Organics Management Guide Submission

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Select the Primary Entity Type Please identify the category that best represents your project: Owner of Infrastructure** (composting, anaerobic digestion, depackaging, etc.)

Questions:

1. **Background: Provide context for the program, project, or policy — why it was developed, when it began, and the problem or opportunity it addresses.**

The FoodCycler multi-residential pilot was developed to address a persistent gap in organics management: food waste in apartment and condominium buildings, where centralized composting systems often struggle with low participation, contamination, odour, and operational burden. Launched in 2025 , the pilot tested a decentralized approach by shifting food waste management upstream into residents' kitchens. The program equipped every unit across two multi-residential buildings in Québec, Canada (155 apartments, primarily 1–2 person households) with in-suite FoodCycler units.

The opportunity was to assess whether source-level food waste processing could reduce landfill disposal, improve resident engagement, and alleviate building-level challenges associated with wet food waste. By enabling residents to dry and reduce food scraps at home before collection or reuse, the pilot aimed to transform food waste from a centralized operational issue into a manageable daily household practice.

2. **Summary: Briefly describe the initiative, including its goals, location, and primary outcomes.**

The FoodCycler multi-residential pilot was a 2025 initiative led by Devcore and NexLiving Communities in partnership with Food Cycle Science, implemented across two full apartment buildings in Gatineau and Thurso, Québec. The program equipped 155

households with in-suite FoodCycler units, enabling residents to process food scraps directly in their kitchens and generate a clean, shelf-stable by-product for reuse or on-site collection. Food Cycle Science delivered the pilot as a complete, hands-on solution, providing program design, equipment deployment, resident onboarding, and ongoing support for both residents and property managers throughout implementation.

As a result, the pilot achieved net new food waste diversion in buildings with no prior organics solution, diverting an estimated 23.5 metric tonnes of food waste from landfill annually and contributing to an observed 25–50% reduction in landfill-bound waste volumes at the building level. No processed food waste was disposed of as garbage, and buildings reported cleaner waste rooms, reduced odours, and fewer operational issues related to wet food waste.

Resident participation and engagement were high. 94% of residents reported plans to continue using the FoodCycler beyond the pilot, and 83% reported that participation motivated them to waste less food overall, indicating sustained behaviour change. Overall, the pilot demonstrated that decentralized, in-suite food waste management, when delivered with hands-on implementation and ongoing support, can achieve meaningful landfill diversion, improve building operations, and drive durable resident engagement in multi-residential settings.

3. **Percent of Overall Diverted Material: If available, include data or estimates on the portion of the community or organization's total diverted material no longer associated with the waste stream that this program or policy addresses.**

Prior to the pilot, neither building had an organics collection or processing system in place, and all food waste generated by residents was disposed of in landfill-bound garbage. As such, all diversion outcomes observed during the pilot represent net new diversion from landfill. Resident tracking data and on-site observations indicate the significant removal of food waste from the garbage stream among participating households. No FoodCycler by-product was disposed of as residual waste.

Diverted material followed clearly documented pathways: 72% of participating households deposited FoodCycler output into newly established communal organics bins for on-site landscaping use or municipal collection, while 26% donated the material to friends or family for use in home gardens.

Property staff also reported early reductions in garbage volume and odour issues in communal bins. Together, these outcomes demonstrate that the program introduced a

previously absent organics solution and significantly increased food waste diversion in a multi-residential context.

4. **Key Program Elements or Policy Provisions: Describe the structure and main components of your program or policy. Explain the investments origins (who, how much). Please include as many of the following elements as applicable: What types of materials are being managed? (e.g., surplus recoverable foods, food scraps, wasted food. How are these materials managed? Who is responsible for managing them? (Organizations, agencies, businesses, or other entities) What products are generated, and how are they utilized or managed? (e.g., compost, animal feed, energy products) Who funds the management of these materials? (Funding sources, grants, partnerships) Who generates these materials? (Identify the origin: households, institutions, businesses, etc.)**

The FoodCycler pilot was designed as a decentralized, in-suite organics management model that shifted food waste handling upstream to residents' kitchens, reducing reliance on centralized waste rooms.

1. Materials Managed

Nearly all household food waste generated by participating residents, including produce trimmings, leftovers, plate scrapings, meat, seafood, dairy, and even bones and food-soiled paper towels. Only source-separated food waste was managed in this pilot.

2. How Materials Are Managed

Each household received an in-suite FoodCycler unit to dry and grind food scraps, reducing volume by up to approximately 90%. The resulting dry, shelf-stable by-product was stored by residents in sealed containers in their apartments and disposed of at their convenience using small collection bins installed in chute rooms on every floor. These bins provided barrier-free access and were emptied as needed by property management.

3. Responsible Parties

Food Cycle Science led program design, equipment provision, onboarding, education, and operational support. Devcore and NexLiving Communities purchased the FoodCyclers, managed property participation, resident engagement, by-product collection infrastructure, on-site landscaping use, and coordination with municipal collection. Residents operated the units and managed household food scraps.

4. Products Generated and End Use

The program generated a nutrient-rich, shelf-stable dried food waste by-product (Foodilizer) through in-suite FoodCycler processing. By drying and stabilizing food scraps at source, food waste was transformed from wet, odorous material into a clean, lightweight soil amendment that could be safely stored, handled, and reused.

During the pilot, Foodilizer was used as a resource rather than treated as waste. Material was collected on-site for use by property management in landscaping and plant beds, with excess coordinated for municipal organics processing. Some residents also reused the Foodilizer for personal gardening or shared it with friends and family, extending reuse beyond the buildings. No processed material was disposed of in landfill-bound garbage, demonstrating how decentralized processing can support circular, local reuse pathways in multi-residential settings.

5. Funding and Investment Origins

The pilot was funded by Devcore and NexLiving Communities, including the deployment of 155 FoodCycler Eco 3 units. Food Cycle Science provided program management, technology, training, and support. No public or grant funding was used.

6. Material Generators

Primary material generators were residents of multi-residential households, predominantly 1–2 person apartments.

5. **Regulatory Impact: Describe how laws, policies, regulations, and/or code have affected your program or project. This may include positive, negative, or neutral impacts. Consider noting which regulations apply, how they influenced implementation or operations, any challenges or barriers encountered, and how compliance requirements shaped program decisions.**

The FoodCycler was not initiated in response to a specific regulatory requirement. It was implemented proactively within a policy environment that already supported organic waste diversion and created expectations that food waste solutions should be provided in multi-residential buildings. While policy did not drive the decision to proceed, the absence of regulatory barriers and the availability of municipal collection systems enabled smooth implementation and reinforced the program's relevance.

At the provincial level, Québec's Residual Materials Management Policy signals a clear direction toward reduced organic waste disposal and stronger source separation. At the municipal level, Gatineau's Residual Materials Management Plan establishes expectations

for compostable material management and prohibits compostables from being disposed of with regular garbage. Existing municipal services meant there were no regulatory or service barriers to the pilot.

Overall, the regulatory context functioned as an enabling backdrop and positions this model as replicable for properties seeking to prepare for future compliance requirements.

6. **Measurable Increase in Supply: Include data or qualitative outcomes showing growth in collection, diversion, or reuse volumes if available.**

The pilot resulted in a measurable increase in food waste diversion and reuse at both household and building levels. Resident tracking data showed a projected average diversion of 152 kg of food waste per household per year, amounting to approximately 23.5 metric tonnes of food waste diverted annually across the pilot cohort. This corresponded with a projected reduction of 7,490 garbage bags generated, based on resident-reported decreases in the number of household garbage bags produced on a weekly basis during the pilot.

At the building level, property management observed an average 25–50% reduction in landfill-bound waste collected from waste room bins. Qualitative feedback from property management further reinforced these outcomes: “We have dramatically reduced our waste production. The tenants use the system enthusiastically, we reuse the [compost] produced for our flowerbeds, our plants, and even share it with our family and friends.”

Diverted material was reused through multiple pathways, including on-site landscaping, municipal organics processing, and local reuse by residents, reducing both landfill disposal and transportation impacts.

7. **Behavior Change: Describe whether the initiative resulted in measurable behavior change and explain how you determined this. If behavior change occurred, outline the strategies that proved most effective. Please include any available data or evidence that supports your findings.**

The pilot resulted in measurable and sustained behavior change among participating residents, with evidence of habit formation over the three-month pilot period. This change was driven primarily by shifting food waste management from a centralized, out-of-sight system to in-home, daily engagement.

By placing FoodCycler units directly in residents' kitchens, food waste became a visible and routine part of household behaviour, rather than something handled intermittently in shared waste rooms. This reframing fundamentally altered how residents perceived and managed food scraps, embedding diversion into everyday routines.

This shift was reflected in continued use and reported changes in food management practices. 94% of participating residents reported plans to continue using the FoodCycler beyond the pilot period, indicating that in-suite processing had become habitual. In addition, 83% reported that participation motivated them to waste less food overall, demonstrating upstream behaviour change beyond diversion alone. Key drivers reinforcing this behaviour change included in-suite convenience, elimination of odour and mess, clear onboarding and ongoing support, and residents' ability to see and manage their own food waste. Together, these factors supported consistent participation in a multi-residential context where sustained engagement has historically been difficult to achieve.

8. **Benefits and Impacts (Economic, Environmental, and Social): Describe the economic, environmental, and social sustainability impacts of the program, policy, or initiative. This may include both positive and negative outcomes. You may address impacts such as costs or savings, job creation, waste reduction, emissions, resource conservation, community engagement, equity, or public health. Please include data or qualitative observations where available and note any trade-offs or challenges.**

The pilot delivered environmental, economic, and social benefits through decentralized food waste management.

Environmental - The program diverted an estimated 23.5 metric tonnes of food waste from landfill annually, material that would otherwise have been disposed of as residual garbage. This diversion represents a meaningful reduction in landfill-bound waste and is equivalent to approximately 30.6 metric tonnes of CO_2e avoided each year. By stabilizing food waste at source, the program also reduced the environmental impacts associated with hauling wet organics and improved overall waste stream quality. Resident attitudes aligned with these outcomes, with 98% reporting that sustainable waste solutions are important to them.

Economic - Reduced waste volumes improved waste room conditions and operational efficiency, with potential reductions in hauling frequency, contamination costs, and staff time. Managing food waste at source avoided the need for expanded centralized organics infrastructure. In parallel, resident feedback pointed to asset-level value: 86% of residents

viewed the FoodCycler as a feature that would help attract future tenants, and 95% would recommend it as a standard amenity in multi-residential buildings, reinforcing its role as a retention and leasing differentiator rather than a purely operational expense.

Social - The program addressed resident demand for an organics solution and was well received. In-suite processing improved cleanliness and reduced odours, contributing to a better day-to-day living experience and reinforcing shared sustainability values. 75% of residents reported that the FoodCycler contributed to a cleaner and more organized kitchen or living space, while 76% said it made it easier to manage heavy or bulky waste within their apartment, highlighting tangible quality-of-life benefits beyond diversion alone.

“Thank you for providing tenants with a FoodCycler to recycle our kitchen scraps. What a wonderful initiative… absolutely amazing and quiet.” Philippe B., Tenant, NexLiving Communities

Trade-offs and Challenges - Like any new initiative or change, the pilot required upfront investment and clear onboarding supported by ongoing communication to sustain participation.

9. **How Stakeholder Buy-In Was Achieved: Explain how the program gained support from key stakeholders (e.g., government agencies, businesses, residents, nonprofits).**

Stakeholder support was built through aligned incentives, clear communication, and early demonstration of value.

Devcore and NexLiving Communities were motivated by operational challenges and resident demand for an organics solution that avoided odour, contamination, and participation issues. FoodCycler was positioned as both a diversion solution and a resident amenity.

Resident buy-in was driven by convenience and practical benefits, supported by simple onboarding and in-suite installation. Food Cycle Science provided coordination, education, and technical support throughout the pilot, maintaining momentum and confidence across partners.

10. **Stakeholders’ Perspectives and Dynamics at Play: Highlight collaboration dynamics, challenges, or differing stakeholder interests and how they were addressed.**

The pilot aligned stakeholders with complementary priorities, including asset value, operational efficiency, technology validation, and resident convenience.

Early collaboration focused on managing perceived operational risk, supporting resident adoption, and aligning infrastructure decisions with behavior change goals. Regular feedback enabled operational refinements and reinforced trust.

By reframing food waste from a shared operational burden into a resident-led solution, the program demonstrated how decentralized organics management can align diverse stakeholder interests.

11. **Lessons Learned: Share what worked well, what didn't, and recommendations for others seeking to replicate your approach.**

The pilot generated practical insights for decentralized organics management in multi-residential settings.

What worked well: Placing food waste management directly in residents' kitchens removed common barriers associated with shared compost rooms, including inconvenience, odour, and contamination. This source-level approach drove consistent participation and complete diversion of processed food waste from landfill-bound garbage. Adoption was driven more by convenience and cleanliness than messaging alone, with residents valuing cleaner kitchens, reduced smells, and easier handling of food scraps. Clear role definition and regular coordination between Food Cycle Science, Devcore, and NexLiving Communities reduced operational friction, while decentralization eliminated the need to expand centralized compost infrastructure and improved waste room conditions.

What required adjustment: Successful outcomes depended on clear and reinforced resident onboarding. Upfront capital investment in in-suite equipment may limit uptake for some properties, suggesting a need for alternative financing models. Collection systems also benefited from flexibility, as some residents preferred local reuse over centralized collection.

Recommendations for replication: Programs should be designed around daily routines rather than diversion targets alone, with early engagement of property managers and ongoing resident support. Starting with pilots and positioning decentralized food waste solutions as building amenities can support long-term adoption and scalability.