

Country	Canada					
Population	150,392					
Title of policy or practice	Consolidated IC&I Food Rescue & Waste Diversion					
Subtitle (optional)	Improving Management and Recovery of Food and Food Waste in the IC&I Sector Through Regional Servicing and Co-operative Financing					
URL video	https://drive.google.com/drive/folders/1wibNET1xndHWerbY1XSD0pdv60-5hvPT?usp=sharing					
Category	06 – FW		SDGs		12 – 13 – 2	
Year of start	2021		Year of end		2022	
Actors involvement	Municipal departments	Public institutions	NGOs CSOs	Research centers	Private sectors	International bodies
	4	1	11	1	50	
Budget	€230,000 for the six-month pilot €75,000 in-kind support					
Brief description	<p>It is estimated that the Industrial, Commercial, and Institutional (IC&I) sector in Canada accounts for 86% of food lost to disposal along the complete value chain. This poor performance is predominately due to limited regulation, cost barriers, insufficient processing infrastructure and collection programs. This sector lacks economies of scale and co-ordination as generally only large waste generating facilities are serviced individually by private sector providers.</p> <p>The pilot mimics the efficiencies and consolidated regional collection model of residential organics programs, enabling businesses to work together to reduce the cost of collection.</p> <p>The pilot benefits both the food insecure (through increased donations of edible food to local food rescue charities), as well businesses and institutions of all sizes generating food waste. The goals include:</p> <ul style="list-style-type: none"> • Reduce Cost of organic waste diversion by designing regionally consolidated collection route to improve efficiency • Reduce GHG emissions by diverting food waste from landfill • Increase social impact by recovering edible food to local community agencies for distribution • Develop a cooperative financial model, whereby organic waste costs are shared by participants based on actual amount of waste generated. <p>For the first six months of the pilot ending April 30, 2022, 139 tonnes of organic waste have been diverted, and 12.4 tonnes of edible food (valued at \$89,455) recovered to local charities, resulting in greenhouse gas reductions of 206 tonnes CO₂e. This model has worked effectively for all types of businesses and institutions participating, with only 1 day/week collection. Contamination levels have been very low, resulting in favourable pricing from processors. With a small increase in the density of businesses on the route, the organics diversion price will be reduced below average for the region, and combined with savings from reduced garbage volumes, will encourage additional diversion.</p>					
Innovation	<p>This is only pilot of its kind in Canada trialling collective management of IC&I food waste, combined with edible food rescue, to maximize the value. For the many regions in Canada with no or limited organics diversion policy in this sector, we hope to demonstrate to policy makers that this model enables businesses of all sizes to affordably and successfully implement food waste diversion, reducing barriers to organics regulation for IC&I sector.</p> <p>This pilot's solution includes numerous innovations, such as:</p> <ul style="list-style-type: none"> • Coordination of organics collection amongst neighbouring businesses and institutions of all types for economic and environmental gain • Combining edible food recovery with food waste diversion work, educating businesses on the value of keeping food at its highest human value and simplifying the process of food donations through technology 					

	<ul style="list-style-type: none"> • Developing a technology-enabled weight-based business model, moving away from the current “cost per bin” (whether full or not) and thereby incentivizing businesses to reduce their food waste • Developing a cooperatively financed organics collection model, where costs are shared equitably across the numerous participants, reducing the financial premium of organics diversion for small and medium enterprises • Expanding the limited data available in Canada on IC&I organic waste across nine subsectors, to enable municipalities to evaluate implications for local landfill capacity extension and/or organics processing development.
Impact	<p>The impact results represent the first six months of the pilot project.</p> <p>The social impact of this pilot includes 12,400 kgs of edible food donated (Indicator 44) by participating businesses and institutions, redirected by 9 local charities to the food insecure community members they support. In addition to enhancing access to nutritious food, it also strengthens social capital through enhanced business awareness of food insecurity as well as connections to community agencies.</p> <p>The environmental impact includes 139 tonnes of food waste (indicator 41) diverted to reuse (composting) and away from landfill, or an estimated annual diversion of 278 tonnes diverted. Through both edible food and food waste diversion, 206 tonnes of CO₂e (indicator 34) have been avoided (estimated 413 tonnes/year).</p> <p>The economic impact includes the retail value of the surplus food recovered of €65,500 (€126,000/year), as well as the value of the 37.5 cubic yards of compost, with a retail value of €1,800. Participants on average reduce their garbage disposal costs by 33%, which helps to offset the higher cost of organics diversion. The model is anticipated to be financially self-sustaining with participation from 150 businesses and institutions.</p>
Inclusion	<p>This pilot combines food recovery and redistribution with organic waste diversion in the uncoordinated IC&I sector, across two government municipalities, responding to our attention on MUFPP categories 1, 4, 18, 19, 33, 34, 35, 41, 43, and 44.</p> <p>We aim to evaluate the effectiveness of a single organics collection model in meeting the business needs across the diversity of nine IC&I subsectors. We also want to understand the ability to achieve collection efficiencies and cost reduction by including both the higher density City of Guelph and the rural/peri-urban County communities beyond it.</p> <p>The success of the pilot to date has been enabled by the broad range of stakeholders contributing to its design and implementation.</p> <p>Municipal partners provided expertise in service boundary and collection route development, economic analysis of the consolidated collections and required efficiencies to reach our target collection costs, as well as connections to local businesses and associations. Local politicians provided promotion and introductions. Private sector participants were essential in providing operational support and IC&I sub-sector specific feedback. Our charitable partners enabled effective inclusion of food recovery organizations and expanded our ability to connect with a wide range of businesses that joined the pilot as participants.</p>
Challenges and learning needs	<p>Cooperative Model: There are multiple options to explore as we scale-up participation to achieve the target economics. We intend to move from a buying group model to a brand-new cooperative organization managing organics diversion on behalf of the engaged participants.</p> <p>Technology: Technology is an essential enabler to this model, leveraging Second Harvest’s Food Rescue App to facilitate edible food donations. We have been successful at collecting weight-based data manually, and are now seeking connected floor scales and/or sensors that would more successfully enable the weight-based business model. We would also like to develop a data utility that anonymizes IC&I participant data but provides sub-sector understanding to enable improved solutions and goal setting that could be expanded to other regions.</p> <p>Knowledge Sharing: We would like to develop a resource so the model may be replicated in other jurisdictions to accelerate IC&I organics diversion across the country.</p>