

FOODCYCLER MUNICIPAL SOLUTIONS





ABOUT US

- Canadian company based out of Ottawa, ON
- Founded in 2011 Company is 100% focused on Food Waste Diversion Solutions
- Products available in North America through FoodCycler Municipal / Vitamix and internationally through network of distributors & OEM partners
- Semi-finalists in Impact Canada's Food Waste Reduction Challenge



TRUSTED CANADIAN SOLUTION









SOUTH GLENGARRY

Ontario's Celtic Heartland

























































Thirty-Three Canadian Municipal Partners

... and counting!



THE PROBLEM - FOOD WASTE

- **63%** of food waste is avoidable
- Household waste is composed of **25-50%** organic waste
- Food waste weight is up to **90%** liquid mass (which is heavy)
- The average Canadian household spends \$1,766 on food that is wasted each year
- Each year food waste in Canada is responsible for **56.6 Million tonnes of CO2** equivalent of GHG



MUNICIPAL IMPACT

WASTE MANAGEMENT IS A MUNICIPAL RESPONSIBILITY

LANDFILL + WASTE COSTS

- $\sim 25-50\%$ of household waste is organic waste
- Landfills are filling up fast, creating cost and environmental issues
- Hauling and disposal services are a major cost factor and environmental contributor ENVIRONMENT

- Landfilled organic waste produces methane, which is 25 times more harmful than CO2
- 1 tonne of food waste is equivalent to 1 car on the road for one year



COMMUNITY

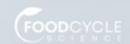
Food in the garbage:

- More frequent collection or trips to the disposal site
- Unpleasant odours
- Animals, pests & other visitors



Removing food waste from garbage:

- Volume is reduced by up to 50%
- Less frequent collection, fewer trips to disposal site, save on bag tags
- Keeps odours out, makes garbage much less "interesting" for animals



HAVEN'T WE SOLVED THIS ALREADY?







GREEN BINS

- Preferred solution for larger cities where dense housing and large processing facilities generate economies of scale
- **Contamination** is an ongoing
- GHG emissions from curbside collection
- **Safety** concerns from additional the road

BACKYARD COMPOST

- Cost-effective but can be labor-intensive also
- May attract pests/animals or create unpleasant odors
- Most users do not compost in winter or inclement weather
- Adoption rates are relatively low and stagnant

LANDFILL

- **Easiest solution** and often perceived as the most costeffective in the short term
- Waste is typically **out of sight and out of mind** for consumers
- High levels of GHG emissions, particularly methane
- Long-term **environmental hazard** requires monitoring / maintenance



THE SOLUTION IN THREE SIMPLE STEPS







Fish & Poultry Bones



Egg shells

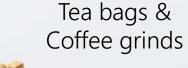
1. Add waste to bucket

2. Add bucket to unit

3. Press Start. That's it!



Dairy Products

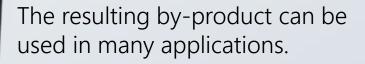




Nut shells, nuts & seeds



Meat, poultry & fish





FOODCYCLE

90% FOOD WASTE REDUCTION

1 KG (2.5L) of wet, smelly food waste 100 G of dry, sterile & odorless soil amendment



4-8 HOURS + 0.8 kWh <10 cents / cycle





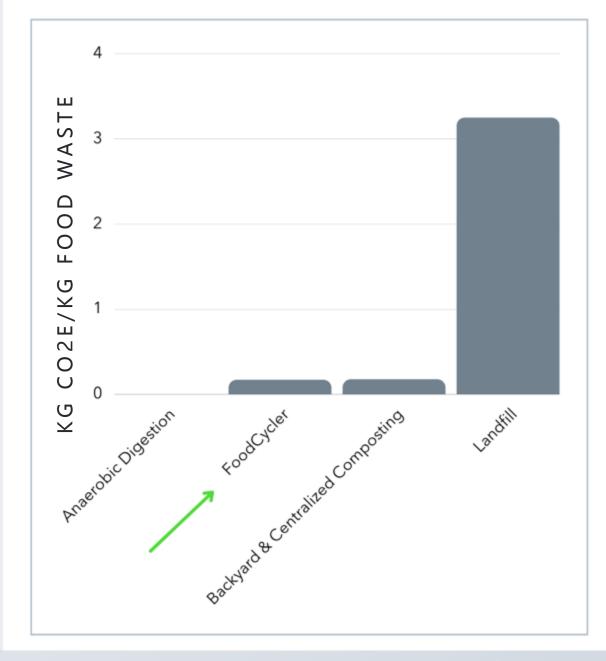
IMPACT ENVIRONMENT

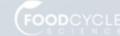
FOODCYCLER IS COMPARABLE TO:

- Central composting (with no transportation emissions)
- Backyard composting (if done correctly)
- FoodCycler offers >95% reduction in CO2E vs. sending food waste to landfill

Source: Based on carbon intensity of power grid = 0.08 kg/kWh in Ontario

**Incorrect backyard composting can lead to methane gases and odours





IMPACT ECONOMIC

EXAMPLE OF IMPACT ON WASTE MANAGEMENT OPERATING COSTS











\$170 – \$250 /TONNE

HAULING FEE

TRANSFER STATION OPERATION

DISPOSAL FEE

* FoodCycler is a locked-in price not subject to wage increases, fuel surcharges or fee hikes







< \$120 /TONNE

NO TRANSPORTATION OR PROCESSING



IMPACT REGULATORY + SOCIAL PRESSURE

THE TIME IS NOW

- Constituents want solutions to reduce their environmental impact
- Waste is perceived as a government problem and regulations are coming
 - Food waste is "low-hanging fruit" to achieving higher **diversion** and addressing the environmental impact of waste

"I've received a number of positive messages from residents saying, "sign me up, where can I get mine." I'm 100 per cent in favor of it."

Deputy Mayor Lyle Warden, (South Glengarry ON)

"We were extremely happy with this program and loved that it made us aware of our daily waste."

- Pilot participant in South Glengarry

"It's a great tool to reduce household waste.

Appreciate that the municipality is being innovative and piloting different solutions."

— Pilot participant in Hornepayne

"It alleviates a lot of the concerns that people might have with backyard composting. The time commitment, the location, pests and animals and everything like that."

- Kylie Hissa, Strategic Initiatives Officer (Kenora, ON)



THE FOODCYCLER PILOTS

"WOULD YOU RECOMMEND FOODCYCLER?"



>700 Households

7 Municipalities have completed their pilot projects with overwhelmingly positive results.

Net New Diversion



Each participating household is estimated to divert between 300-400 kg of food waste annually.



>90% Yes

<1% No.

The rest are undecided or need more time.



Average overall user experience rating.



PILOT PROGRAM 12 WEEKS FROM START TO FINISH

PILOT TIMELINE

Residents purchase FoodCycler at a

Participants use the unit for a period of 12

Residents purchase Participants use the unit for a period of 12

Participants fill out an exit survey, providing

Full program design and implementation.

Municipal Office (or other designated location)

Number of cycles per week are tracked to estimate total diversion achieved.

subsidized rate from

weeks.

Survey results used to evaluate program success.

program and any other

their review of the

feedback.

Many grants available, including FCM's Green Municipal Fund!



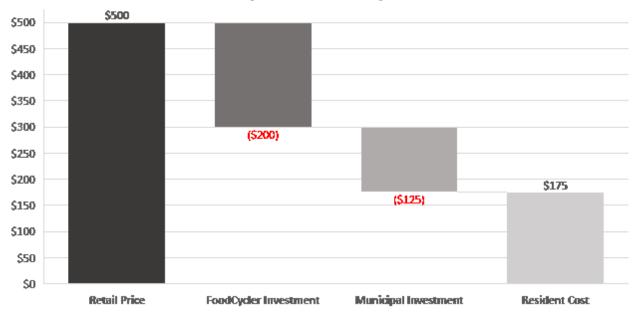


SUBSIDIZED PILOT PROGRAM

OPTION 1



FoodCycler Pilot Subsidy Model



Municipality	Pilot Scope	Municipal
2500 – 10,000 residents	100 households	\$12,500
	Taxes	

SUBSIDIZED PILOT PROGRAM

OPTION 2 (BUNDLE)



FoodCycler Pilot Subsidy Model



Municipality	Pilot Scope	Municipal Investment
2500 – 10,000 residents	100 households	\$12,500

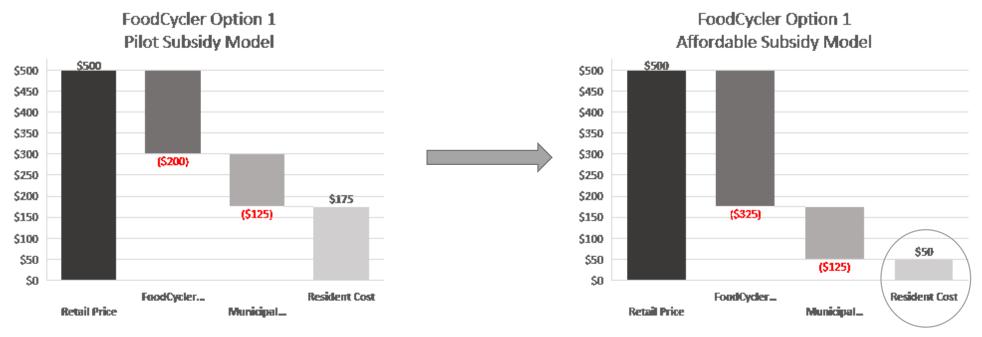
applicable taxes



OPTIONAL AFFORDABLE ADD-ON GET 10% MORE UNITS

FoodCycler believes that food waste diversion solutions should be available to all Canadians, no matter where you live or whether you can afford it.

Municipalities now have the option to provide low-cost FoodCyclers to those who cannot access the program at full price.





THANK YOU!

ANY QUESTIONS? QUESTIONS?

Christina Zardo

Manager of Municipal Solutions Email: christinaz@foodcycler.com Phone: 613-402-7999

Ami Gagné

Project Coordinator, Municipal Solutions Email: amig@foodcycler.com Phone: 613-700-4682



