagine Food Campaign



3. Local Food and Diversion Infrastructure – Secondary Distribution Network and Hubs

Outcome

Increased capacity and collaboration in food rescue logistics, processing and storage.

Connections/Relationships

- Geospatial Mapping – Waste, Rescue & Processing Sites
- Upcycle Kitchen (the SEED)
- Food Material Flow Study
- Industrial, Commercial & Institutional Food Loss Waste Pilot



4. Leverage Data and Technology to Support Waste Interventions

Outcome

Household and IC&I waste data can be collected accurately and efficiently and used to provide timely feedback on waste intervention efficacy.

Connections/Relationships

- City and County Food Waste Audits
- Behavioural Insights
- Food Material Flow Study
- Geospatial Mapping – Waste, Rescue & Processing Sites
- IC&I Food Loss Waste Pilot



Circular Businesses and Collaborations Workstream

Circular Business Action Plan

The Circular Business and Collaborations Workstream is made up of participants from the Smart Cities Office, the City and County Economic Development Departments, and various organizations involved with business development in the region. The original goal of the Circular Businesses & Collaborations Workstream was to create 50 new circular businesses and collaboration. This has been far exceeded and has led to additional funding to create the Circular Opportunities Innovation Launchpad (COIL) and the Zero Waste Economic Transformation Lab (ZWETL).

The objectives of the Circular Businesses & Collaborations Workstream are to ensure that:

- Businesses collaborate to create circular supply chains
- Regional business innovation is a living lab for new circular business models
- Businesses use circular economy principles to transform the regional economy
- Supports are available to accelerate and scale circular business ideas

In October 2022, key partners gathered in facilitated meetings to prioritize actions that will contribute to the goal of creating a circular food economy that inspires and creates a thriving, circular and regenerative economy. Members of Our Food Future's Nutritious Foods and Waste as a Resource Workstreams were also in attendance. During these meetings, partners discussed opportunities with momentum and synergy that could be prioritized over the next three years.

Four strategic priorities for future circular businesses and collaborations initiatives were advanced:

Strategic Priority #1: Disrupting Business as Usual

Outcome: The mission is to support the circular transition, innovation, and systems change urgently required through funding, education, mentorship, networks, connections, and impact measurement. The vision is for circularity to become the norm for truly sustainable and successful enterprises.

Continue to fund programs in innovative ways and offer circular economy curriculum with experts from around the world while being an advocate and partner with government and industry leaders in circularity.

Strategic Priority #2: Building Circular Infrastructure & Markets

Outcome: The mission is to build a strong, supportive, and thriving infrastructure of platforms, standards, certification secondary markets, as well as policy and systems changes that uphold the circular economy across multiple sectors. The vision is for circularity to be a business model that is supported by investment, policy, viable markets, and scaling opportunities.

Through facilitating new connections, investments, being an urban-rural testbed for circular solutions, and strengthening consumer awareness and demand for circular products, we will use innovative circular approaches as a climate-smart, data-driven business model that drives policy and new partnerships.

Strategic Priority #3:

Circular Understanding & Knowledge Sharing

Outcome: The vision is that circularity will be embedded as the standard way of doing good business, and that the tools and resources are available for all enterprises to move from principles to practice. The mission is to share the necessary tools and resources that empower individuals, enterprise, and government to adopt or support circular practices.

Build a growing circular economy curriculum with expert contributors from around the world, and offer a public circular economy certification to make content more accessible and transferable to business integration and/or general interest. Collect and share impact measurement data and analysis of programs and resources, build a strong pipeline of circular enterprises across supply chains, promote circular business models in procurement circles, and lead conversations about the circular economy through speaking engagements, media requests, social media, newsletters, and web content.

Strategic Priority #4:

Financing the Circular Economy

Outcome: The vision is to build sustainable social finance structures that invest in communities, our planet, and our future generations. The mission is to finance the circular economy so that it is a viable and growing alternative to the take-make-waste economy.

Create community-led financial systems that support local economic resilience and produce direct impact back into the community, engage with and draw on financial support from conventional financial ecosystems (financial institutions, venture capital), and support business expansion across the country through COIL national network, procurement and sales growth support, and export-readiness with Trade Commissioners Service.

Business Workstream Development

Through stakeholder consultation and visioning, the following areas of focus emerged to contribute to a circular, business ecosystem.

1. Disrupting Business as Usual

Outcome

More support for disruptive technologies and enterprises that will accelerate the transition to a climate-smart circular economy.

Connections/Relationships

- Program delivery partners (Smart Cities Office, Innovation Guelph, IOC, Anthesis Provision)
- Front Doors (Chamber, Biz Centre GW, Wood Centre, LEDC)
- Funder (FedDev, ISED, Corporate)
- International CE experts, practitioners and academics
- CE Ecosystem - Circular Innovation Council, Circular Economy Leadership Canada, etc.



4. Financing the Circular Economy

Outcome

More community-supported and purpose-driven finance models for the circular economy.

Connections/Relationships

- IOC Shared Space/Harvest Impact
- Social impact networks (Social Innovation Canada, Catalyst Community Finance Initiative, etc.)
- Financial institutions, VC firms
- Trade Commissioner Service
- Ivey Business School - Centre for Building Sustainable Value
- COIL National Network



2. Building Circular Infrastructure & Markets

Outcome

Make circular products and purchasing models the mainstream standard.



Education



Policy



Funding



Platforms



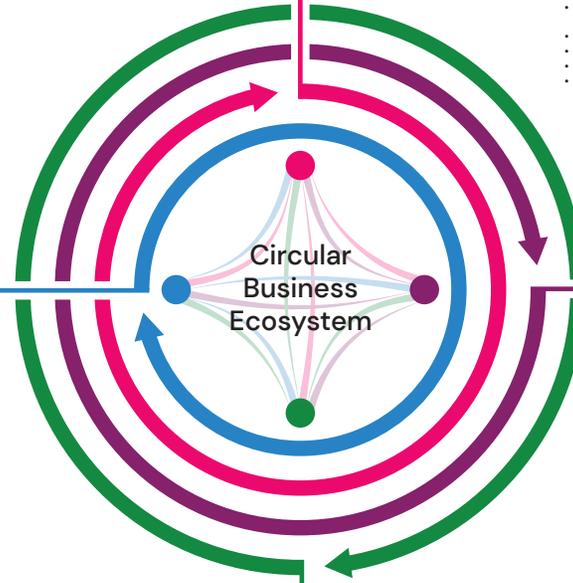
Connections



Certification

Connections/Relationships

- Program Delivery Partners
- Standards developers and authorities
- National grocery chains
- Financial institutions, VC, angel investors, etc.
- City of Guelph interdepartmental support - Ec Dev, Solid Waste Management, etc.
- Business Development support at municipal, provincial and federal levels (e.g. Ec Dev offices, Chambers, Community Futures, Boards of Trade, etc.)
- Environment & climate leaders & policy makers
- Arrell Food Institute, University of Guelph
- Ivey School of Business - Centre for Building Sustainable Value & Innovation North
- COIL National Network



3. Circular Understanding & Knowledge Sharing

Outcome

Generate circular understanding and knowledge-sharing.

Connections/Relationships

- Program delivery partners and Front Doors
- Global practitioners and academics
- Common Approach (Pathfinder Project) and adoption of impact measurement and management practices, including aligned software tools
- COIL National Network



Expanding Beyond Food: Our Circular Future is Possible

Guelph-Wellington is at the international forefront of creating a more circular food system that can be modeled not only in other Canadian communities, but in cities around the world. Circularity is a unifying factor that has brought our community together for a common mission. However, the links between a circular approach, climate action, and local food are not always clear, and it can be a challenge imagining the transformative impact of Our Food Future and COIL. Critical to the long-term success and impact of this work will be a shared and unified vision.

Visualizing the future can help us expand our sense of what is possible. Possibilities that build on, scale or are alternative to the present not only delight and inspire us, but are strategic and smart for shaping our next steps, and resilient cities of the future. This includes developing effective engagement and behaviour change strategies, and creating viable visions of possible futures to mobilize action. We are engaging the power of the imagination to see the future possibilities for Our Food Future and COIL as they relate to regional circular economies.

In partnership with One Earth, Metabolic and other community collaborators, we are developing whole system visualizations of Our Food Future and COIL that highlight key achievements of the initiative through profiling impact stories, imagined futures, and revealing their interconnections. These visualizations reinforce how these stories advance the three core goals of Our Food Future: increasing affordable and nutritious food, reducing wasted food, and seeding new circular businesses and collaborations.

On the following pages we present two examples of system visualizations that are informing our work. Over the coming months we will release further visualizations that highlight some of our major place-based initiatives, and the future state that we seek to achieve by 2025.

Alongside our growing group of collaborators, we will dive into each of these elements to explore and visualize a 'day in the life' of a community member with these initiatives and how it would impact them, their community, and the climate. A tangible example is the Fresh Food Prescription collaborative program, which received funding this year from Our Food Future (see feature on next page).

Our visualization will take away the mystery of how a program like this can contribute to significant change by showing what it is like to receive the prescription, fulfill it through a farmers market such as the Guelph Farmers Market or front-door delivery through Groceries from the SEED, and connect into a community support network for encouragement and support along the way.

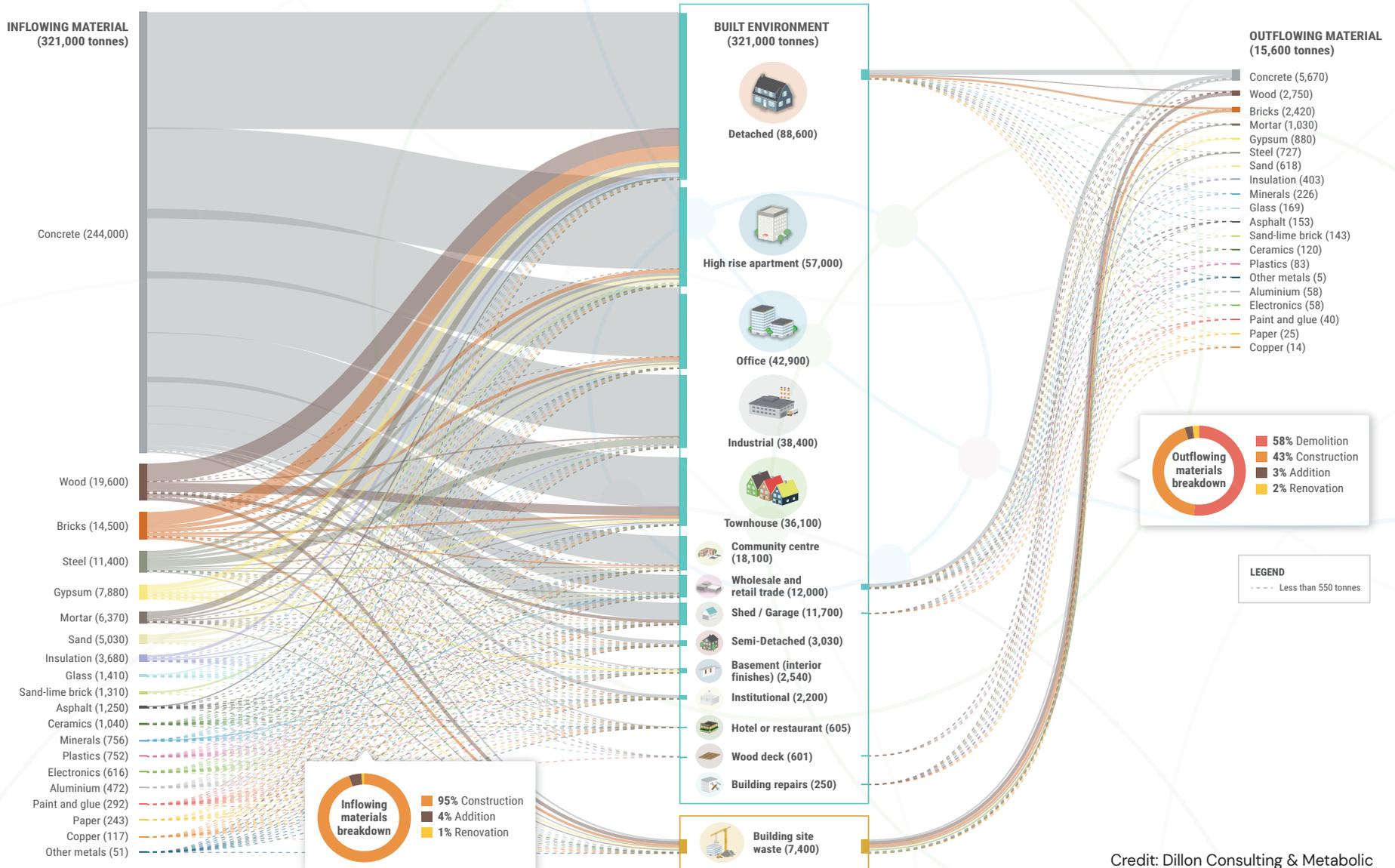
Visualizing the impacts of fresh food prescriptions

The future of healthcare includes a more integrated approach. In the Fresh Food Prescription pilot led by The SEED and supported by Our Food Future, doctors and health care providers write prescriptions for free fruits and vegetables to people with diet-related diseases like diabetes. The pilot has demonstrated a reduction in severity of food insecurity for community members, and participants who used over 50% of their vouchers reported an average increase of eight times per week for fruit consumption, and seven times per week for vegetable consumption.



Visualizing material flows and waste in the construction industry

This Material Flow Analysis traces waste in construction and demolition activity. Methodologies like this one, also used to define waste hotspots in the food system, will help business sectors identify and mitigate waste.



Credit: Dillon Consulting & Metabolic

Collaborators





126,984

Meals distributed to community members



Individuals with increased access to affordable, nutritious foods

7,836



Acres of land piloting regenerative agriculture practices

150



Data sets centralized in the Food Future Data Hub

60



Stakeholders engaged in our programs

1,079



New funding leveraged

\$17,136,507

Our Impact 2020-2022



Circular Opportunity Innovation Launchpad



Value of inkind contributions

\$1,772,598



Value of supports for NGOs

\$3,046,868



Value of supports for businesses and social enterprises

\$2,028,505



Value saved and/or earned by shifting to more circular business practices

\$1,247,409



Value of edible food recovered

\$641,467



Businesses that established or expanded their circular practice

243



Business collaborations strengthening the circular supply chain

308



New products and services from diverted food waste

23



Tonnes of food waste diverted, upcycled or recycled

86,458



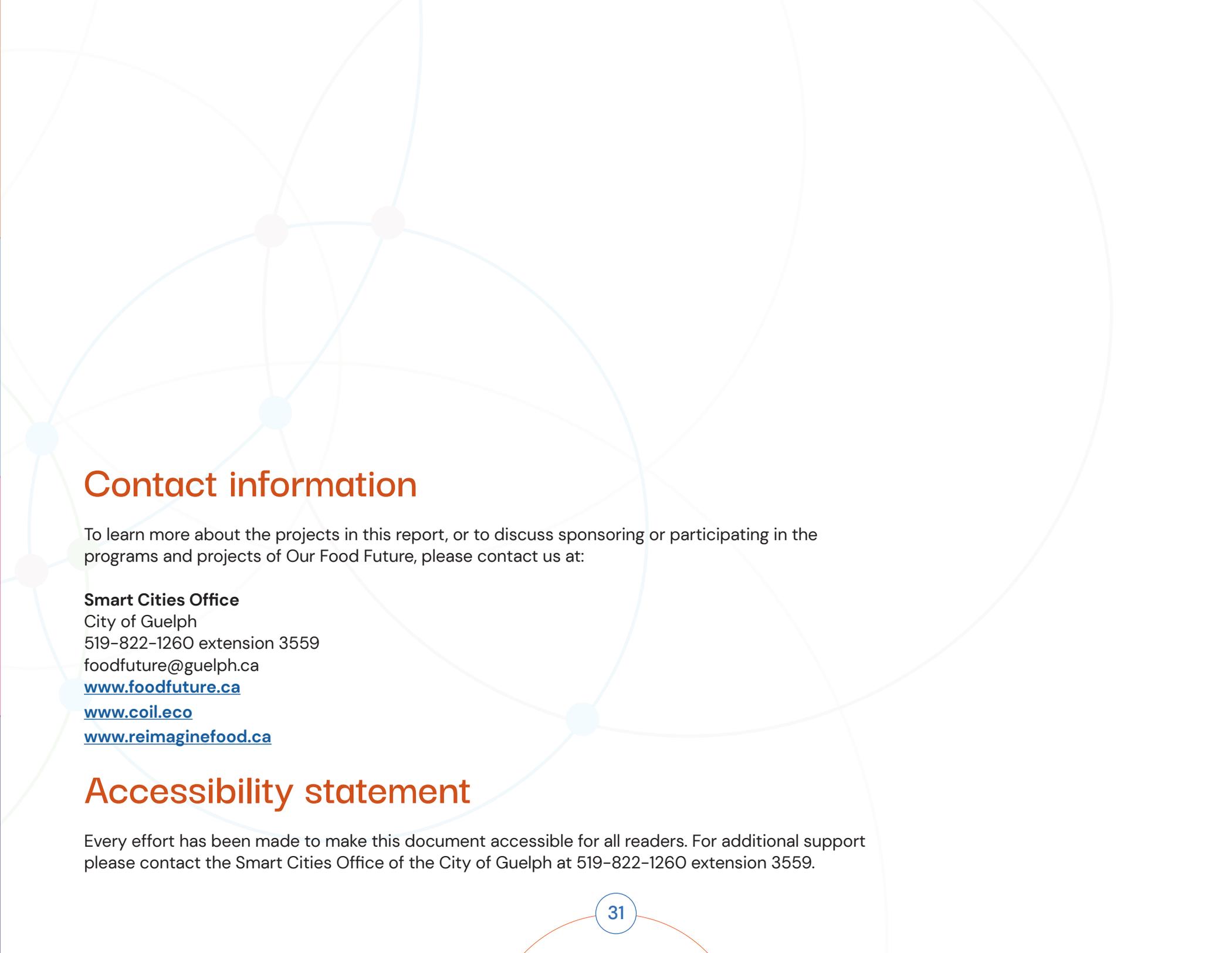
Tonnes of food upcycled to new products

75,567



GHG Emissions prevented

116,419 tonnes



Contact information

To learn more about the projects in this report, or to discuss sponsoring or participating in the programs and projects of Our Food Future, please contact us at:

Smart Cities Office

City of Guelph

519-822-1260 extension 3559

foodfuture@guelph.ca

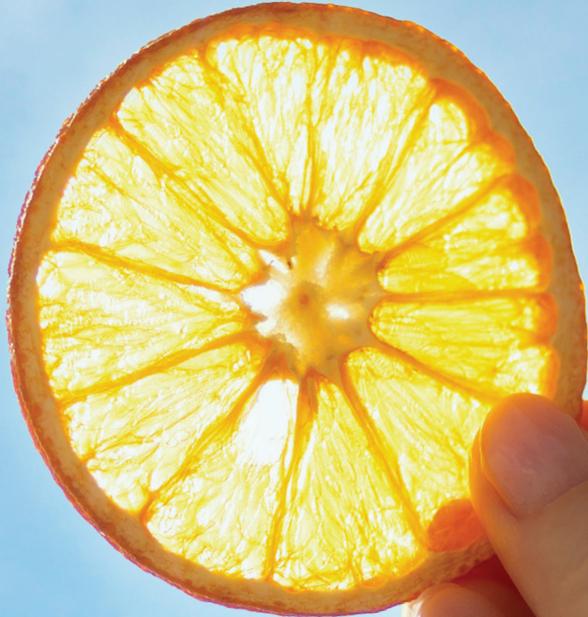
www.foodfuture.ca

www.coil.eco

www.reimaginefood.ca

Accessibility statement

Every effort has been made to make this document accessible for all readers. For additional support please contact the Smart Cities Office of the City of Guelph at 519-822-1260 extension 3559.



Our FoodFuture

Guelph-Wellington



Circular Opportunity
Innovation Launchpad

