

## Executive Summary

### Purpose of Report

To update County of Wellington Council on the progress of the City of Guelph's Smart Cities COIL (Circular Opportunity Innovation Launchpad) initiative. Since launching programs in October 2021, COIL streams have worked with over 60 companies in the food, environment and construction, renovation, and demolition (CRD) sectors.

Smart Cities Guelph is now launching the COIL Climate and Circularity Solutions Hub with \$250,000 in anticipated new funding from Desjardins Ontario Credit Union. In addition, Smart Cities has been awarded \$100,000 from Scotiabank's Net Zero Research Fund (subject to contribution agreement completion) to advance a signature Hub project on Regenerative Agriculture in Wellington County. Following direction from their City Council in January 2022, Smart Cities Guelph is also exploring potential future partnerships and funding pathways to continue their regional leadership in the circular economy, including the potential launch of a national COIL network.

This report is to detail these new opportunities and next steps.

### Key Findings

- COIL's first year has found tremendous success in helping businesses develop and scale new circular economy innovations in the food, environment and CRD sectors, including millions in projected new business revenues from products and services created through COIL programs.
- COIL is launching a new Climate and Circularity Solutions Hub which will work with academic and industry partners to connect circular economy innovation with action to combat climate change.
- COIL has been approached by several municipalities across Canada seeking to establish instances of COIL. We are now exploring potential strategies and funding streams to transform COIL into a national network of circular economy innovation clusters, with Guelph-Wellington as the Canadian epicenter for the circular economy.

### Financial Implications

All Smart Cities' programs are funded through external grants. The new programs detailed below will continue with this approach with no new operating expenses to the City or County beyond current routine administration (e.g. financial, legal services).

The new Climate and Circularity Solutions Hub is bringing in an additional \$250,000 in funding from Desjardins Ontario Credit Union to establish the hub. In addition, Scotiabank has awarded Smart Cities \$100,000 in new funding from their Net Zero Research Fund to support a Hub project focused on Regenerative Agriculture in Wellington County. We anticipate that additional public, corporate and foundational donors will contribute to this important climate solutions work.

A new COIL national network will require funding from multiple federal regional economic development agencies, and a plan is being developed to finalize anticipated costs. Guelph-Wellington would serve as the epicentre of this network

and will leverage the intellectual property developed through our COIL and Our Food Future initiatives as part of our contribution to a national circular economy network.

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## **Report**

### **COIL progress and success to date**

In 2019, Wellington County and Guelph won \$10M from Infrastructure Canada's Smart Cities Challenge to launch the Our Food Future initiative, a project aimed at building a regional circular food economy and with goals that include increasing access to nutritious food, supporting new circular businesses and redefining waste as a resource. After demonstrating strong interest from our regional social innovation sector and business community, Smart Cities was awarded an additional \$5M from FedDev Ontario to launch COIL (Circular Opportunity Innovation Launchpad), an initiative aimed at spurring circular innovations and helping circular businesses grow and scale their impacts.

Since launching programs in October 2021, COIL has worked with over 60 businesses across the food and environment sectors. The first two cohorts have resulted in numerous success stories, including:

- Dozens of companies developing new upcycled products from materials that would have otherwise gone to waste including muffins and ramen noodles from tofu byproducts; spent brewery grain into a plant-based protein; sheep wool waste into a low-phosphate fertilizer; ready-to-eat meals made primarily from juice and brewery pulps.
- COIL programs have fostered the development of multiple new patentable technologies and business models with the potential to scale across Canada and beyond.
- COIL brought the Upcycled Certified standard to Canada – a consumer-facing certification program that indicates when a product is produced using upcycled ingredients. Upcycled Certified will launch this fall with a cluster of newly certified products from our ecosystem.

All COIL programs have been developed and delivered in close partnership with core collaborators from the City of Guelph, Wellington County, 10C and Innovation Guelph, and with support from community champions including Anthesis-Provision, the Guelph Chamber of Commerce, Guelph-Wellington Business Centre, Launchit Minto, and the John F. Wood Centre at the University of Guelph. Per our FedDev funding requirements, COIL recently formed a strategic relationship with the London Economic Development Corporation which will help more businesses across southwestern Ontario access our programs, tools and resources.

This aligns with the County of Wellington's Economic Development Strategic Plan, which seeks to foster an environment conducive to entrepreneurial activity, and to develop lasting partnerships that advance the economic sustainability of the County.

### **Launch of COIL Climate and Circularity Solutions Hub**

A shift to a circular economy is urgently needed if we are going to address climate change. Ellen MacArthur Foundation states that roughly 55% of emissions can be

tackled by the transition to renewable energy – while the remaining 45% of emissions must be addressed in how we make and use products and food, and manage land. Transitioning to a circular economy not only generates greater economic value from resources, but it is also an essential strategy to address climate change. Over eighty countries have included action on the circular economy as part of their commitments for the Paris Climate Agreement.

To directly link Guelph-Wellington’s circular economy strategies with climate action, COIL is launching a new Climate and Circularity Solutions Hub. The Hub will leverage Guelph-Wellington’s on-the-ground circular economy programs and expertise to better understand and communicate best practices for building a climate-smart circular economy. The Hub is launching with a range of collaborators including the University of Guelph, Ivey Business School and CSA Group (formerly Canadian Standards Association).

At launch, the Hub will focus on three core areas:

**Net-Zero Systems:** As an urban-rural testbed, Wellington and Guelph have learned much about what regions need to do to facilitate the growth of circular economy collaborations and networks. The Hub will continue this by launching demonstration projects that prototype, and pilot policies, tools, technology and infrastructure that facilitate, net-zero circular economy systems.

**Impact Evidence:** Not all circular economy actions result in emission reductions, therefore we need to focus innovation efforts on the approaches that do. The hub will work with experts, academic partners and communities to uncover new knowledge to help measure, verify and share climate-smart circular economy best practices.

**Learning Platform:** Not enough businesses and consumers are aware of the circular economy and the resilient growth opportunities it will bring. The Hub will lead education, training and engagement programs that build climate-smart circular knowledge and skills – and mobilize leaders to act.

The Hub is being launched with \$250,000 in funding from Desjardins Ontario Credit Union. Desjardins has a long history of supporting circular economy innovation and research in Quebec and other parts of Canada. We anticipate making a formal announcement with Desjardins in the Fall.

In addition, Smart Cities has been awarded \$100,000 from Scotiabank’s Net Zero Research Fund (subject to contribution agreement completion) to support a signature Hub project advancing regenerative agriculture assessment systems in Wellington County. This regenerative agriculture project has also been supported by Maple Leaf Foods which provided initial funding of \$10,000 to launch this project. The interest of multiple corporate donors in Guelph-Wellington’s COIL initiative speaks to the nation-wide recognition our region has gained through our circular-economy-building efforts. The Hub is being designed to facilitate future opportunities for other leaders in corporate Canada, foundational donors and research organizations to further support and participate in this important work.

## **COIL Future Funding and Potential National COIL Network**

Current federal funding for both Our Food Future and COIL will end by December 2023. In January 2022, City Council directed the Guelph Smart Cities Office to seek

additional private and public sector funding to support the City's circular economy work beyond this date. This discussion has not yet been brought before County Council.

COIL has been approached by several municipalities across Canada interested in establishing their own instances of the COIL. Smart Cities believes there could be significant value in establishing a network of COIL clusters across the country building on and extending the work we have pioneered in Guelph and Wellington County.

In our initial visioning, the network would include a series of regional clusters across the country with a national centre-of-expertise in Guelph-Wellington. Each regional cluster would launch their own suite of regionally-focused programs, building on the strategies developed in GW. In addition, there would be a layer of national programs, innovation challenges and awareness campaigns coordinated out of GW. The Smart Cities Office, along with community partners (10C & Innovation Guelph) would also seek continued and expanded funding as the circular economy innovation epicentre for southern Ontario. A sustainable business model is being developed – one that leverages the IP created in the development of the COIL programs and brand.

To date, two regional organizations have signaled their interest in helping co-create this model and discussions are underway with several others. Interested collaborators include:

- Vancouver Economic Commission (serving Vancouver region and BC)
- Halifax Economic Partnership (serving the Maritimes)

Discussions are underway with collaborators around potential funding and operating strategies. From initial discussions with potential federal funders, Smart Cities Guelph is optimistic that there would be interest in helping Guelph-Wellington spread our circular economy expertise to other regions across the country.

As with our current programming, any continuation or expansion of COIL work would leverage external resources and not impact the City or County's core operating budget.

## **Report Authors**

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