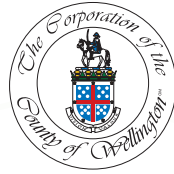


# Our circular future

Midterm Report  
January 2022



## An Initiative of



## Lead Funders



Federal Economic Development  
Agency for Southern Ontario

## Delivery Partners



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# Foreword

## A global transformation has begun – and Guelph-Wellington is leading the way.

In 2020, Guelph-Wellington officially launched Our Food Future: an ambitious undertaking to build a circular food economy. Supported by \$10 million in funding from Infrastructure Canada's Smart Cities Challenge, we set out to reimagine how our community produces, distributes, sells, and consumes food.

It's important work locally. Both the County's and the City's strategic plans prioritize people and sustainability. By creating a more circular food system, we're strengthening our community, ensuring greater access to good nutrition and taking action to address the climate crisis. This work has become even more relevant as our community recovers from the profound effects of the COVID-19 pandemic.

Transforming food systems is also important globally. In August 2020, the United Nations' Intergovernmental Panel on Climate Change released a landmark report warning that the world cannot avert a climate crisis unless we rapidly transform our food systems. Meanwhile, a recent EAT-Lancet Report concluded that feeding a future population of 10 billion people a healthy diet within planetary boundaries will require transforming eating habits, improving food production, and reducing food waste.

Guelph-Wellington is on the forefront of this change. The innovations we're creating and the lessons we're learning here can inform and inspire change around the world and advance progress towards the UN's Sustainable Development Goals.

But food is just the beginning. We believe embracing a circular approach more broadly is good for the planet and good for our communities.

That's why we launched the Circular Opportunity Innovation Launchpad (COIL) in 2021. This network aims to create, prove, and scale transformative solutions in both the food and environment sectors, helping move Canada toward a more sustainable, circular economy.

We're proud to see how businesses, local organizations, academic institutions, individuals, and municipal governments have come together to make this possible. Collectively, we're making significant strides towards more sustainable and equitable systems and a resilient, forward-looking community.

Sincerely,



Mayor Cam Guthrie  
City of Guelph



Warden Kelly Linton  
County of Wellington



# Our world, our food system



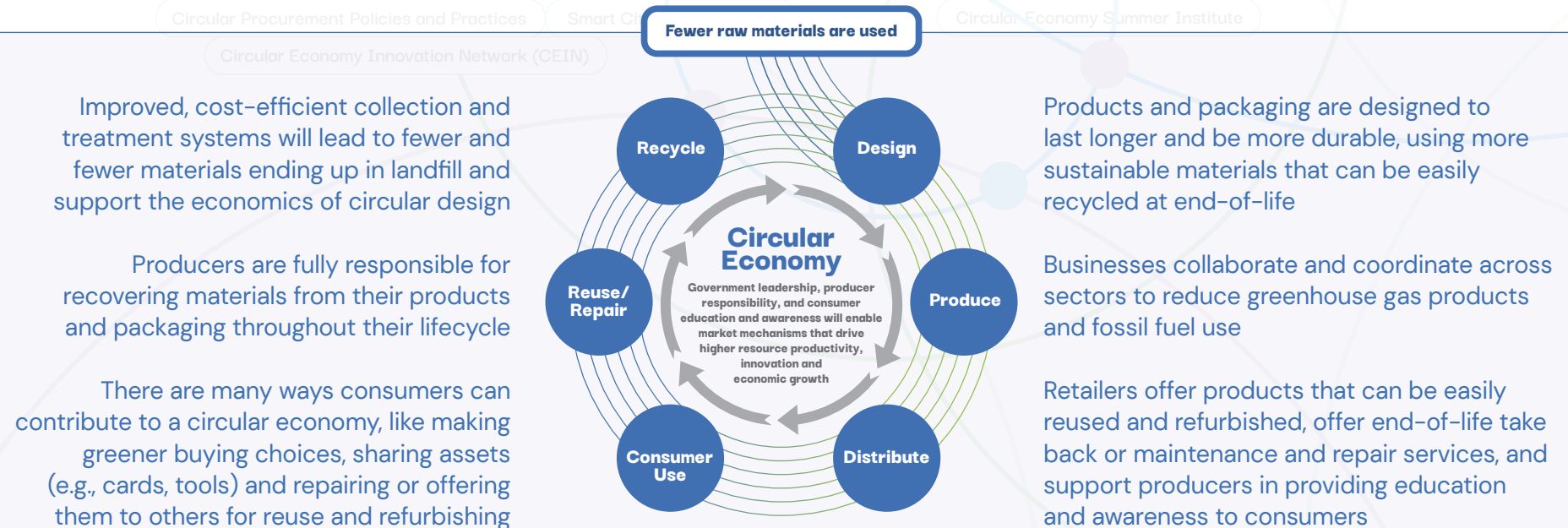
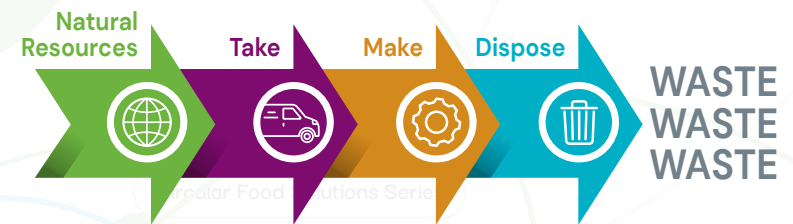
# Our Food Future: cultivating a circular framework

Circularity lies at the heart of Our Food Future and Circular Opportunity Innovation Launchpad. Our Food Future's goal is to create a circular food system in Guelph-Wellington that eliminates waste by keeping as much energy, nutrients, and materials as possible cycling through the system — and generating value as a result. We're rethinking everything from how we produce food to how we distribute, sell, and consume it.

COIL extends that thinking across southern Ontario and even further afield, focusing on the nexus of the food and environment sectors.

The current food system is based on a linear model that flows in one direction: production, processing, distribution, consumption, and disposal. Because this approach fails to recover the nutrients in food by-products and waste, it's expensive both financially and environmentally.

Circular food systems take a different approach. They seek to design out waste and pollution. They seek to 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 reduce the waste that must be disposed of. This allows the same area of farmland to feed more people, while curbing greenhouse gas emissions and reducing the pressure on municipal landfills.



Circular food systems also go beyond food production and manufacturing. This approach challenges us to innovate and grow our food economy with equity and dignity, to question and address issues of food access, and to learn about and relate to our neighbours locally and globally through knowledge exchange and celebration.



## A movement with worldwide momentum

It's an urgently needed transformation. The global food sector accounts for **a third of the world's greenhouse gas emissions**. It's also the biggest cause of biodiversity loss and the biggest user of water on the planet.

In the two and a half years since we launched Our Food Future, momentum around circular economy principles has accelerated. For example, Canada's largest trading partners are making major investments into the circular economy, including [China](#) (US\$468 billion by 2024) and the [E.U.](#) (€10 billion by 2023).

Major food corporations — including General Mills, McCain Foods, and Danone — have committed to creating more sustainable and circular supply chains, and in the recent federal election, we saw all three of Canada's main national parties referencing the importance of a circular economy.

Through Our Food Future and COIL, Guelph-Wellington has positioned itself at the forefront of this global movement. Our efforts have been featured in reports at the World Economic Forum and in multiple panel discussions at the World Circular Economy Forum. We're also working with our peers across the country, the Federation of Canadian Municipalities, and other organizations to develop national circular economy strategies that build on our work.



# Supporting the global shift to sustainability

Creating a more circular food system will create plenty of local benefits. But it's also going to contribute to the UN's Sustainable Development Goals (SDGs).

In 2015, all UN member states adopted these 17 goals as a universal call to action to end poverty, protect the planet, and improve the lives of everyone, everywhere. Sustainable development blends and balances social inclusion (people), environmental protection (planet), and economic growth (prosperity), meeting the needs of the present without compromising the ability of future generations to thrive.

Some of the goals have obvious links to food systems, such as zero hunger or good health and well-being. However, each SDG connects to food in one way or another. For example, reducing inequalities includes improving access to affordable nutrition. Climate action includes reducing carbon emissions from agricultural sectors. And quality education can't happen without well-fed students.

Indeed, the UN has recognized just how powerful food systems can be in achieving those goals. In September 2021, they convened their first-ever Food Systems Summit — a landmark event that saw more than 150 countries commit to addressing hunger, climate change, poverty, and inequality by transforming the way they produce, consume, and think about food.

That's exactly what we're doing with Our Food Future and COIL.



# Community at the core: Our history



Government of Canada announces Smart Cities Challenge



Our Food Future is shortlisted and awarded \$250,000 to further develop its vision



COVID-19 recovery plan **Grow Back Better** provides community programs, funding and business supports



Harvest Impact social finance fund launches



Our Food Future supports **Emergency Food Home Delivery** during pandemic



**Food Future Data Hub** launches to provide access to centralized, robust data set



## Visioning Our Food Future

## Bringing our Vision to Life

2017

2018

2019

2020

Nov.

April

June

May

Oct.

Jan.

May

June

August

Oct.

Nov.

**OurFoodFuture**  
Guelph-Wellington

Guelph-Wellington submits **Our Food Future**, a bold vision to build a modern circular food economy



Guelph-Wellington is awarded \$10 million!



Unique governance model and leadership team established



740 Kids **Get Growing** gardening kits distributed budding backyard gardeners

**PROVISION COALITION**  
MAKING FOOD SUSTAINABLY

**R-Purpose** and **R-Purpose Micro** business and social enterprise coaching program launches



Community and sector collaboration platform **Kitchen Table** launches



World's first **fully circular restaurant meal** celebrates unique food business partnerships



Our Food Future named a **top recovery project in Canada** by Future of Good



Our Food Future featured in **World Economic Forum's PACE Report on Food**



Cohort of 40 enterprises complete **Seeding Our Food Future** program



**Circular Opportunity Innovation Launchpad** – launches as parallel program to Our Food Future, with \$5 million FedDev funding



**Regenerative Agriculture** survey report published



COIL launches **ReSource Exchange** marketplace



COIL launches **Activate Circular Accelerator** program



COIL launches **Re(Purpose) Incubator**



Joined **National Zero Waste Council**



**Community Food System Resiliency Table** convenes

## Visioning COIL

2021

January



**Cultivating Community & Connections** progress report released

Feb.

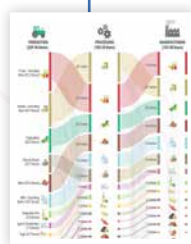
**Guelph-Wellington Urban Agriculture Challenge** granting program winners announced

March



**Groceries from The SEED** pay-what-you-choose online grocery store launches

April



**Food Waste Flow Material Study** phase 1 released; funding announced for phase 2

May



COIL launches **Circular Economy Digital Passport**

July



COIL launches **Circulate Co-Lab Challenge #1**

August



**Experimental Acre** Pilot Project launched in partnership with Arrell Food Institute at University of Guelph

September



Our Food Future featured at **World Circular Economy Forum**

Oct.



**Guelph-Wellington Food Environment Assessment** completed

Nov.

Dec.

## A shared circular vision

In 2018, a group of community stakeholders imagined a food system that would recognize the value of waste, create space for businesses to grow and adapt their operations, and ensure everyone had access to healthy, nutritious food. From those discussions, Our Food Future was born: a bold initiative that aims to create a circular food economy here in Guelph-Wellington.

Now we're making it happen, thanks to the support of Infrastructure Canada's Smart Cities Challenge funding, local partners, and dedicated community members. Today, the City of Guelph and the County of Wellington are working alongside community groups, businesses, industry associations, NGOs, post-secondary institutions, research institutes, public agencies, and utilities through Our Food Future.

Together, we are redesigning our economic system. We are mobilizing organizations towards sustainability and adapting our processes to live within planetary boundaries. We are supporting a prosperous, regenerative economy that uses innovation, data, and collaboration to drive change.

When we first started planning Our Food Future in 2018, we worked with our community partners to establish nine initial Pathfinder projects:

- [Assess the Guelph-Wellington food environment](#)
- Create a [circular food security and health action plan](#)
- Establish a [circular food economy innovation hub \(CFE iHub\)](#)
- Coordinate a [Harvest Impact Fund funding and financing ecosystem to support circular enterprises](#)
- Foster [new food economy skills and training](#)
- Develop and share [circular business tools and services](#)
- Launch a [Reimagine Food awareness campaign](#)
- Increase the circularity of [carbon credits in the food system](#)
- Increase [circularity in municipal waste systems to drive innovation along the food value chain](#)

Today, that number has multiplied. In some cases, the original projects have spun off new ventures such as the Circular Opportunity Innovation Launchpad (COIL). In other cases, new stakeholders have joined Our Food Future and fresh opportunities have emerged that support our overarching goals.

On the following page, we have grouped our projects into the strategic intervention areas listed above. Many projects have cross-cutting aspects. For example, the Guelph Farmer's Market Refresh project falls under "Celebration & Food Culture" and also contributes to "Processing & Distribution." Many of these programs are highlighted in this report through stories and spotlights. For a complete detailed description of every program, see the program descriptions.

# Program overview by Strategic Intervention Area







# Planting the seeds: Our work to date

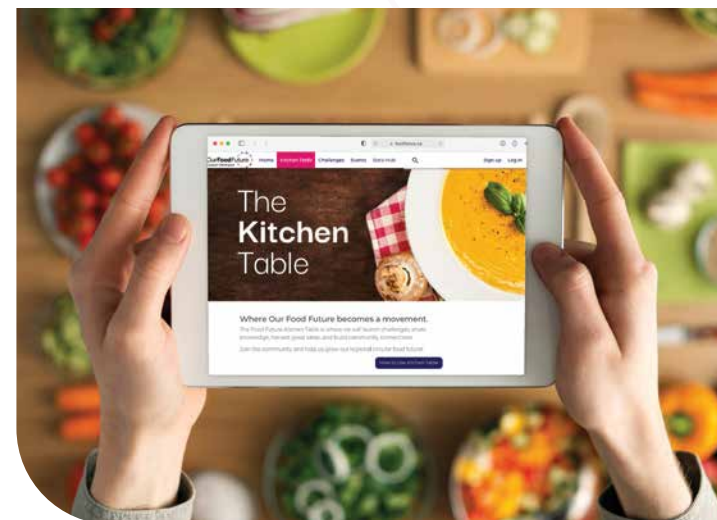


To date, much of our work has focused on creating the right growing conditions for transformative ideas to flourish.

To foster collaboration, we established a diverse network of **49 partner organizations** and **995 stakeholders**, including local businesses, not-for-profit organizations, youth, farmers, and community members. We also launched [The Kitchen Table](#), an online community collaboration platform with over **700 registered users**.

To give those stakeholders and partners the information they need to create evidence-based solutions, we launched an [open data platform](#), compiling maps, applications, and more than **50 food-related datasets** from federal, provincial, and local sources.

And to help bring those solutions to life, we've attracted more than **\$1 million in in-kind contributions**, including advisory support, transportation services, and access to warehouse space and equipment.



We've also launched the **Circular Opportunity Innovation Launchpad (COIL)**. Founded in 2021, in collaboration with Innovation Guelph and 10C, with support from other business organizations, COIL is helping accelerate circular businesses and innovations across southern Ontario in the food and environment sectors. COIL is launching innovation challenges across supply chains and will support five industrial scale demonstration projects that inspire broader circular change. It also established [Resource Exchange Marketplace](#), an online platform that helps businesses connect, buy, sell, and repurpose products/co-products or waste that they generate in their business but can't use.

Finally, we're keeping the momentum going through capacity-building and education. This has included taking part in nearly **50 broadcasts and events** — locally, nationally, and internationally — reaching more than 100,000 people. Meanwhile, our quarterly [On Our Plate](#) newsletter boasts nearly **900 subscribers**, and [our monthly podcast](#) has been streamed at least 614 times.

Each day, our core team, partners, and collaborators deliver tangible results that are transforming how Guelph-Wellington produces and consumes food.

Collectively, we are increasing community prosperity and environmental sustainability. We are fostering greater social equity. And we are establishing a clear vision of an inclusive green economy of the future — one that values nutrition, health, diversity, equity, and dignity.

## ● A fork in the road: growing back better from COVID-19



Volunteers pack emergency food boxes for delivery to community members during the pandemic – supported in part by Our Food Future's Grow Back Better strategy

In 2020, the coronavirus pandemic disrupted social and economic structures and exacerbated food insecurity: issues that Our Food Future was working to resolve. It quickly became clear that Our Food Future could support Guelph-Wellington's response to COVID-19 and the recovery from the global crisis. That's why we accelerated our project roll-out and immediately leveraged \$1.4 million in funding from Infrastructure Canada's Smart Cities Challenge.

The result was [Grow Back Better](#): an 18-month strategy to support Guelph-Wellington's agri-food and social benefit sectors. The 10-point plan and subsequent programs were structured around three key priorities:

- Increasing access to affordable, nutritious food
- Supporting new and existing food businesses
- Strengthening regional food system resiliency

Over 18 months,  
Grow Back Better:



generated **\$1.4 million** in community donations and in-kind contributions



leveraged an additional **\$1.5 million** in public- and private-sector funding



prepared and delivered **77,013** meals and **57,187** nutritious food boxes to community members



provided **\$106,000** for 10 community-led urban agriculture projects

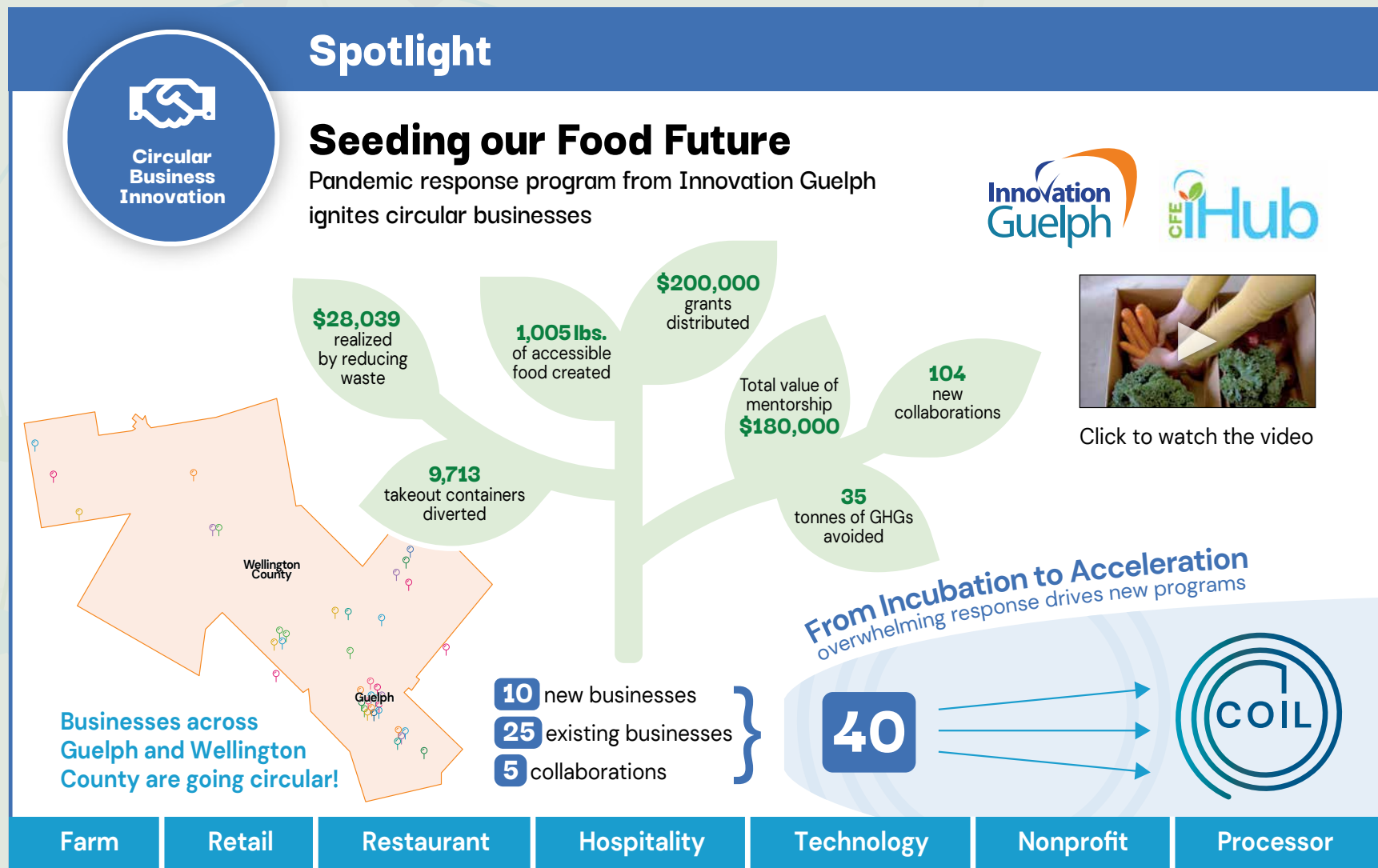


provided **\$1.3 million** in cash and support for local food businesses



Grow Back Better created immediate community impact in Guelph-Wellington. In addition, it has demonstrated that strong cross-sectoral partnerships and circular economy principles can be applied to businesses and social benefit programs in short order.

As Guelph-Wellington began to emerge from the worst economic impacts of the pandemic, we integrated ongoing Grow Back Better programs into the broader Our Food Future and COIL initiatives, ensuring they continue to support the community during COVID-19 and the subsequent recovery.



# Evolving our framework: Our circular economy initiative strategic map



# Strategic Framework

## Vision

We are accelerating a circular regional economic system inspired by nature's regenerative processes and by traditional cultures that live in harmony with the Earth. The food system is our entry point to foster innovation, collaboration, and system-wide change throughout many communities and sectors. Through these efforts, we are supporting healthy ecosystems, thriving communities, and a regenerative economy.

## Guiding Principles

Context-sensitive

Resilient

Reciprocal, relational,  
responsible, and respectful

Equitable  
and inclusive

## Our Initiatives

**OurFoodFuture**  
Guelph-Wellington

**COIL** Circular Opportunity  
Innovation Launchpad

## Goals

**Affordable,  
nutritious foods**

**Circular  
businesses and  
collaborations**

**Waste as  
a resource**

**Systems  
Change**

## Objectives

- 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
  - Informed and empowered residents

- 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

- Communities understand the true cost of food waste
- New collaborations foster environmental economic benefits across the supply chain
- Innovative business models reduce waste
- Research, demonstration projects, and data drive change

- Collective action creates regional, whole-system change
- Circular policies and practices
- Governance strengthens new system relationship
- Data, analysis, and sharing furthers understanding of local assets, opportunities, and issues
- Expertise is shared to support a national and global circular economy
- Traditional cultures inform ways of living within planetary boundaries

## Strategic Intervention Areas



Access  
&  
Inclusion



Celebration  
& Food  
Culture



Growing,  
Production  
& Land Use



Processing  
&  
Distribution



Buying,  
Selling &  
Sharing



Circular  
Business  
Innovation



Waste  
Reduction &  
Recovery



System  
Change  
Levers



Since we launched Our Food Future in January 2020, it has grown and evolved. We've strategically expanded our programs and initiatives, building on the results of existing projects and taking advantage of new opportunities that emerged from the community to create even bigger impacts. We also launched COIL to advance our circular vision into the environment sector and extend our work beyond Guelph-Wellington.

To reflect this evolution, we refreshed our vision and strategic framework in the summer of 2021 and operationalized it into goals, objectives, projects, impact to date, and expected outcomes. Through design sessions with our partners, we encapsulated our updated framework.

## Our Strategic Framework

### Vision

We are accelerating a circular regional economic system inspired by nature's regenerative processes and by traditional cultures that live in harmony with the Earth. The food system is our entry point to foster innovation, collaboration, and system-wide change throughout many communities and sectors. Through these efforts, we are supporting healthy ecosystems, thriving communities, and a regenerative economy.

### Guiding principles

To inform how we do our work with our partners and community, we established the following guiding principles:

**Context-sensitive** — We design programs and projects that build on the unique place-based context of our community.

**Resilient** — We plan and design systems to respond and adapt to a changing environment.

**Reciprocal, relational, responsible, and respectful** —

We are [inspired](#) by the Indigenous values of reciprocity, relationality, responsibility, and respect and are committed to learning and integrating traditional ways of knowing, being, and doing in our work.

**Equitable and inclusive** — We strive to ensure that everyone (individuals, families, and neighbourhoods) can access a diverse range of affordable, nutritious, and culturally relevant foods, as well as equitable and inclusive access to opportunities in the circular economy.

### Circular initiatives

The City of Guelph and County of Wellington are collaborating with community partners on a growing number of circular economy initiatives led by:

- Our Food Future, Smart Cities Initiative — funded by Infrastructure Canada
- Circular Opportunities Innovation Launchpad (COIL) — funded by FedDev Ontario

These initiatives work together to support the common vision.

## Goals

Our central vision is now reflected in four goals that we believe describe a circular food system and how it can support a regenerative economy.

A circular food system:

- Values, shares, and celebrates a diversity of affordable, nutritious, and culturally relevant foods that support a healthy, resilient community (**Affordable, nutritious foods**)
- Inspires and creates a thriving, circular, and regenerative economy (**Circular businesses and collaborations**)
- Respects planetary boundaries by recognizing the impact of wasted resources and the value of what's being thrown away (**Waste as a resource**)
- Enables the systems change required for a circular regional economy, beginning with the food system, through collective knowledge, governance, and action (**Systems change**)

## Approach

To achieve our goals, we have co-created a Theory of Change, which we revisit and adapt as we test and learn. Our theory of change takes a place-based, system wide approach, with objectives and strategic interventions in each area of the food system value chain.

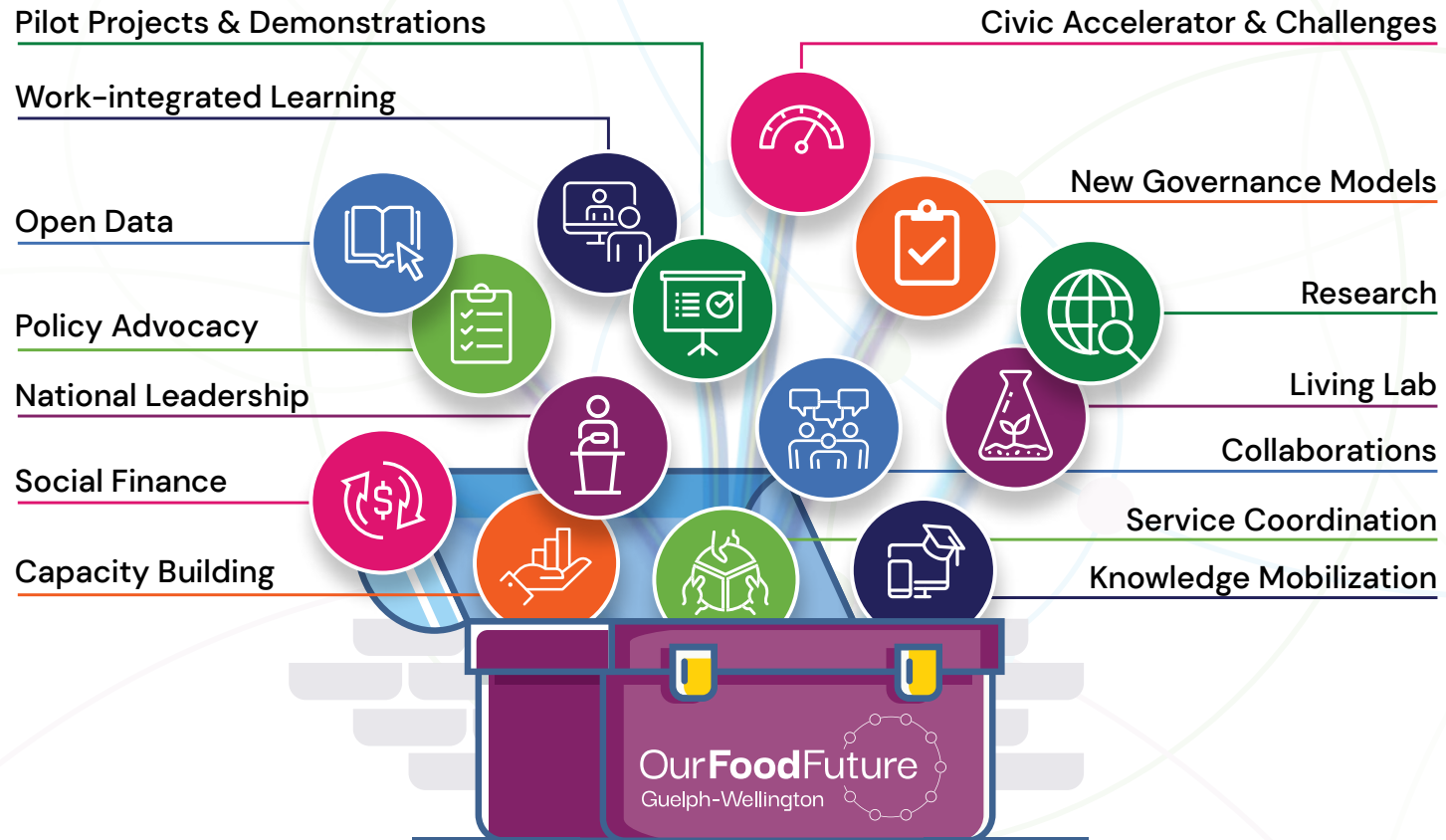
Our approach:

- begins with the creation of the circular food system because changes in the food system have the power to reshape economies, create healthy connected communities, and rebalance our relationship with the environment
- takes a whole of system and place-based approach where through local testing and learning, we will demonstrate the art of the possible
- employs a distributed governance and community capacity building approach where we co-create projects that address the impacts of today's linear economic system
- uses circular principles and practices, smart data and technology, and city building approaches to effect system change and implement our shared vision
- builds a regenerative economic system that is grounded in place and culture in Guelph-Wellington but connected to national and global supply chains
- measures our success with a quadruple bottom line that values purpose, planet, people and prosperity.

Ultimately, these changes will create a **roadmap for a larger, inclusive circular culture, and regenerative economy.**

# System transformation tools

Supporting our approach, we are deploying a broad array of systems transformation tools.





## Strategic Intervention Areas

The circular economy is a roadmap for tackling climate change and biodiversity loss while supporting economic prosperity and addressing critical social needs. In Guelph-Wellington, we kickstarted our circular economy transformation with the development of a regional circular food system. The following key Strategic Intervention Areas aligned with components of the food system value chain, from field to fork, help us envisage the whole system transformation. We have added components to the traditional food system value chain to help transform it from a linear to a circular system. Our approach emphasizes waste reduction and recovery, circular business innovation, and increasing access to affordable, nutritious foods.

We realize that all of these components are not always connected in a sequential linear fashion, instead they are interconnected at every stage of the value chain. These nodes of interconnection present opportunities to create change and test innovations utilizing systems change enablers. The six R's help close loops, reduce waste and create new circular practices, businesses, and supply chains in every step of the system. Systems change enablers help to break through barriers and better understand challenges in the system. Finally, inspired by the Doughnut economics framework, our work contributes to a strong social foundation for human well-being, while respecting the ecological ceiling or planetary boundaries within which we must live.



# Our Strategic Intervention Areas help us move from the linear model to a circular food system



**Access and inclusion** — Support everyone's right to nutritious food and create a culture where people who need help are supported, honoured, and validated.



**Celebration and food culture** — Promote, share, and celebrate food as an essential expression of culture and a key ingredient for the well-being of strong community members, families, and neighbourhoods.



**Growing, production, and land use** — Ensure ample rural and urban spaces and sustainable methods to grow healthy food with climate-friendly agricultural practices that build ecological health.



**Processing and distribution** — Discover efficiencies and responsible solutions when processing, storing, and distributing food products.



**Buying, selling, and sharing** — Engage the full food supply chain — from wholesale to retail, institutions to restaurants, global grocers to local markets — to embed circular practices and strengthen the sharing economy.



**Circular business innovation** — Enable circular, collaborative and resilient business strategies for a regenerative economy.



**Waste reduction and recovery** — Pursue a system and society where all foods and food by-products continue to circle back into the system, contributing value rather than waste.



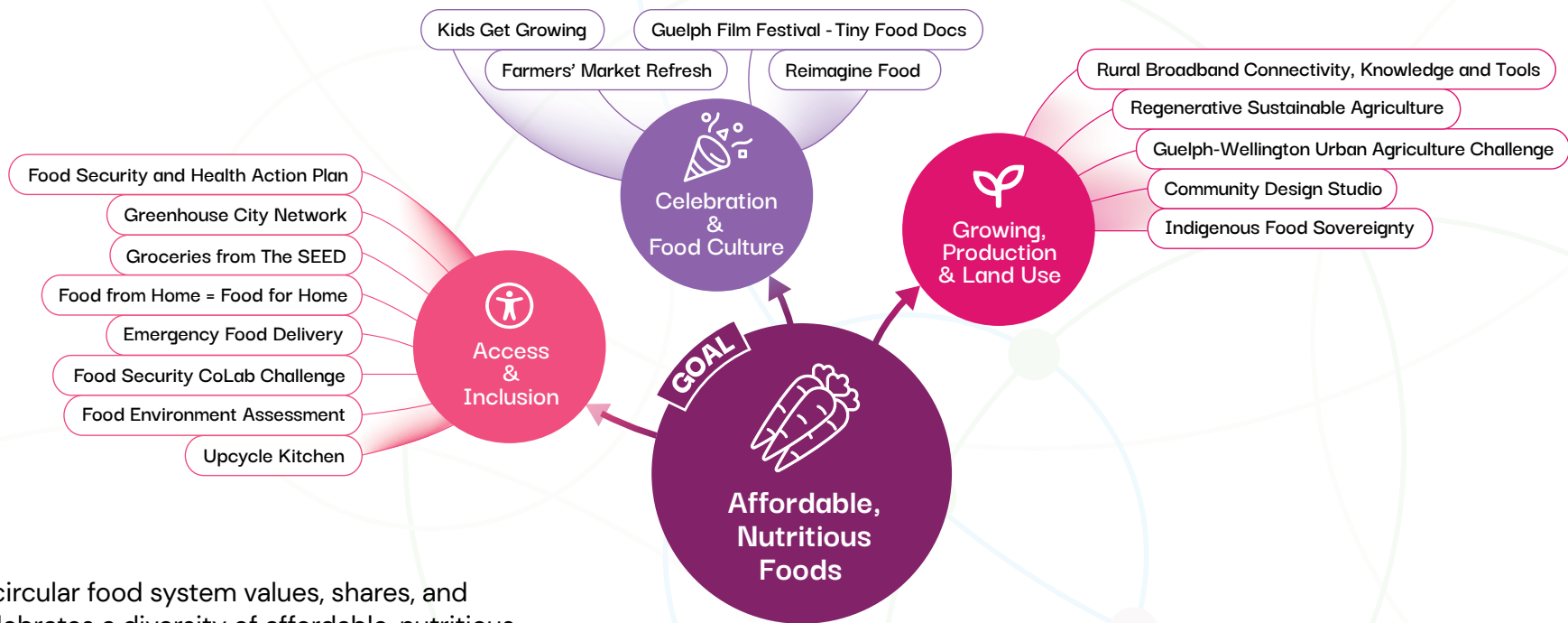
**Systems change enablers** — Leverage data and system analysis, new governance and collaboration approaches, supporting policy, continual learning and sharing to better understand current challenges of the linear system and transform them into sustainable circular economic opportunities.

# Goal 1: Affordable, nutritious foods





## Goal 1: Affordable, nutritious foods



A circular food system values, shares, and celebrates a diversity of affordable, nutritious, and culturally relevant foods that support a healthy, resilient community.

## Objectives

1. Everyone — individuals, families, and neighbourhoods — can access a diverse range of nutritious, affordable, and culturally relevant food.
2. Food is valued, celebrated, and shared. People are empowered to eat well, reduce waste, and are connected to local food, producers, and the land.
3. Innovative community collaborations and new circular business models are developed that support food producers/farmers who are creating sustainable livelihoods and implementing regenerative practices.
4. The demand for new circular economy business models, services and products is created through the development of a circular culture.
5. Urban agriculture models are supported to increase local food production capacity, food security, and resiliency.

## Outcomes



### Growing, production and land use

- 1.1 Increased local production of nutritious food
- 1.2 Improved agricultural practices that support ecological health



### Access and inclusion

- 5.1 Increased access to affordable, nutritious food and when possible, culturally relevant
- 5.2 Increased availability and preference for local, nutritious foods of choice



### Celebration and food culture

- 8.1 Increased awareness and engagement in local food (including youth)
- 8.2 New behaviour change strategies and interventions in the food system

## Our impact 2020–2021



**21** Guelph-Wellington farmers began using regenerative practices as identified in the Regenerative Agriculture Report



prepared and delivered  
**77,013** meals and **57,187**  
nutritious food boxes to  
community members



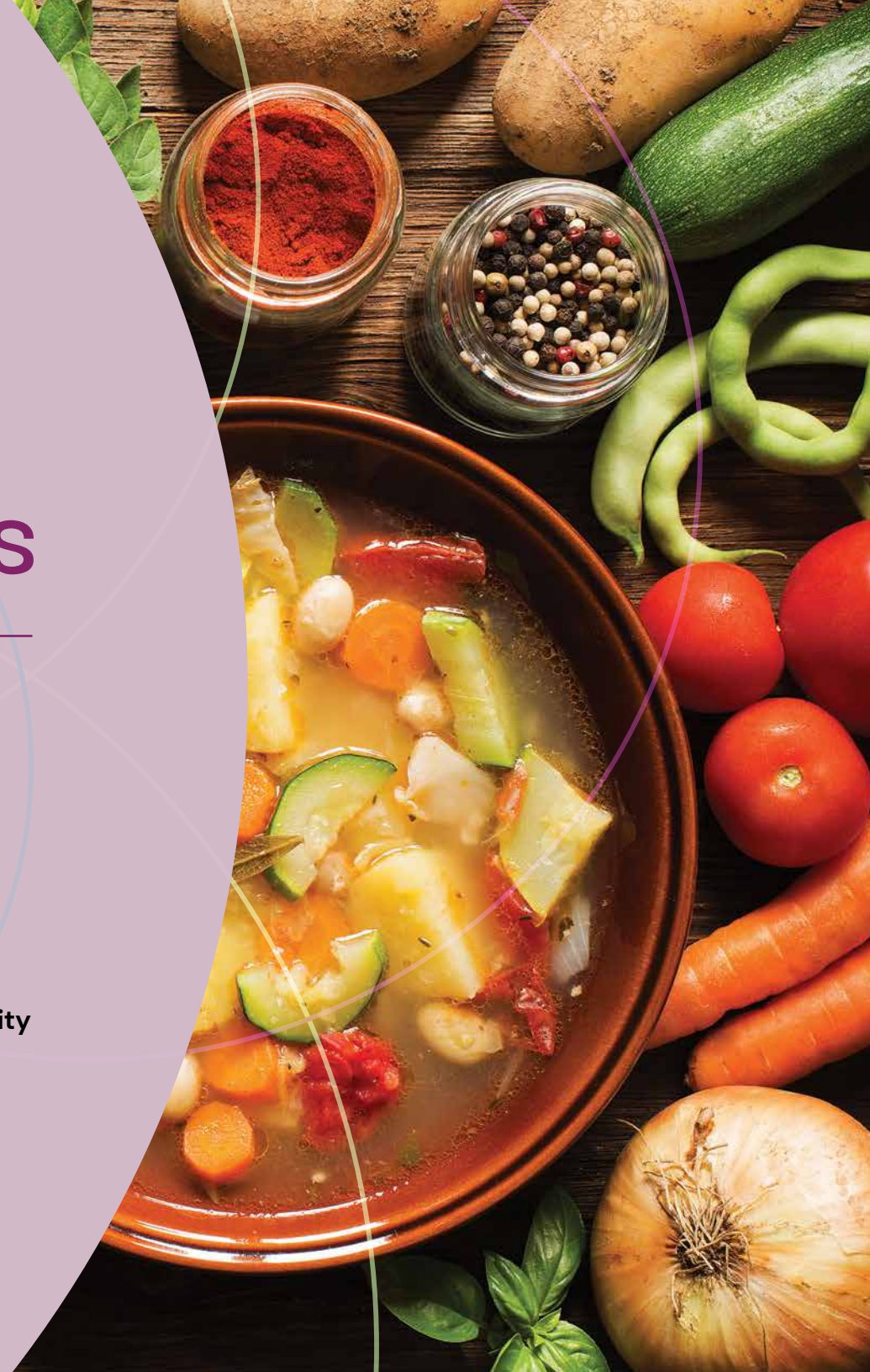
**3,267** Individuals with  
increased access to  
affordable, nutritious foods

# Goal 1: Affordable, nutritious foods

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## stories and spotlights

- Understanding our local food environment
- Driving truly collaborative solutions to food insecurity
- Growing possibilities for food access
- Improving access to nutritious foods
- Connecting with newcomers
- Engaging youth in Our Food Future
- Expanding rural broadband connectivity
- Regenerative farming





### Understanding our local food environment

According to Cornell University researchers, consumers make an average of 200 food-related decisions every day about what, where, when, and how much to eat. Most of these decisions are unconscious, shaped by the surrounding food environment: the physical, social, economic, cultural, and political factors that impact access to nutritious food.

For the past two years, Our Food Future has been scrutinizing the food environment in Guelph-Wellington.

We used GIS technology to map retail food outlets and community agriculture spaces. We audited grocery stores, looking at the availability, affordability, and promotion of nutritious foods. We conducted surveys, focus groups, and interviews with residents about eating habits and the barriers that make nutritious eating difficult. We reviewed municipal policies, we scanned educational programs, and we examined food access programs.

The result is Guelph-Wellington's first-ever [Food Environment Assessment](#). Published in November 2021, it provides a detailed snapshot of food access in Guelph and Wellington County, including physical access; economic access; food and nutrition knowledge and food skills; and marketing, promotion and celebration of food. The report revealed many strengths. However, it also highlighted a number of gaps and issues.

For example, one in eight residents experience food insecurity. And for nearly 60 per cent of them, lack of transportation to grocery stores is a barrier to accessing nutritious food. Meanwhile, a scan of outdoor billboards and signage reveals that many elementary and secondary schools are located near retail food outlets, which regularly expose students to ads for ultra-processed foods.

The findings establish a baseline to measure the impact of interventions to increase access to nutritious foods. It will also facilitate conversation and community engagement, helping to shape a **Food Security and Health Action Plan** that ensures nutritious foods are available, accessible, and affordable to everyone in Guelph-Wellington.



### Driving truly collaborative solutions to food insecurity

This year, 10C Executive Director Julia Grady, as co-chair of the Business and Collaborations Workstream, and Toward Common Ground Lead, Sarah Haanstra, as the chair of the Nutritious Food Workstream, helped facilitate a highly collaborative exercise to allocate \$100,000 through Our Food Future's Harvest Fund. From April to August, the **CoLab Action and Funding Process** gathered a group of community members and organizational leaders to co-create solutions to help address food insecurity.

Rather than applying for a particular amount of funding, as they would in a standard granting competition, groups brought ideas forward to indicate their intention to participate in the Co-Lab process. And because they didn't need to be incorporated to get involved, it opened the door to a wider range of participants.

Seven innovative solutions emerged — ranging from expanding community markets that sell fresh food on a sliding scale to making farmland and commercial kitchen space available to support local food initiatives. The process emphasized synergies, prioritizing ideas with strong potential for collaborative action. This process is helping to advance the following projects:

- **Sustain and Grow Community Markets** to meet ever-increasing demand and sustain free access to fresh produce at the North End Harvest Market and the Silvercreek Market and Advance Your Voice, a gathering of people with lived experience of poverty, to grow their leadership in community food access.
- **The Two Rivers Neighbourhood Group** to add an additional community-based market that sells affordable year-round fresh local food.
- **The Hub and Spoke Collaborative Pilot Project** to test shifting Guelph Food Bank away from direct-to-client food support and member agency excess distribution program to a model where GFB will be a distribution hub for smaller neighborhood-based food security programs.
- **The Anishinaabeg Ways of Living, Being and Doing** project to bring together people from First Nations, Inuit, and Métis communities and allies to learn from and with each other and share time together in Anishinaabeg Ways of Living, Being and Doing. This Indigenous-led initiative weaves through every Co-Lab challenge project, informing and supporting all the others.
- **The HOPE House** – Holding Spaces and Place project to offer arable land, space and food infrastructure (e.g., kitchen space) to support other project ideas to emerge. This project chose not to receive funding, but rather offered gifts to be shared across the other projects.
- **The Cultural Meals Social Enterprise** project to create opportunities for immigrant women to make meal kits and cook meals from different cultures to be made available for sale.
- **Parkwood Gardens Curated Meals** project to engage in a partnership with HOPE House to produce weekly ready-made free meals for families.

The applicants began by co-creating a set of shared principles to guide their interactions and decision-making. Next came a participatory fund allocation process to decide how best to share the funds between the projects, based on their collective impact toward the shared objective of tackling food insecurity. The Co-Lab process was one of the ways that these groups were able to lead with empathy, share knowledge and work together to tackle problems facing our communities.



## Spotlight

### Growing possibilities for food access

Guelph-Wellington Urban Agriculture Challenge awards strengthen community garden projects

**10** projects funded

**\$106,000** distributed

**\$1,380,279** total value of projects submitted

**1,650** community members engaged

**40** workshops and seminars

**2,297+** lbs of food grown

**50+** raised garden beds built



Helping community members build composters using recycled materials



**1.** Rainwater harvesting bench brings water supply to community gardens – .83 gallons collected for every inch of rain. **2.** Piloting garden trellis made with cattle fencing produced better yields that were easier to tend. **3.** Newcomer youth community garden programs and workshops.







## Spotlight

### Improving access to nutritious foods (and reducing waste, too!)

#### Emergency Home Food Delivery during Pandemic

**265** volunteers spent  
**12,020** hours preparing  
**77,013** meals and  
delivering **51,687** food  
boxes to **2,674**  
individuals with a value of  
**+\$670,000**



Gift cards  
available!

Social enterprise  
transforms unwanted  
produce into delicious  
sauces, dips and jams



A sustainable approach to  
food security across Guelph  
& Wellington County.

For every customer who pays  
full price up to 3 others access  
food at discounted costs.



GUELPH TODAY .com

"...as simple as buying groceries."  
Click to read more.



**\$53,643**

to date raised  
through  
community  
donations  
to support  
food security.

Donate at  
[harvestimpact.ca](https://harvestimpact.ca)



## Spotlight

### Connecting with newcomers

Helping new Canadians grow culturally-significant foods and build community



13

countries

60+

families

200+

crops

5,168

volunteer  
hours



GUELPH TODAY .com

**"Newcomers grow vegetables and herbs from their homelands."**

[Click to read more.](#)



Celebration  
& Food  
Culture

## Spotlight

### Engaging youth in Our Food Future

Furthering our understanding of local food, urban gardens, and reducing waste



Teaching newcomer youth about urban food production.

**Leveling the Ground Winner \$2,000**  
Guelph-Wellington Urban Agriculture Challenge.



A youth education community partners campaign.



#### Kids Get Growing

**300** families

**740** home gardening kits

**1,480** seed packets distributed



GUELPH  
**FILM**  
FESTIVAL

#### Tiny Docs for Tiny Food People



Budding youth filmmakers create food focused documentaries.

"I liked digging in the garden, the purple beans and finding worms!"

Grayson, age 5



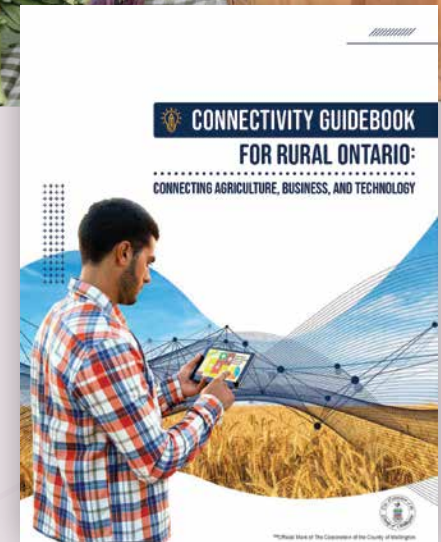
### Expanding rural broadband connectivity

For farmers in Wellington County, digital technologies offer many opportunities. Fourth-generation farmer Romy Schill uses an e-commerce platform to sell sustainably produced wool. Robotic milking systems support operations at the Elora Research Station. And Bob Wilson uses RFID tags to track each of his calves over the course of their lives.

However, a lack of reliable high-speed internet prevents many producers from taking full advantage of high-tech innovation. Our Food Future's **Rural Broadband Connectivity, Knowledge, and Tools** initiative is helping to change that in a number of ways.

Our [Connectivity Guidebook for Rural Ontario](#) is helping producers understand and access digital solutions. We're advocating for better infrastructure: surveying community members to map service gaps and engaging with internet service providers and funders to get underserved areas connected sooner. We're also working with host farms to test signal-boosting equipment and similar options.

And because the possibilities for data-driven agriculture continue to grow, we're liaising with University of Guelph researchers and organizations like R2B2 to facilitate those advances.





## Spotlight

### Regenerative farming

Healthier soils reduce reliance on extractive resources

#### Principles

Minimize soil disturbance



Avoid soil compaction  
Precision agriculture  
Low-till or No-till

Keep soil covered



Leave crop residues  
Cover crops

Maximize crop diversity



Crop rotation  
Intercropping  
Silvopasture

Maintain living roots



Perennial plant

Integrate livestock



Mob grazing  
Rotational grazing  
Animal integration  
Manure management

#### Practices

#### Benefits

Ecological services  
Water management  
Erosion prevention  
Carbon sequestration  
Improved soil biology  
Lower GHGs  
Reduced fuel costs  
Improved soil structure  
Reduced inputs  
Improved pest management  
Improved biodiversity

### The Experimental Acres Pilot



24  
farms

Coaching and funding for up to 24 farms to explore regenerative farming techniques.

#### Other supports offered:



Place-based carbon market study



Future funding paths



Best management practices



Community of support



Knowledge transfer



Wellington Soil Symposium

# Goal 2: Circular businesses and collaborations



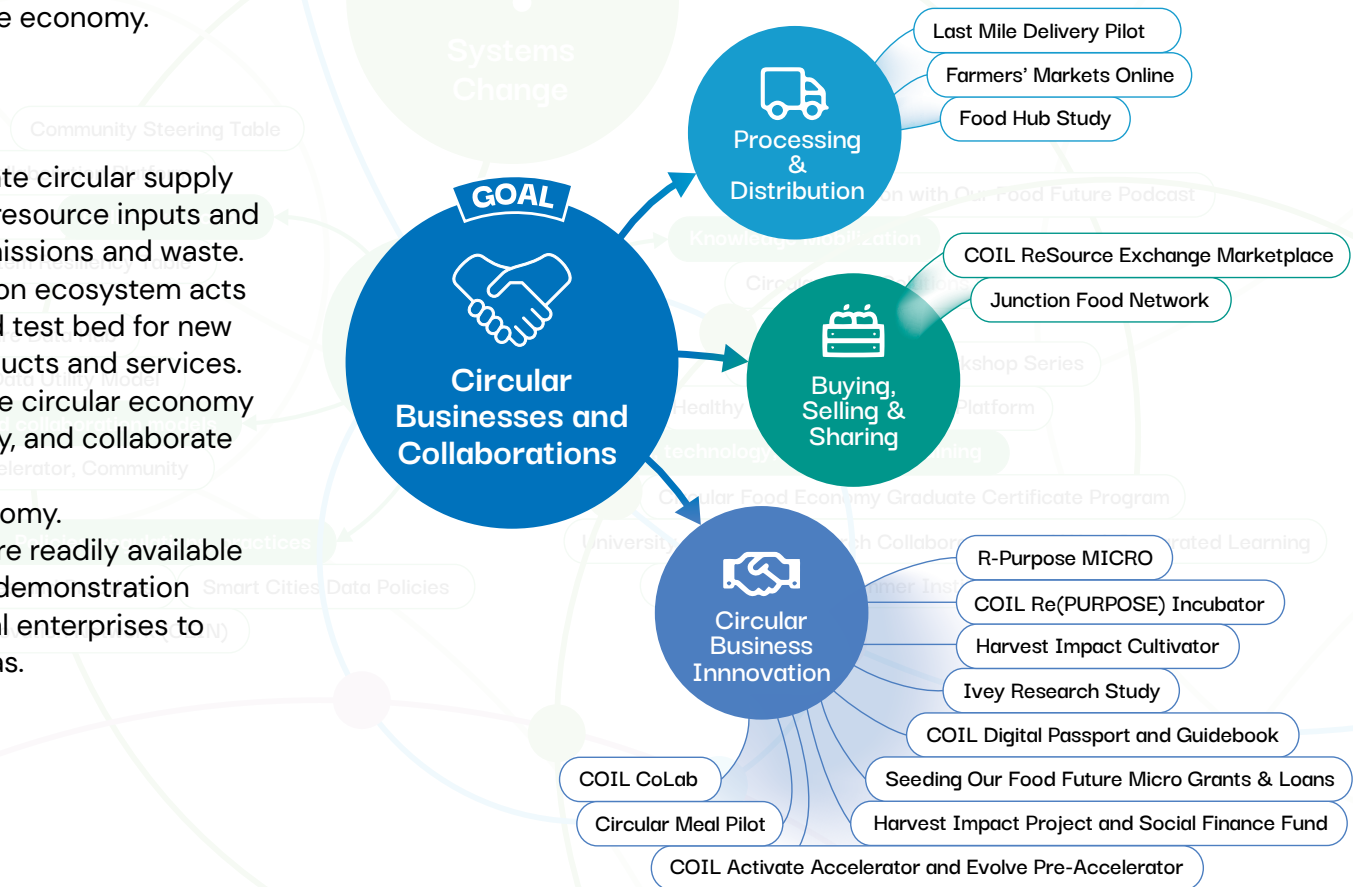


## Goal 2: Circular businesses and collaborations

A circular food economy inspires and creates a thriving, circular and regenerative economy.

### Objectives

1. Businesses collaborate to create circular supply chains that reduce and reuse resource inputs and design out greenhouse gas emissions and waste.
2. The regional business innovation ecosystem acts as an urban-rural living lab and test bed for new circular business models, products and services.
3. Purpose-driven businesses use circular economy principles, data and technology, and collaborate with public partners to transform the regional economy.
4. Impact funding and services are readily available to community collaborations, demonstration projects, businesses and social enterprises to accelerate and scale their ideas.



## Outcomes



### Processing and distribution

- 2.1 Reduced environmental/carbon footprint
- 2.2 Increased processing and distribution of local products



### Circular business innovation

- 3.1 Increase in businesses adopting circular, collaborative strategies
- 3.2 New circular businesses launching and creating jobs
- 3.3 Increase in circular business revenue and cost savings



### Buying, selling and sharing

- 4.1 Increase connections between local food businesses, manufacturers and consumers
- 4.2 Stronger and more resilient local supply chain
- 4.3 Increased circularity within the supply chain

## Our impact 2020-2021



NGOs received support  
valued at **\$2,919,218**



Businesses and social  
enterprises received support  
valued at **\$1,503,755**



**\$960,812** Was saved and/  
or earned by shifting to more  
circular business practices



**112** Business  
collaborations strengthened  
the circular supply chain



**14** New products and  
services were created from  
diverting waste



Businesses the established  
or expanded their use of circular  
practices: **181**

City of Guelph  
**79**

Wellington County  
**69**

Ontario  
**33**

# Goal 2: Circular businesses and collaborations

## stories and spotlights

- Creating a launchpad for circular innovation
- Backing big ideas through the Harvest Impact Fund
- Turning waste into opportunity
- Building a Circular Business Ecosystem
- Discovering value in waste





### Creating a launchpad for circular innovation



Launched in April 2021 with \$5 million in funding from the [Federal Economic Development Agency for Southern Ontario](#) (FedDev Ontario), the **Circular Opportunity Innovation Launchpad (COIL)** helps create, prove, and scale transformative circular solutions. By using Guelph-Wellington's circular economy test-bed ecosystem, and in collaboration with Innovation Guelph and IOC, with support from University of Guelph, LaunchIT Minto, Guelph Chamber of Commerce, Provision Coalition, Wellington-Waterloo

Community Futures, and the Guelph Wellington Business Centre, COIL aims to accelerate 49 circular businesses and launch five industrial-scale demonstration projects across southern Ontario.

The initiative includes several components. The **COIL Activate Accelerator and Evolve Pre-Accelerator** supports businesses with funding, training, and mentorship as they develop and scale their circular operations. COIL is also developing learning modules and guidebooks to educate businesses on circular economy concepts and opportunities, as well as a **Digital Passport** program that allows participating companies to collect badges based on their circular practices and raise their community profile.

Meanwhile, the **COIL ReSource Exchange Marketplace** is a free online platform that helps find new uses and collaborations for food by/co-products or other waste, rather than sending them to landfill.

Finally, the **COIL Circulate CoLab** puts out challenges, inviting innovators to propose ways to reduce waste, redesign supply chains, and transform existing linear business practices. The first challenge was launched in August 2021, focused on redesigning upstream food systems. Five teams, consisting of a total of 21 organizations have been funded to prototype their idea and in February 2022 the teams will pitch their prototypes to an expert evaluation committee, with at least one team winning up to \$100,000 to scale into a full demonstration project. More CoLab challenges will be issued in spring and fall 2022.



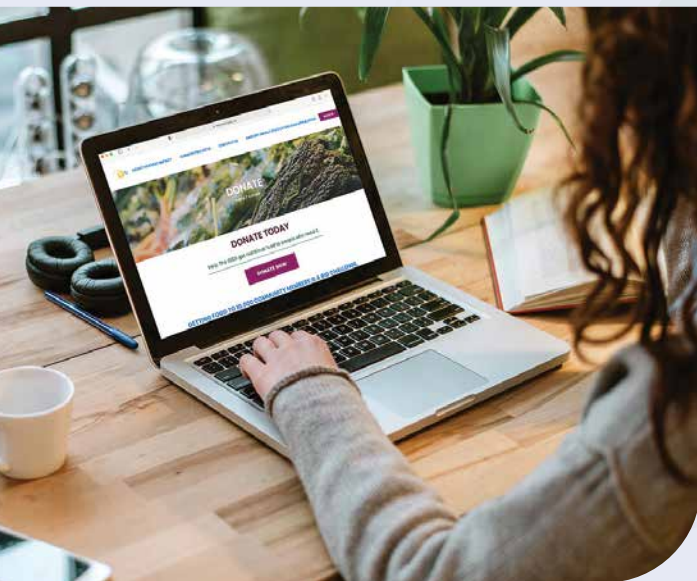
"If we want to create a more circular economy, we need innovators to blaze the trail with new ideas and solutions," says COIL manager David Messer. "Through Circulate CoLab we hope to give innovators space and resources to test big ideas that can inspire and transform their industry or even create new ones."

A circular food system inspires and creates a thriving, circular and regenerative economy.

## ● Our Stories

### Backing big ideas through the Harvest Impact Fund

COVID-19 sent shockwaves through Guelph-Wellington, exacerbating existing food insecurity and many other system-level issues. Now, [Harvest Impact](#) Cultivator Loans are helping local businesses recover from the pandemic, while shifting practices in ways that contribute to a more sustainable, equitable, and healthy food economy.



As one of the methods to seed Harvest Impact, the program is a collaboration with Wellington-Waterloo Community Futures and Saugeen Economic Development Corporation. In 2020, it provided \$10,000 in interest-free loans to help 17 local food companies advance circularity across the region. For example, WaterFarmers is designing and installing urban agriculture systems. A Friendlier Company is pioneering sustainable packaging for take-out food. And Winterhill Farm and Garden is providing organically grown vegetable boxes from their family farm near Rockwood.

Meanwhile, the Harvest Impact team is developing a place-based social finance fund and is working collaboratively within the social finance ecosystem to enable an increase in local investing and respond to growing demand from investors looking for more than just financial returns. As a new Social Finance Fund, Harvest Impact promises to offer opportunities to invest in projects that deliver meaningful social and environmental impacts. Its focus will be to support organizations and individuals, including non-profits, who have big ideas but wouldn't typically qualify for bank loans or other traditional funding — whether due to narrowly defined financial criteria or restrictions on who can apply.

"This isn't a venture capital fund. Harvest Impact is a community lending tool," says Julia Grady, executive director of 10C Shared Space, the organization behind the Harvest Impact Fund. We will always lead with a social-first principle and are building towards having a blend of funding (non-repayable) and financing (repayable) to support the early-stage capital that these circular economy projects need. The fund will be structured as a share capital cooperative, where members and investors contribute to the pool of available money in exchange for shares and a voice in the organization. This embodies the seven principles of the cooperative movement, which include members' economic participation and concern for community.

Grady's team has been working hard to develop the application platform, lending procedures and practices, and they have created an impact dashboard that will capture non-financial investment results — such as the number of nutritious meals distributed or the amount of greenhouse gas emissions reduced. Now, they're aiming to provide the first prototype loans in January 2022.

### Turning waste into opportunity

One company's trash can be another company's treasure. That's the idea behind the research that Western University's Ivey School of Business is conducting in collaboration with Our Food Future.

Associate professor Jury Gualandris and post-doctoral fellow Dr. Sourabh Jain identified the most common examples of how businesses are exchanging surplus materials and by-products to create economic and environmental benefits. They also looked at current gaps, barriers, and ways to facilitate these synergies. "In a nutshell, our study unveils how the structure of circular systems affect their economic and environmental impacts," says Gualandris.

It wasn't simple. The Ivey researchers couldn't find any datasets of circular systems in general, let alone circular systems dealing with food loss and waste (FLW). So, they set out to build one from scratch. Once they identified companies using these synergies, the next challenge was convincing them to share the details in order to shed light on best practices.

Through perseverance, the researchers created Canada's first repository of business-to-business FLW repurposing exchanges. They also made it available online through an [interactive map](#), which they continue to expand. (Businesses that want to be listed can [fill out this survey](#).)

Now, Gualandris and his team are analyzing their data. This includes identifying operational and organizational enablers that businesses should consider before embarking in the journey towards circularity. They also aim to tease apart the anatomy of circular systems, understand what scale maximizes their benefits, and identify how government policies could facilitate their success.

Currently, they are performing a quantitative life cycle assessment, looking at how different processing options for different types of food waste can cut carbon emissions. As a result, they'll help generate the insights businesses need to advance powerful circular solutions that mitigate climate change.





## Spotlight



Circular  
Business  
Innovation

# Building a Circular Business Ecosystem

Engaging with 1,000+ businesses and collaborations to promote and enable circularity

**Circular Economy  
Urban Rural Test Bed  
Guidebook and  
Marketing Toolkit**

OurFoodFuture  
Guelph-Wellington



Platforms, networks,  
training, mentor  
teams and toolkits  
connect and support  
circular businesses across  
Guelph-Wellington



**24**  
members



**97**  
registered  
users

[resourceexchange.ca](http://resourceexchange.ca)



**Coming soon!**



**Circular  
Economy 101**  
post-secondary  
credit course



## Spotlight

### Discovering value in waste

Rapid, high-impact training pathways to help businesses create new products and markets by designing out waste.

60%

of Canadians will purchase upcycled products

68%

of Canada's food waste is unavoidable

\$46B

value of upcycled market

64

participating businesses across Guelph-Wellington... so far

Heartwood Farms identified waste in processing and transportation and is developing new products from their waste stream.



Friendlier is eliminating single-use take-out containers and has quickly become Canada's fastest-growing reuse company.



Connecting local food businesses to discover and exchange unusable waste resulted in Canada's first fully circular meal, generating international attention.



Click to watch the video

# Goal 3: Waste as a resource





## Goal 3: Waste as a resource

A circular food system respects planetary boundaries by recognizing the impact of wasted resources and the value of what's being thrown away.

### Objectives

1. Community members and businesses understand the true cost of food waste and the environmental and economic benefits of designing waste out of the food system.
2. New collaborations to restore and regenerate environmental economic benefits are formed between businesses, researchers, public sector, and across the supply chain.
3. Innovative business models and approaches are tested to reduce waste, including upcycling, reducing avoidable waste, and repurposing unavoidable waste.
4. Research, demonstration projects, experiments, data, and learnings help drive change.



# Outcomes



## Waste reduction and recovery

- 6.1 Greater awareness and attention to waste, and strategies for reducing waste
- 6.2 Increased use of food/food by-products to generate new value
- 6.3 Lower carbon footprint from food related economic activities

### Our impact 2020-2021



**6,479** tonnes of food waste were  
diverted from landfill

That's equal to about 18 million apples



**1,769** tonnes GHG Emissions prevented

Equal to 295 passenger vehicles  
driven for one year

# Goal 3: Waste as a resource

## stories

- Weeknight Supper Savers
- Keeping food waste out of landfill
- Zeroing in on food waste hotspots
- Pioneering AI-powered waste audits
- Circular carbon credits
- Building a sustainable food system can require starting from the ground up – with the soil





## ● Our Stories

### Weeknight Supper Savers

Households end up tossing a lot of usable produce in the compost bin — and that's especially true for families with children. Could a little food literacy plus some kid-friendly recipes help cut that waste?

To find out, researchers from the University of Guelph launched a pilot program in 2020. Funded by Danone Institute North America, **Weeknight Supper Savers** targeted families with children between the ages of nine and 12. A total of 19 families signed up to learn how to make nutritious meals, save money, reduce waste, and get kids involved in the cooking process.



The researchers began by collecting and analyzing the food waste each household produced, determining their baseline habits. After that, the participants took part in a four-week intervention that involved an online cooking class, meal-planning tools, tips delivered via text messages, and a cookbook with recipes designed to reduce food waste.

Those efforts paid off. When the Supper Savers team examined household waste at the end of the four weeks, the volume of avoidable waste had shrunk 34 per cent. And in a follow-up survey, parents reported being confident in reducing food waste. They also reported that the cookbook, classes, and meal planning tools helped kids participate in meal prep.

“Our team was excited to see how this program was able to get the whole family involved — both parents and their children,” says Jess Haines, the University of Guelph researcher who co-led Weeknight Supper Savers.

Now, future research with a larger sample group is in the works to confirm these findings and build on the successful pilot program.

### Keeping food waste out of landfill

When food waste ends up in landfills, it gets buried under layers of garbage that starve it of the oxygen it needs to decompose aerobically. As a result, it generates potent greenhouse gases instead of being converted into nutrient-rich compost that can fertilize land.

But until recently, the landfill was the only option for residents in Wellington County who didn't compost food waste themselves. That all changed in July 2020, when the County launched its **Green Bin Organics Program**. Through the initiative, 34,000 green bins and kitchen catchers were distributed to households in the area.

In the first year alone, the program diverted nearly 2,500 tonnes of organic material from landfill — 25 per cent more than their target — and thus avoided the equivalent of 2,575 tonnes of CO2 emissions. In addition, the company contracted to collect waste for the County switched to trucks that are more eco-friendly. These new vehicles run on compressed natural gas instead of diesel, further reducing emissions.

Meanwhile, the City of Guelph is currently reviewing and updating its **Solid Waste Management Master Plan**. Developing the new 25-year plan has involved rigorous public engagement that revealed a strong appetite for embracing circular economy principles. It also identified numerous opportunities to support grassroots initiatives that are already diverting material from landfill.

The plan, slated to go to City Council in December 2021, includes several recommendations to increase circularity, build on Guelph's leadership in waste minimization and leverage synergies between the City and County.



# Our Stories

## Zeroing in on food waste hotspots

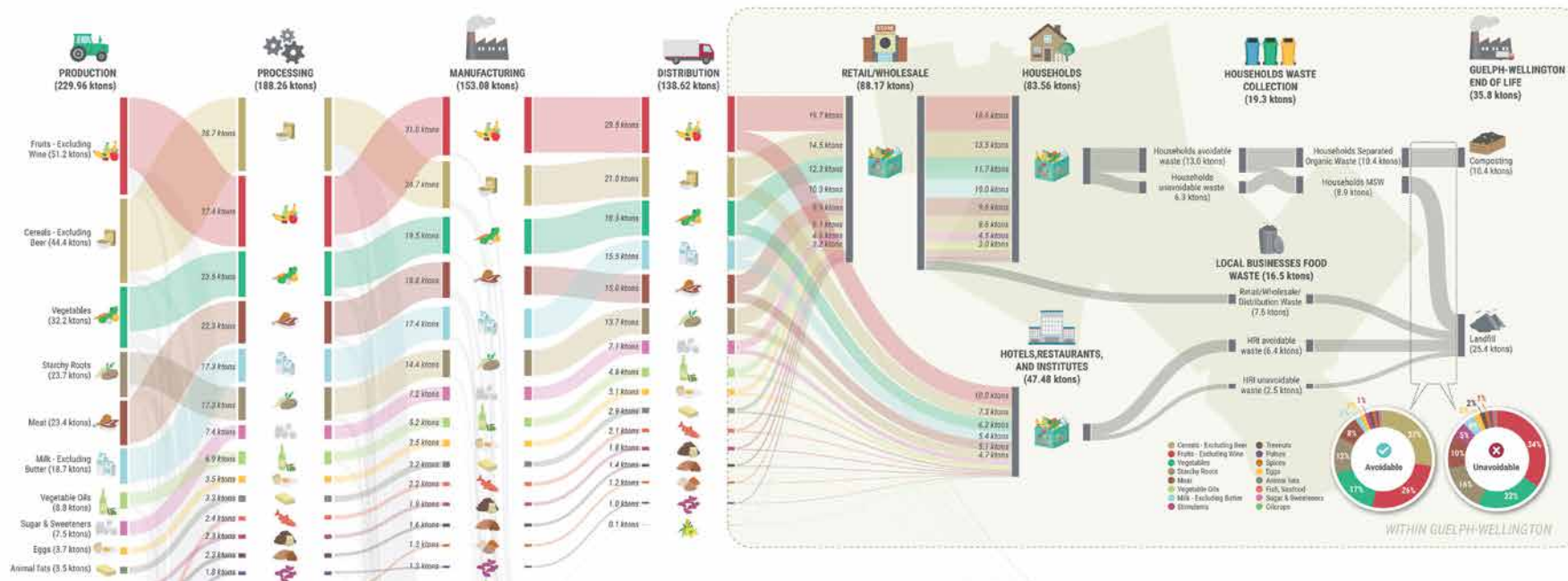
Where does the greatest amount of waste happen within our region's food system? Our Food Future researchers set out to identify these waste "hotspots." The Food Material Flow Study is the first of its kind in Canada, offering valuable insights to inform circular strategies. Click the link below to view the full image.

Kitchen Table Collaboration Platform

Collective Action

In Conversation with Our Food Future Podcast

## Mapping Food Waste Flows Across Guelph and Wellington



More than 70 datasets were analysed to produce this [Sankey diagram](#) snapshot of food waste flows in the region.



In the first phase of this complex undertaking, researchers from Dillon Consulting, Metabolic, and the University of Guelph compiled more than 70 sets of national and local data. Next, they undertook a Material Flow Analysis of that data to understand what resources flow into the food system, where they end up and where waste occurs at each stage: growing and processing, distribution and packaging, and consumption in restaurants, institutions, and homes.

The findings — published in the June 2021 [Food and Food Waste Flow](#) report — revealed that 55 per cent of all food in Guelph-Wellington is thrown away. Almost half of this could be avoided. The analysis also identified specific areas that warrant deeper investigation, such as fruit losses before manufacturing and losses of cereals at the processing stage. Meanwhile, although the volume of wasted meat and milk isn't as high as other food categories, it creates significant environmental impacts because of the energy required to produce these foods.

Now, Our Food Future collaborators are exploring the most effective interventions to reduce these losses or find new value in the waste through living lab pilot projects.

"By reimagining food and food waste, we create opportunities to rescue food that would otherwise be wasted and create opportunities for new food businesses," says Cameron Walsh, division manager, City of Guelph Solid Waste Services. "This study and data give us a better understanding of where to invest our resources."



55 per cent of all food in Guelph-Wellington is thrown away and 25 per cent of this waste is avoidable.

## Our Stories

### Pioneering AI-powered waste audits

How much avoidable food waste and non-organic material are Guelph residents tossing in their green cart? In October 2020, the City of Guelph launched a **Residential Waste Data Challenge** to find out. Eagle Vision Systems responded.

The Kitchener company had worked with the City in the past to automate other aspects of waste collection by developing CartSeeker, an automated arm operation. Leveraging similar technology, this time they set out to develop a first-of-its-kind system to analyze organic waste in real time as each household green cart is emptied into the collection vehicle.



Working with researchers at the University of Guelph's Intelligent Control and Estimation (ICE) Lab, Eagle Vision developed a video system that records material going into the trucks. From there, Artificial Intelligence algorithms were used to detect five target items: compostable bags, non-compostable bags, yard waste, recyclables, and avoidable food waste.

Two summer students reviewed thousands of video stills to train the AI to identify target items. By the end of the pilot project, the technology could identify these items with 90 per cent accuracy.

"It is amazing the technology that is coming from these projects," says

Chad Scott, Manager of Logistics and Site Operations at the City of Guelph Solid Waste Resources Division, "We are only beginning to learn how to leverage this amazing work to improve safety, help our environment by reducing contaminants, and help our team raise the bar on service."

This high-tech initiative provides a lot more knowledge about exactly what is being thrown away and in which neighbourhoods, without the need for manual waste audits. As a result, it can help inform public education programs and interventions aimed at reducing food waste in the green cart. And, because Guelph's green carts have RFID tags that link them to their street address, City staff could also provide targeted interventions to areas of the city producing the most unnecessary food waste.

### Circular carbon credits

As the global climate crisis worsens, carbon offsets are becoming an increasingly valuable commodity. Essentially, they allow individuals and businesses that emit greenhouse gases to reduce their environmental footprint by paying other businesses or organizations to sequester carbon. And that holds all kinds of potential for the circular food economy.

“The circular economy is intrinsically linked to emissions reductions,” says David Messer of the Smart Cities Office. “By cutting food waste, we’re saving the energy required to produce it, transport it, and dispose of it — and avoiding all the carbon these activities create.”

These types of emissions are often challenging to track. But Messer points to examples like Indigo Carbon in the U.S., which pays farmers to cut greenhouse gases through regenerative practices like cover cropping and no-till farming. “The model can work, it just hasn’t been done here at scale,” he explains. So, Our Food Future is filling that gap.

Individuals and small businesses often lack the scale and capacity to participate in voluntary carbon offset schemes, however, taken together, the positive actions of hundreds of smaller actors could combine to generate a significant volume of carbon credits. What is missing is a system or technology to track, attribute and verify smaller scale actions which could then be bundled to reach a sellable scale.

In November 2021, our group leveraged City of Guelph’s Civic Accelerator model to issue a **Circular Carbon Credit Challenge** focused on reducing food waste and promoting climate friendly actions. We are inviting companies or developers to help us co-create an app that tracks, verifies and rewards actions that reduce emissions and support the circular economy.

We are also working with the David Suzuki Foundation (DSF) to examine our project activities considering voluntary and regulatory carbon credit markets. Research being done by DSF will help us prepare a Request for Proposals to engage in our next phase of work — a **Regional Carbon Market Study**. This will be a place-based study of Guelph-Wellington’s food supply chain and the emission-avoidance activities our project has helped create. Through this we can identify or develop tools that enable each sector of the food chain to track its carbon credits, creating a further source of revenue for climate-friendly food production.





## ● Our Stories

### Building a sustainable food system can require starting from the ground up – with the soil

When we talk about the environmental impacts of food production, we are using global aggregate emission averages and the numbers are dizzying. But if the footprint looks large, so does the hope for remedy; globally, shifts in agricultural practices hold the potential to be our largest carbon sink, and the soils in our local food region are well matched for this purpose.



The suite of practices known as Regenerative Agriculture – rebuilding soil health to increase GHG sequestration – are dynamic, sometimes offering different results in different fields. Because of the complexity, these solutions will require cooperation to effect meaningful change.

Our Food Future began with a survey of farmers, methods, and funding in our region. We wanted to know who was already leading this change, whether there were best practices emerging, and where there were gaps in support.

“Our farmers are always innovating, and now are poised to be climate heroes,” said Justine Dainard, Smart Cities Project Manager at the County of Wellington. “Our job is to provide a system of support which enables easy uptake of these regenerative agriculture approaches.”

Building on this, we are launching the Experimental Acres, an on-farm pilot designed to protect farmers from risk as they learn what works for their soil. This pilot is designed as an ‘on ramp’ which builds layers of support over the growing season, and includes components such as soil assessment, verification tools, a community of practice, and identifies a path to future funding.

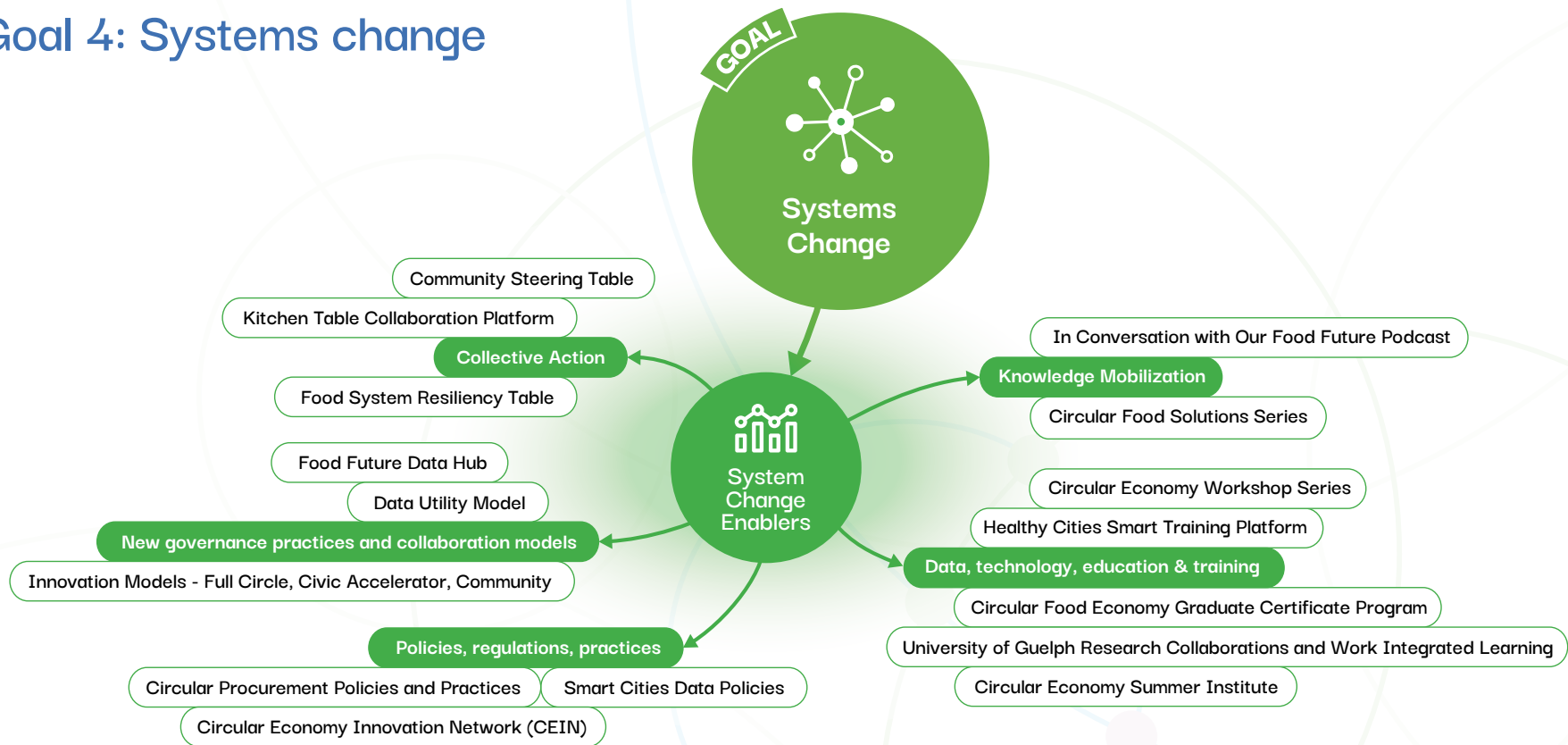
As we learn from this pilot, the findings will be shared with both farmers and other municipalities so successes can be duplicated. As well, public events such as the upcoming Wellington Soil Symposium will further amplify and celebrate the regenerative agriculture in our foodshed.

# Goal 4: Systems change





## Goal 4: Systems change



Our circular regional food system enables the systems change required for a circular regional food system through collective knowledge and action. A circular food economy – enables the systems change required for a circular regional economy, beginning with the food system, through collective knowledge, governance, and action.

## Objectives

1. **Collective action** is undertaken to create regional, whole-system change.
2. **Policies, regulations, and practices** are established to support a circular food economy.
3. **New governance practices and collaboration models** are developed to strengthen and create new system relationships.
4. **Data, systems analysis, continuous learning**, and sharing are used to better understand local assets, opportunities, and issues.
5. **Expertise is shared** and learnings published in support of a national and global circular economy.
6. **Relationships and teachings** from traditional cultures and land stewards inform ways of living within planetary boundaries.



## Outcomes



### Systems Change Enablers

- 7.1 Increased knowledge, skills, resources, capacity, and collaboration to design and implement innovative/strategic solutions
- 7.2 Greater understanding and awareness of circular practices through research and data
- 7.3 Change in practice and policies to enable circular innovation

## Our impact 2020–2021



**\$14,223,374**  
of funding was leveraged



**\$1,275,004**  
in in-kind contributions  
was leveraged



**52** relevant datasets  
were centralized in the Food  
Future Data Hub



**995** stakeholders  
were engaged in  
Our Food Future

# Goal 4: Systems change

## stories and spotlights

- Building smart, healthy cities
- Harnessing data and technology to guide Our Food Future





### Building smart, healthy cities

To make cities healthier, more livable and more resilient, the University of Guelph is investing in an innovative training program.

The **Implementing Smart Cities Interventions to Build Healthy Cities (SMART) Training Platform** will equip students with multidisciplinary and implementation skills needed to run and manage the ever-more complicated cities of tomorrow — cities that incorporate everything from healthy food and green space to public transportation, housing and social services.

The federally funded \$4.95-million project builds on Smart Cities proposals developed by Guelph-Wellington, Montreal and the Opaskwayak Cree Nation in Manitoba, bringing together 48 researchers at 10 institutions across Canada.

At the University of Guelph, 10 researchers will contribute their expertise in nutrition, health and agri-food systems. “Food security and resilient food systems are critical to building healthy cities,” says Dr. David Ma, the principal investigator for the project at the University of Guelph.

The SMART Training Platform aims to cultivate a new generation of multidisciplinary researchers in health, social sciences and humanities, engineering and environmental sciences equipped with implementation skills. Through the program, trainees will examine and test bold solutions in real urban settings, moving knowledge into action in support of building healthy and smart cities.



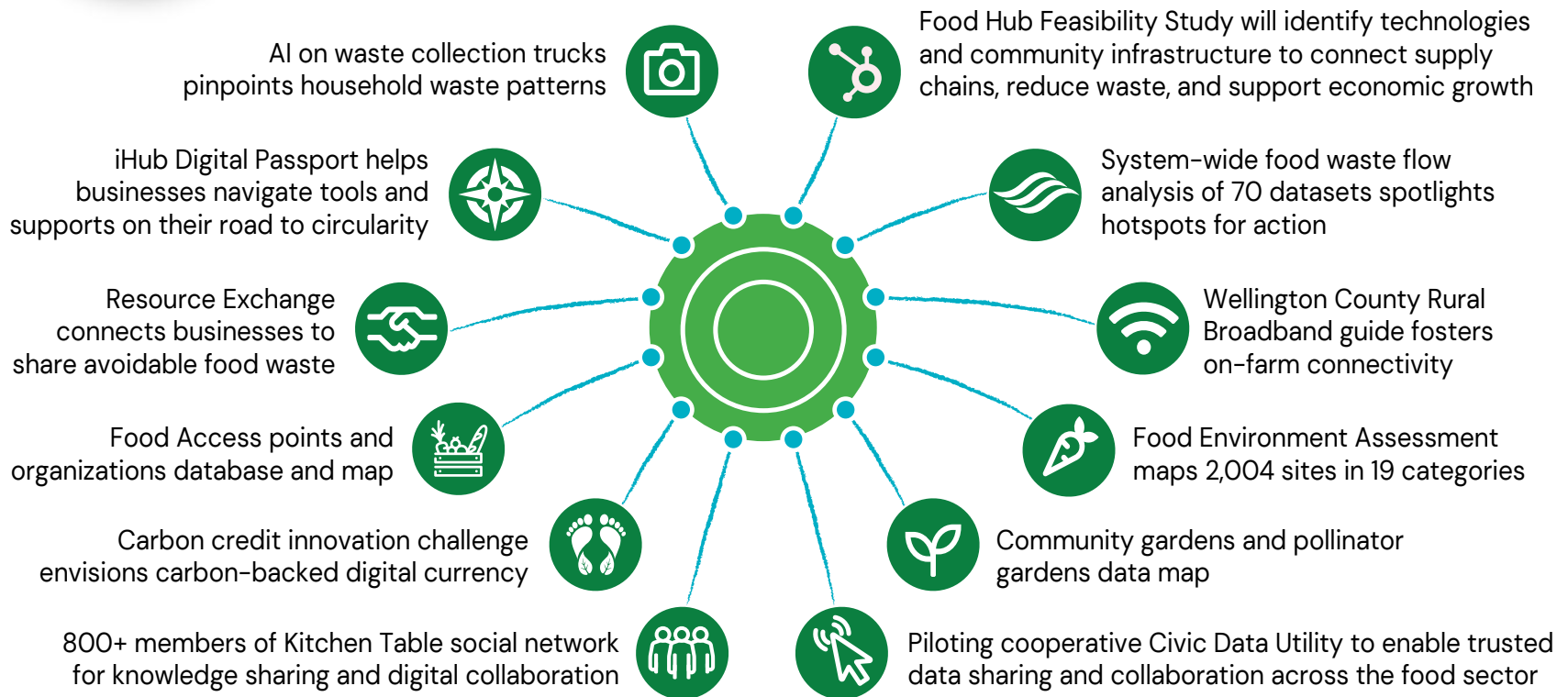




## Spotlight

### Harnessing data and technology to guide Our Food Future

Enabling, collecting and analysing data and technology to further direct evidence-informed circular solutions



To build a smart food system we need to start by understanding the system we have now – what data, technologies and relationships are in place, and where we need something new to address existing gaps. The first two years of the Our Food Future project have focused primarily on understanding these vital elements and exploring opportunities to prototype new, collaborative, and scalable technology approaches to enable circularity across the food system.

# Conclusion: Unlocking opportunity



## The stage is set for a more circular future

Our Food Future has created significant impacts in Guelph–Wellington since our launch in 2020, despite the considerable challenges created by COVID-19.

We've diverted thousands of tonnes of food waste from landfills. We've established collaborations with businesses to improve the circularity of supply chains. We've helped more farmers adopt regenerative practices. And we've prepared and delivered more than 60,000 meals to families in need.

Most importantly, we've laid the groundwork to deliver more programs and deeper impacts moving forward. Our growing collection of data is giving us new insights into issues and opportunities. Our pilot projects are showing what works and what doesn't. And our refreshed model for success puts Guelph–Wellington in an even stronger position to create a circular food economy that can serve as an example for the world.



COIL takes that even further, broadening our focus into packaging, emissions, and other environmental issues, and expanding our geographic focus.

In 2022, watch for us to be launching our Reimagine Food engagement campaign and motivations survey, as well as implementing food access projects from the Food Environment Assessment. In the County, we will be furthering our work in regenerative agriculture and exploring the carbon credit market for farmers. Our Material Flow Study is evolving into a Zero Waste Economic Transformation Lab that COIL will be launching soon. And much more.

Together with partners from every sector, we're driving the kind of transformative changes that allow community members, businesses and the planet to thrive.

But we're just getting started. Take a seat at the table. Join the conversation and help us unlock even more opportunities for circularity in our food system and our regional economy.





**77,013** meals and  
**57,187** food boxes  
prepared and delivered  
to community members



Individuals with increased  
access to affordable,  
nutritious foods

**3,267**



Regional farmers  
using regenerative  
practices

**21**



Data sets  
centralized in the  
Food Future Data Hub

**52**



Stakeholders  
engaged in  
Our Food Future

**995**



New funding  
leveraged

**\$14,223,374**

# Our Impact 2020-2021



Circular Opportunity  
Innovation Launchpad



Value of inkind  
contributions

**\$1,275,004**



Value of supports  
for NGOs

**\$2,919,219**



Value of supports  
for businesses  
and social enterprises

**\$1,503,755**



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

**\$960,812**



Businesses  
engaged in  
the program

**191**



Businesses that  
established or expanded  
their circular practice

**181**



Business collaborations  
strengthening the  
circular supply chain

**232**



New products and  
services from  
diverted food waste

**14**



Tonnes of food  
waste diverted  
from landfill

**6,479**



Tonnes of food  
upcycled to  
new products

**66**



GHG Emissions  
prevented

**1,769 tonnes**

● Increasing access to affordable, nutritious and culturally specific foods  
■ Leading system change through collective knowledge and action

▲ Accelerating businesses and collaborations to create a thriving circular economy  
◆ Reducing and creating new value from waste

# Collaborators



# Program descriptions



## Program Descriptions

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## Affordable, Nutritious Foods



### Growing, Production and Land Use

**Community Design Studio** – Faculty and students in the University of Guelph Landscape Architecture department are connecting with the City, businesses and community members to engage in place-based design projects that centre food infrastructure, community and culture in the development of public spaces. The first project focused on how designing for food could be incorporated into plans for the Baker Street redevelopment, a major project in downtown Guelph. The second studio looked at design interventions for the lands surrounding the Guelph Farmers' Market.

**Guelph-Wellington Urban Agriculture Challenge** – A call for projects and ideas in 2021 that support a circular economic recovery and accelerate food production, getting more food to the table with less environmental impact. A total of \$106,000 was awarded to 10 winners spanning small community projects to transformative built-form projects. Applications ranged from augmenting existing gardens and community agriculture spaces with growing infrastructure such as fruit trees, rainwater harvesting and composters to providing unique opportunities for growing, learning and capacity building. [Learn more](#) about the winning projects and follow their implementation progress.

**Indigenous Food Sovereignty** – Developing relationships with Indigenous community members to better understand their worldview and recognize and promote their social and ecological wisdom is the first step in achieving the long-term goal of ensuring all Indigenous people have access to land and healthy, culturally relevant food. In addition, Our Food Future aims to support Indigenous-led and co-created projects. The four key Indigenous principles of relationality, responsibility, reciprocity and respect have much to teach Our Food Future and the broader settler community about community-centric approaches. We are committed to building positive relationships with local Indigenous communities to bring these values to life in our work and community to co-create an equitable and bountiful food system.



**Regenerative Sustainable Agriculture** – Applying the circular economy to farms means supporting the shift towards regenerative agriculture: a suite of best practices focussed on rebuilding soil health. We conducted research and [released a report](#) on some of the climate-friendly, or regenerative farming practices in our County. We also have launched the Experimental Acres, an on-farm pilot designed to protect farmers from risk as they learn what works for their soil. This pilot is designed as an “on ramp” that builds layers of support over the growing season and includes components such as soil assessment, verification tools, a community of practice and a path to future funding. As we learn from this pilot, the findings will be shared so successes can be duplicated.

**Rural Broadband Connectivity, Knowledge and Tools** – Improving the County’s rural broadband access includes advocacy with both internet service providers (ISPs) and funders; an ongoing survey of ISPs and community members to map services and gaps; discussions with existing and incoming ISPs in order to support expansion strategies; creation of a [tool kit](#) for residents; and keeping abreast of innovations and opportunities regarding rural broadband. Public workshops and on-farm visits will offer further opportunity to practise the Connected Farm Living Lab approach, matching host farms that wish to engage in real-world testing with researchers and technology.



## Access and Inclusion

**Food Environment Assessment** – Our Food Future’s Nutritious Foods Workstream, led by Wellington-Dufferin-Guelph Public Health and the non-profit Toward Common Ground, undertook research to understand the local food landscape to inform broad policy and programming decisions. The research included: a policy review; food retail audits; neighbourhood

mapping; programming and infrastructure scans; and analysis of consumer purchasing and consumption behaviour. Surveys and focus groups with local community members were conducted to understand the resident experience and facilitators/barriers to acquiring, preparing and consuming nutritious foods. The research also identified opportunities to support residents in accessing nutritious food under both normal conditions and during COVID-19. Read the final report.

**Food Security and Health Action Plan** – This plan will articulate an intervention strategy (2022-23) for developing, implementing, and evaluating evidence-based programs, policies and cross-sector solutions. It will be developed in collaboration with local agencies and community groups and draw on insights from the Food Environment Assessment. Interventions will focus on promoting nutritious foods through the following areas: knowledge and skills for healthy eating, transforming food insecurity (economic access) and healthy food neighbourhoods (physical access).

**Food Security CoLab Challenge** – Our Food Future’s CoLab initiative gathered a group of community members and organizational leaders around a common goal – to break down existing barriers to food security within the Guelph-Wellington region. Rather than following a typically competitive and rigid granting process, these groups, led by Our Food Future collaborators 10C and Toward Common Ground, co-created a highly collaborative and equitable framework. This included a collective budgeting process to decide how to allocate funding to achieve the shared objective of community food security. The learnings of the Our Food Future Co-Lab will continue to be captured in the final months of evaluation and shared in a final report. This equitable and inclusionary funding model may support other departments, grantors, and organizations negotiate a similar place-based framework.

**Emergency Food Delivery** – When the pandemic first hit in 2020, The SEED – a community food project of the Guelph Community Health Centre – rapidly shifted its programs to give those most impacted by COVID-19 immediate access to nutritious food. By leveraging technology, transforming their supply systems and mobilizing a community of cooks and delivery options, The SEED distributed over 61,000 nutritious food boxes between April and October 2020, including fresh foods, frozen meals and shelf-stable goods free of charge to community members in need via contact-free home delivery.

**Groceries from The SEED** – Building on the success of local Sliding Scale Markets and the Emergency Food Delivery program, The SEED has launched “Groceries from The SEED,” a pay-what-you-choose online grocery store with a social purpose. Through the project, residents can do their regular grocery shopping online through The SEED, paying the full retail price. The profit from these purchases then goes to subsidize substantial discounts for community residents in need. With this program, The SEED aims to support 2,000 low-income residents in about 750 households.

**Food from Home = Food for Home** – New arrivals to Canada often come from distinctly different climates, and geographies and bring a wealth of new flavours and cuisines. This urban growing program provides gardening space and resources for newcomers to grow and distribute culturally relevant foods and share gardening practices. Located at the Westmount Farm on land near Guelph’s St. Joseph’s Hospital, it brings together local urban farmers and participants from newcomer communities with experience and/or interests in growing food. The goal is to grow and share healthy nutritious foods, including culturally relevant varieties that are often difficult to source, as well as provide meaningful connections between Newcomers and the local community.

**Greenhouse City Network** – This proposed network of year-round urban greenhouses will allow both food relief agencies and community growers to efficiently grow a substantial amount of the produce they desire. The harvest will be used to feed those in our community without the resources to always access fresh, nutritious food. Produce will be distributed to local relief agencies and directly to those in need through a variety of means, including free and sliding-scale food-box programs, community markets, emergency food pantries and community meal experiences. The result will be a replicable model of governance, operations and data sharing that will best respond to community needs and increase the yield of year-round fresh food. Greenhouse City Network will build local capacity through enhancing shared agriculture infrastructure, technology, knowledge and action.

**Upcycle Kitchen** – This social enterprise initiative run by The SEED – a community food project of the Guelph Community Health Centre – rescues produce that would otherwise be discarded by distributors and transforms it into jams, sauces, soups, dips and other products. They also piloted an “Upcycle Kitchen Café,” providing meals made from upcycled ingredients to the Guelph Community Health Centre staff and clients.



## Celebration and Food Culture

**Guelph Film Festival – Tiny Food Docs** – In 2020 and 2021, Our Food Future co-presented a kids’ documentary program around the theme of food as part of the Guelph Film Festival. This builds awareness and community engagement and supports nutritious food, urban agriculture, and food waste project objectives, especially for children. In both 2020 and 2021, the festival sponsorship resulted in 18 short films from Guelph-Wellington children exploring how food is a part of their daily lives.

**Farmers' Market Refresh** – Our Food Future partnered with the City of Guelph Farmers' Market team to design and implement a public call for ideas, proposals and potential partners to explore new opportunities to augment the continued success of the weekly farmers' market. Through an innovative partnership that aligns with the Market's vision, the City sought proposals from the community to strengthen and expand this vital community asset. After a successful bid and negotiations, [Council signed an agreement](#) in November 2021 that will see Our Food Future collaborator 10C assuming the management of the market building and Saturday event operation. The intention of the agreement is to co-create a multi-purpose indoor-outdoor community market that is thriving with new partnerships, enterprises and is actively used 7 days per week.

**Kids Get Growing** – Working with the YMCA-YWCA of Guelph and Big Brothers Big Sisters of Centre Wellington, we safely distributed 740 children's gardening kits in Guelph and Fergus in 2020. Kits included soils, seeds/seedlings and educational materials to help Guelph-Wellington children learn about growing their own food. All kits were provided free of charge.

**Reimagine Food** – This public awareness and engagement campaign (2021-22) aims to spark conversation with Guelph-Wellington businesses and residents around lighter living, food access, and the real costs of food waste. Research through this project will help us discover the diverse motivations that lead residents of Guelph-Wellington to support circular products and services, reduce food waste, and undertake lighter living actions. Findings will also help fine-tune an engagement campaign and program design to better support uptake of climate and planet-friendly initiatives, including circular products and services and food waste reduction. Using a range of digital and place-based community engagements, the initiative will use interventions to drive behaviour change and encourage residents and stakeholders to take action.

## Circular Businesses and Collaborations



### Processing and Distribution

**Food Hub Study** – In collaboration with the NGen Advanced Manufacturing Supercluster, this study will assess the supports, facilities and other infrastructure needed to create an innovative circular agri-food system. This work includes a survey of the services and infrastructure in Wellington County that support food producers, as well as an assessment of whether there are adequate supports and facilities for the local agri-food industry.

**Farmers' Markets Online** – To support local food producers during the pandemic, Our Food Future partnered with the [Open Food Network](#), an open-source, not-for profit e-commerce platform, to help farmers' markets across Guelph and Wellington County create online sales channels. Funding was made available to farmers and food vendors to access this online platform for all interested Guelph-Wellington markets and vendors.

**Last Mile Delivery Pilot** – This demonstration project addressed immediate community needs through novel food distribution models, transforming a local restaurant that was forced to close as a result of the pandemic into a market for fresh, local, affordable food. Renamed Corner Market Guelph, it acted as a delivery point for healthy groceries and locally prepared foods. The restaurant hired back some of its employees to pack and prepare pre-made meals and then deliver them using zero-emission electric bicycles.





## Circular Business Innovation

### **COIL Activate Accelerator and Evolve Pre-Accelerator –**

These unique business accelerator programs help sustainability-focused companies in the food and environment sectors learn, scale their business and expand their socio-environmental impacts. Participants receive funding, executive-level mentorship, access to a globally designed circular economy curriculum and connections across our Rural-Urban Testbed ecosystem. Participants in the program will become part of COIL's circular economy business community and act as inspirational leaders to other businesses moving along the path of circular transformation.

**COIL CoLab** – With support from Innovation Guelph's Circular Economy iHub, the CoLab issues innovation challenges to redesign supply chains in the food and environment sectors to reduce waste and transform existing linear business practices. The winning teams (made up of 3–7 businesses and collaborators) will be funded through our CoLab process to work with mentors and experts to build out their idea, create a prototype and pitch how the solution would work at full scale.

**COIL Digital Passport and Guidebook** – Working with Guelph's Circular Economy iHub (CE iHub) at Innovation Guelph, COIL is implementing an intake process and a passport system that allows participating businesses to track their engagement with the many facets of Our Food Future. It will include a backend customer relationship management system to track interactions that will feed into a broader evaluation system and create a marketing presence for circular economy businesses.

**Harvest Impact Cultivator** – This loan program led by 10C offered up to \$360,000 of financing at 0% interest to approximately 36 Guelph-Wellington food system enterprises (including businesses, not-for-profits and social enterprises).

Implemented in collaboration with Wellington-Waterloo Community Futures and Saugeen Economic Development Corporation, it was designed to support their recovery from current economic shocks and to help them shift their practices in a way that contributes to a more sustainable, equitable and healthy food economy.

**Harvest Impact Project and Social Finance Fund** – The Harvest Impact Project works to engage circular and social entrepreneurs in transformational changemaking projects, offering pathways for collaborative grant-funding, social finance investment across an emerging network of social-first lenders. In its development stages, the Harvest Impact Social Finance Fund will provide circular and social entrepreneurs to access grants, loans, awards, including non-repayable start-up capital to high-potential projects. Harvest Impact is a pooled community-lending utility structured as a share capital cooperative, with available capital of \$3,000,000+ to create local investment opportunities and provide seed financing investments to Guelph and Wellington's leading circular solution businesses and collaborations.

**COIL Re(PURPOSE) Incubator** – The Re(PURPOSE) Incubator, led by Provision Coalition, is specifically designed to help Ontario's small and medium-sized food and beverage enterprises commercialize unavoidable food waste. Its services include by-product quantification, nutritional analysis, market analysis, value proposition analysis, partnership acceleration and more. The Re(PURPOSE) Incubator will be the first of its kind in Canada to associate these key functions and resources into one virtual and easily accessible platform.

**Seeding Our Food Future Micro Grants & Loans** – This program provided expert advice from Innovation Guelph, a series of virtual classes and non-repayable grants of up to \$5,000

to help individuals, businesses and social enterprises across Guelph and Wellington County promote a green economic recovery and enhance food security in the wake of COVID-19. Support was offered to 40 new and existing businesses to advance circular business practices, for a total investment of \$200,000. Learnings from this program informed the design of the new Evolve incubator program.

**Ivey Research Study** – Researchers at Western University's Ivey Business School undertook a study to identify the most common existing food and plastic waste synergies and assess the impact of a circularity broker in facilitating these synergies. Currently, they are looking at what barriers exist and what policy levers could encourage food-waste synergies and plastic-waste synergies at scale through well-designed waste exchanges. They will also assess the structuring, functioning and impacts of circular networks of waste synergies that are currently emerging.

**R-Purpose MICRO – Provision Coalition** – an Our Food Future collaborator – developed and delivered this training program for small businesses to incorporate circular economy principles and practices, thereby making their businesses more sustainable. Over 50 companies graduated from the program, expanding their skills and expertise in circularity and sustainability, creating valuable collaborative networks and implementing their own circularity plans.

**Circular Meal Pilot** – In this circular pilot project, three food items produced using circular practices – rainbow trout, bread and potatoes – were prepared and showcased at three local Neighbourhood Group restaurants as an “Our Food Future” menu special. Spent grain from a local brewery was used to create a fish supplement to feed the rainbow trout, and waste from the fish farm was used to fertilize the potato crop. Meanwhile, spent grain and spent yeast were used to make the sourdough bread.



## Buying, Selling and Sharing

**COIL ReSource Exchange Marketplace** – This online platform supports the exchange and recycling of end-of-life materials between businesses and the sharing of underutilized equipment and resources. Functioning as a “commodities exchange,” it allows people to connect and utilize otherwise wasted materials, facilitating the distribution of by-products and waste generated in the food system.

**Junction Food Network** – Testing circular principles, baseline mapping and engagement at the local neighbourhood level with local food businesses and community members to better understand the food ecosystem. In Guelph's Junction neighbourhood, this involves ecological asset mapping, community asset mapping and piloting an online platform that allows home gardeners to sell (or donate) the foods they are growing directly to their neighbours.

## Waste as a Resource



### Waste Reduction and Recovery

**City and County Food Waste Audits** – Both the County and the City utilize food waste audits to better understand how residents are using their green bins. The County completed food waste audits before and after the implementation of its new curbside green bin collection program, establishing baseline tonnage and composition data and assessing the impact of the green bin service. Interventions will be tested against the same households in future years to encourage green bin usage, determine effective messaging and promote food waste reduction solutions.

### **Food Material Flow Analysis and Hotspot Interventions –**

Several experts were brought together to complete a [Food Material Flow Study](#) that mapped the flow of food produced, consumed and wasted in Guelph-Wellington. This work revealed several food waste “hotspots” across the region, including fruit losses before manufacturing and losses of cereals at the processing stage. A [Sankey diagram and video](#) were created to disseminate the results. Building on the knowledge gathered from the Food Material Flow Study, an advisory panel has identified strategic interventions that could reduce inefficiencies and waste in the regional food system. We are currently selecting which of these interventions to pilot in the next phase of this project (2022–23). We will then produce several case studies examining waste and greenhouse gas production before and after interventions are applied. An application process to the Federation of Canadian Municipalities is currently underway for this next phase.

**Circular Carbon Credit Challenge** – This innovation challenge will explore the potential a voluntary carbon credit-backed currency could play in supporting the community’s circularity and Net Zero goals. The pilot aims to leverage carbon credits generated by the city to seed a self-sustaining model that incentivizes and rewards businesses and residents who make climate and circular friendly actions. In early 2022, Our Food Future will work with the successful innovator to design and prototype this model with the hope of piloting a scalable system later in the year.

### **Industry, Commercial & Institutional Food Loss Waste Pilot –**

Led by Canada’s Circular Innovation Council, this pilot project focuses on the industrial, commercial & institutional sector within Guelph-Wellington, where organic materials are managed independently by the organization on a facility-by-facility basis. The project aims to identify and trial collaborations to coordinate collection, transportation, and consolidation of organic material. This material will be processed into compost

at All Treat Farms. The goal is to pilot a replicable model to better manage edible food to maintain its highest value and optimize organics recycling. Metrics will include greenhouse gas reduction and food diversion amounts.

**County Curbside Green Bin Collection** – Launched in 2020, the Green Bin Organics Program offers County of Wellington residents’ household organic waste collection for the first time. This waste is diverted from landfill and instead turned into high-grade compost through a carbon-verifiable process. In the first year of operation, more than 2,500 tons of organic household waste were processed. In addition, regular audits take place after planned educational interventions, allowing us to further understand and improve our engagement with residents.

**Residential Waste Data Challenge** – Following an innovation challenge, the City of Guelph has partnered with Eagle Vision Technology and the University of Guelph to pilot a technology-driven solution to analyze the waste in residential green carts. This first-of-its-kind system uses artificial intelligence to analyze organic waste in real time as each household’s green cart is emptied into the collection vehicle. This new data will help us to better understand residential food disposal habits so we can plan targeted public education/outreach and interventions that help residents reduce food waste and contaminants that cause problems in the organic waste stream.

**R-Purpose Food Loss and Waste Prevention** – Provision Coalition – an Our Food Future collaborator – is working with eight local food or beverage manufacturing/processing companies over an 18-month period to reduce food loss and waste. Companies have access to tools and a team of experts who will help build and integrate circularity into operations, products and services. Outcomes focus on creating a circular business strategy, promoting a regenerative culture, preventing food waste in operations and repurposing unavoidable waste.



**Guelph Solid Waste Master Plan** – The City of Guelph has updated its 2014 Solid Waste Management Master Plan (SWMMP), exploring new and innovative ways to support the waste management needs of Guelph's growing community. The updated plan will guide the City in their waste management goals and objectives for the next 25 years. The process of developing it included assessing the current state of solid waste management in Guelph; analyzing strategies for single-use plastics; developing projections for future state and growth; and analyzing the industrial, commercial, institutional sectors. A key finding has been the growing community interest to prioritize and adopt a circular economy framework to further the City's aspiration towards zero waste goals.

**Weeknight Supper Savers – Food Waste Audits and Interventions** – Supported by Danone, this project tested the feasibility, acceptability and preliminary impact of a food waste reduction intervention with local families that include children ages 9–12. It also examined the extent to which the intervention is associated with changes in household food waste, parents' and children's waste-related knowledge, attitudes and behaviour, and parents' and children's fruit and vegetable consumption.



## Systems Change

### Collective Action

**Community Steering Table** – This governance body includes core delivery participants, as well as organizations that may not be directly involved in project implementation but play a supporting role in achieving the outcomes of the initiative. As a local community-coordination table, it provides advice regarding implementation, resource coordination, community

and stakeholder engagement and outreach. The membership of this multi-sector group reflects principles of diversity and inclusion.

**Food System Resiliency Table** – This table launched in December 2021 supports the development of a resilient regional food system that contributes to a green recovery from COVID-19. Members are gathering intelligence on the regional agri-food sector and developing recommendations and programs to support short-term and mid-term needs. The table is poised to be a legacy project of Our Food Future, with the goal of becoming a policy council that is embedded in both City and County government.

**Kitchen Table Collaboration Platform** – This digital engagement and innovation platform is where we will launch challenges, share knowledge, harvest great ideas and build community connections. Its purpose is to increase visibility for local projects and businesses, drive crowd-sourced innovation through challenge processes, rally new voices and lay the foundation for an active community that can sustain the circular food economy well into the future.

## Policies, regulations, practices

**Circular Economy Innovation Network (CEIN)** – This is a collaborative proposal for a national initiative to develop a Canadian circular economy strategy and portfolio of programs to integrate circular economy strategies into supply chains; support industry by developing new business models; and improve productivity through new approaches and technology applications. It will engage 5,000+ companies of all sizes across 500+ communities in sectors that include agri-food, forest bioeconomy, mining and metals, plastics, construction, and manufacturing. The resulting national circular economy roadmap will guide individual projects and program investments.

**Circular Procurement Policies and Practices** – Circular public procurement can support the transition towards a circular economy. It helps cities and public sector partners purchase works, goods and services that contribute to closed-energy and closed-material loops within supply chains, minimizing or avoiding negative environmental impacts and waste creation. Our Food Future is conducting an analysis of opportunities for partners to implement circular procurement policies and practices.

**Smart Cities Data Policies** – We're creating the technology and policy infrastructure to support deeper collaboration between the organizations participating in Our Food Future, as well as the broader community. This has included pursuing an umbrella MOU and governance structure between core public sector collaborators to support data sharing use cases as they are identified. Meanwhile, we have worked with Alectra Utilities to prototype technology solutions that enable decentralized data governance. We have also created new digital privacy and user policies for members of the public using our social network platform, [Kitchen Table](#).

## New governance practices and collaboration models

**Innovation Models – Full Circle, Civic Accelerator, Community** – We've established three complementary innovation models, which leverage Guelph's proven Civic Accelerator innovation partnership approach to co-create new technologies and tools that advance Our Food Future objectives. These models have already been used for the Residential Waste Data Challenge, Circular Carbon Credit Challenge and the Urban Agriculture Challenge.

**Data Utility Model** – Data that can support shared economic, social and environmental priorities resides across a range of public, private and not-for-profit organizations. However, much of it is siloed off from each other. The Data Utility Model will test use cases for a civic data utility that will create a platform for sharing community data and sustainable digital infrastructure to support intelligent community solutions over the long term.

**Food Future Data Hub** – To facilitate data sharing, collaboration and app development, we launched a centralized data hub focused on food systems and the circular economy. It includes public-facing open data and apps (maps, dashboards, etc.), as well as a platform for controlled data collaboration (e.g., protected databases). The hub is accessible by the public, community groups, businesses and entrepreneurs, and food systems researchers to support the development of data-driven solutions.

## Data, technology, education & training

**Healthy Cities Smart Training Platform** – Led by the University of Guelph, the SMART Training Platform builds on three Smart Cities proposals from the cities of Guelph, Montreal and the Opaskwayak Cree Nation. This \$4.95 million investment from the Canadian Institute of Health Research will develop and deliver a high-impact training program for university students in implementation science. Focused on food and health issues, the program will give trainees access to 100+ ready-to-go projects, 100+ community partners and the expertise of 50+ researchers in epidemiology, public health, urban planning, management, economics, engineering, data sciences and more.

**Circular Food Economy Graduate Certificate Program** – Conestoga College is developing a new post-graduate program designed to train change-makers to shape the transition of the food system to a circular food economy. The program will produce graduates with employment potential in industry, government and the non-profit sector. The program emphasizes applied learning and incorporates an internship or a co-operative placement.

**Circular Economy Workshop Series** – One of the anticipated recommendations in the Guelph's updated Solid Waste Management Master Plan will be to create a framework that provides a clear roadmap for developing a circular economy. The new approach will challenge the City to rethink how it delivers services to residents and provides an opportunity to be a leader in strengthening local ecosystems and resources.

**University of Guelph Research Collaborations and Work Integrated Learning** – We engaged students in a variety of projects including the University of Guelph's Agrifood Innovation course, the Arrell Food Institute and the ICON Ideas Congress. Students taking the Agrifood Innovation course conducted research to supplement the Food Environment Assessment with in-store audits of food retailers. Five Arrell Food Institute graduate students are participating in the design process for the Experimental Acres on-farm pilot and are developing our frameworks and metrics. As well, the undergraduate ICON Ideas Congress at the University of Guelph engaged with Our Food Future to use the project as a springboard for their curriculum in Fall 2021.

**Circular Economy Summer Institute** – This is a partnership with the University of Guelph to develop a Circular Economy Summer Institute. Beginning with a national circular food economy course (2022) that links an elite cohort of students from across Canada with practitioners from business, civil society, government, and industry in an experiential multidisciplinary setting. This will be delivered via a combination of an immersive summer school, online workshops that run through the fall and winter semesters, and a team-based group project where groups of students will work with policy or corporate executives to design solutions for identified problems.

## Knowledge Mobilization

**Circular Food Solutions Series** – A research project, supported by the Smart Cities Office in collaboration with Vancouver's National Zero Waste Council, Circular Economy Leadership Canada and the NGen Advanced Manufacturing Supercluster. Part of the GLOBE Solution Series, [the report](#) aims to identify circular food practices present in communities across Canada. The project aligns with our commitment to develop replicable approaches to growing a circular food economy and to research policy innovations to accelerate the growth of circular businesses.

**In Conversation with Our Food Future Podcast** – A monthly podcast that explores the creation of a circular food economy in Guelph-Wellington. Host Barbara Swartzentruber, who heads up Our Food Future, joins guests to discuss projects and policies, share the stories behind our work, discuss emerging ideas in the food sector and introduce listeners to the people who are working to take our community's vision from theory to action.





## 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:

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## 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.



# OurFoodFuture

Guelph-Wellington

