

Transitioning the Blue Box to Full Producer Responsibility

Rural Ontario Municipal
Association Conference

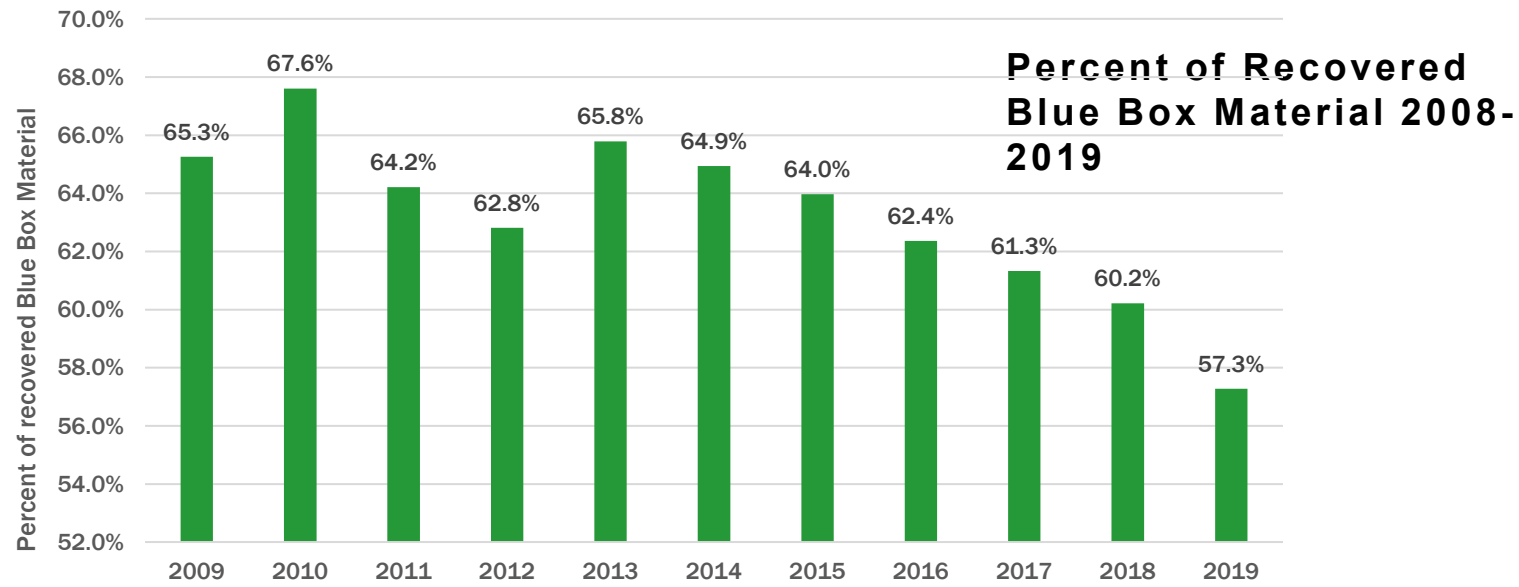
January 23, 2023

Dave Gordon, Senior Advisor

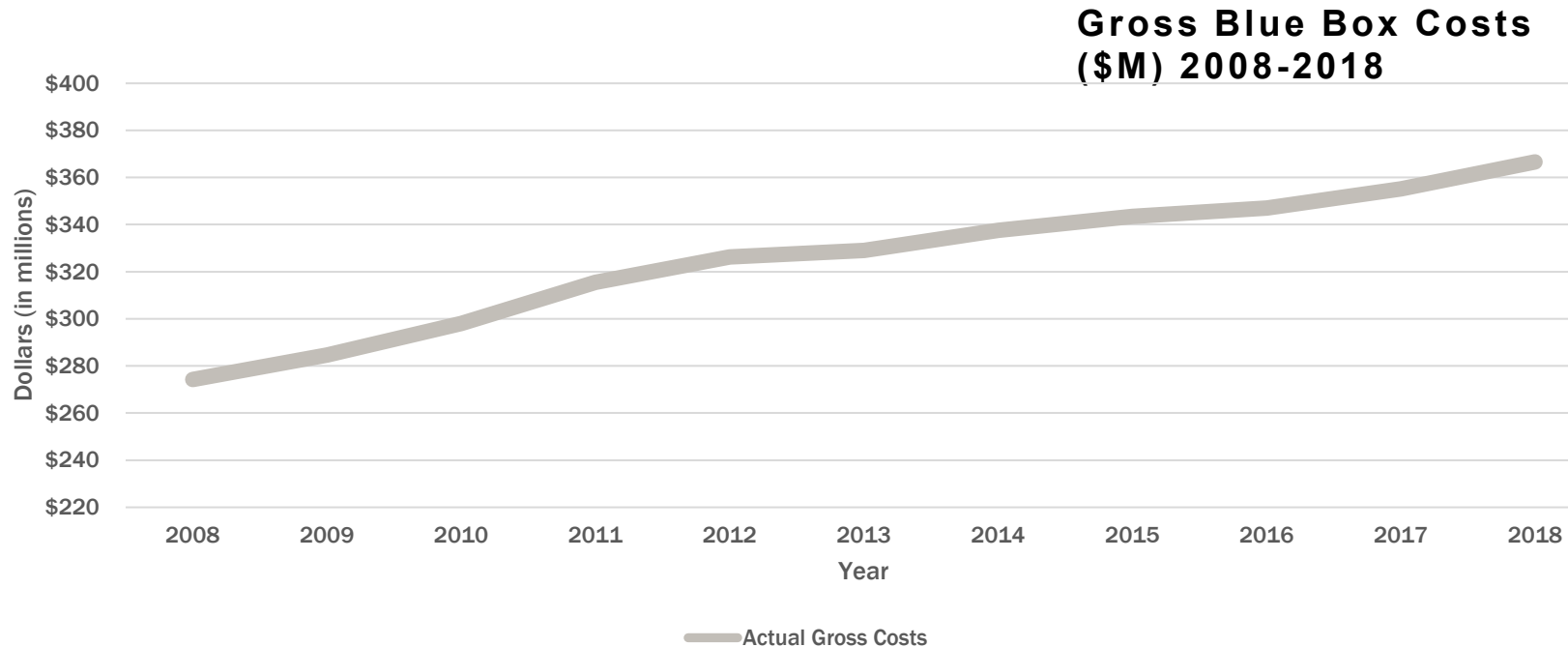


Agenda

- Rationale for Change to Full Producer Responsibility
- Regulation Overview
- Transition Timeline
- Council Considerations
- Information Producers Need from Communities
- Resources and Support



Diversion is dropping



Costs are rising

Blue Box Regulation

- Regulation was finalized June 3
- Producers fully responsible for operational and financial management of program
 - Municipalities potentially a service provider if commercial terms can be agreed
- The final regulation includes the following provisions:
 - Establishment of a province-wide common collection system that transitions all current municipal programs and expands servicing to
 - all communities regardless of size (except Far North)
 - all residential dwelling types
 - all schools,
 - all publicly run retirement homes and long-term care facilities, and
 - more public spaces
- An enhanced and standardized list of materials that will need to be collected and recycled
- High, progressive, and enforceable targets
- Certainty for planning to ensure a seamless transition with a [transition schedule](#)

Eligible Sources

Pre-Transition: Shared Industry Funding

- Local municipalities with 5,000+ population



- Collect or accept from same sources as residential garbage



- 50% funding does not include costs for Industrial, Commercial and Institutional (IC&I), even if delivered through municipal program

([O. Reg 101/94 s. 7](#), [BBPP p. 59](#))

Post-Transition: Producer Responsibility

- All Ontario communities outside of the [Far North](#), including First Nation communities.



single-family homes



seasonal dwellings



multi-unit residential buildings



public & private schools



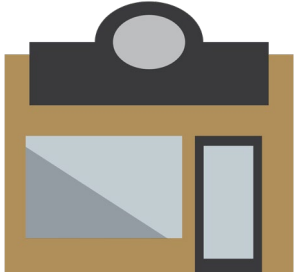
specified retirement & long-term care homes



specified public spaces

([O. Reg 391/21 s. 1 & 4](#))

Non-Eligible Sources



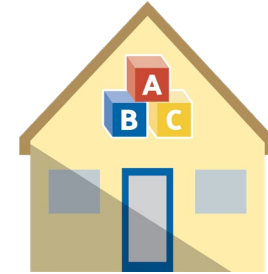
Industrial or commercial properties



Not-for-profit organizations



Municipal buildings or facilities
(e.g., libraries, arenas)



Daycare



Places of worship



Commercial buildings along
residential routes

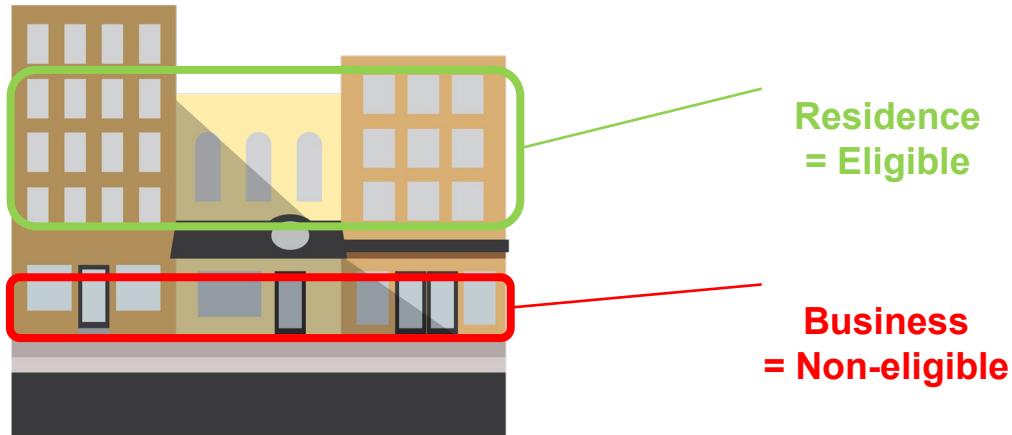


Campgrounds and trailer-parks (without
permanent or seasonal households)

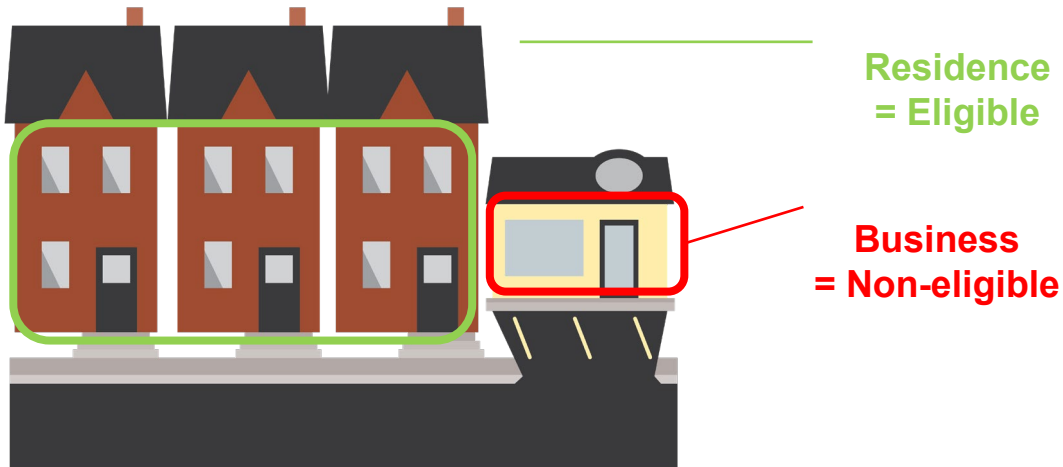


Commercial
Farm

Business Areas



Mixed Use Properties



Commercial buildings along
residential routes

There are some properties that have both eligible and non-eligible materials. These will need to be separated from residential collection and serviced in an alternative way, starting in 2026.

Mixed Use Properties:

- Residential apartments on top of a business are considered **eligible**
- Industrial or commercial property underneath the residential building are **non-eligible**
- Found in Business Improvement Area (BIA) or along residential routes

Commercial Buildings Along Residential Routes:

- Residential buildings (single family homes/ multi-unit residential buildings) are **eligible**
- Industrial or commercial properties (e.g., coffee shop, convenience store) are **non-eligible**

Designated Materials

Pre-Transition: Shared Industry Funding

All of these:



Aluminum cans



Glass bottles & cans



PET plastic bottles



Steel cans



Newsprint

for food and beverages

At least two of these:



Aluminum foil



Boxboard & paperboard



Cardboard



Polystyrene containers & packing materials



Office paper



Polycoat cartons



Magazines



Paper cups & plates



Plastic film



Rigid plastic containers (HDPE, PS)



Telephone Directories



Textiles

Varies by Municipality

([O. Reg 101/94: Schedule 1](#))

Post-Transition: Producer Responsibility

Packaging, Paper Products, & Packaging-like products:



- ✓ Typical “blue box packaging” items, made of paper, glass, metal or plastic



- ✓ Single-use products used for consumption (e.g., straws, cutlery, plates, coffee cups)



- ✓ Printed and un-printed paper (newspaper, magazines, flyers, office paper)



- ✓ Single-use products used for containment (e.g., aluminum foil, plastic bag)

Consistent across the Province

([O. Reg 391/21 s. 2](#))

Targets (Minimum Requirements)

Pre-Transition: Shared Industry Funding

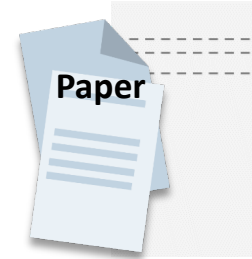


60% recovery of blue box materials by 2008

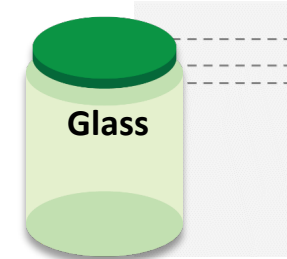
- Announced by the Ministry in 2003
- Not codified in the regulation

Sources: [2009 Stewardship Ontario Annual Report](#)
“[McGuinty Government builds on Success of Blue Box Program](#)” December 22, 2003

Post-Transition: Producer Responsibility



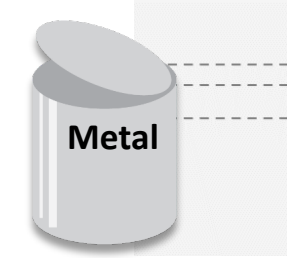
85% by 2030
80% by 2026
72% in 2018



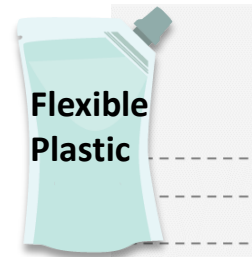
85% by 2030
75% by 2026
68% in 2018



60% by 2030
50% by 2026
48% in 2018



75% by 2030
67% by 2026
54% in 2018



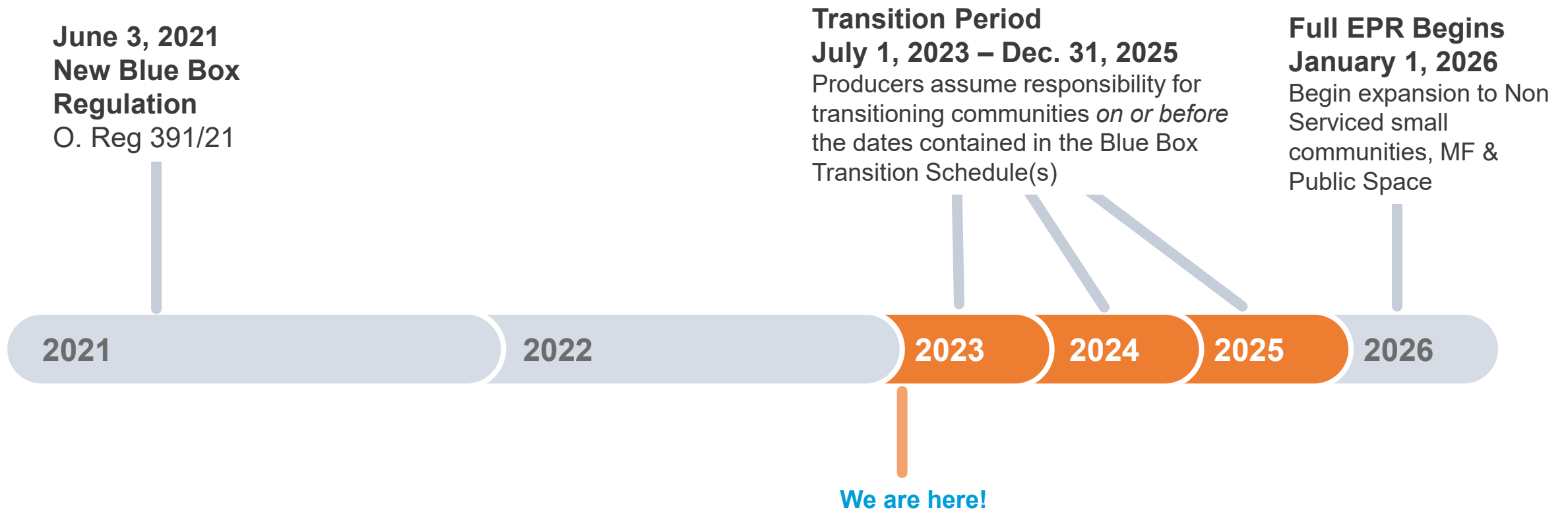
40% by 2030
25% by 2026
7% in 2018



80% by 2030
75% by 2026
(Data not available for 2018)

([O. Reg 391/21 s. 42](#))

Blue Box Transition Timeline



Council Considerations

- Your community should have decided to opt in or out of service provision by this point
- Those opting in:
 - Contract negotiations w/ producers on terms and conditions, compensation for service provision, assessment of risk etc.
- Those opting out:
 - Coordinating with producers and contracted service provider for smooth transition

Community Cooperation Agreements

- We are working with a number of municipalities to develop a community cooperation agreement that could be used by the sector
- The intent of the agreement is to ensure clear roles and responsibilities between municipalities and producers ensure a smooth transition for residents
- The agreement would consider items such as:
 - Management of customer calls/complaints for blue box servicing
 - Management of materials not collected/rejected at the curb
 - Coordination of new development requirements for blue box collection/storage of materials

Information Needed By Producers

- number of single family dwellings, multi-residential dwellings with number of units and other eligible sites (e.g., schools, long-term homes) receiving recycling collection by the municipality
- addresses of single family dwellings, multi-residential buildings and other eligible sites receiving service
- number of single family dwellings receiving curbside garbage collection by the municipality but not receiving curbside recycling collection by the municipality and addresses of these dwellings with a map
- number, type and location of entities on collection routes that are non-eligible
- level of service being provided to single-family dwellings as of a specified date including materials accepted, type of container, frequency of collection (weekly, bi-weekly, alternating weeks), day of the week on which collection occurs, approach if collection day falls on statutory holiday, maps of collection schedules and collection routes, quantity collected
- level of service being provided to multi-residential dwellings as of a specified date including materials accepted, type, size and number of containers, location of containers at each building (e.g., outside, inside, underground), whether keys or codes are required to access building or containers, frequency of collection, maps of collection schedules and collection routes, quantity collected
- location of depots accepting designated materials including hours of operation, materials accepted, type, size and number of containers, frequency of collection and quantity collected from each depot

Resources and Support

Dave Gordon - dgordon@amo.on.ca

<https://www.amo.on.ca/advocacy/waste-diversion>



Carrie Nash - cnash@thecif.ca

<https://thecif.ca/>





Thank you & Questions

Dave Gordon

416-268-2994

dgordon@amo.on.ca

FoodCycler

Diverting Food Waste in a Rural Community



Municipality of
Dysart et al

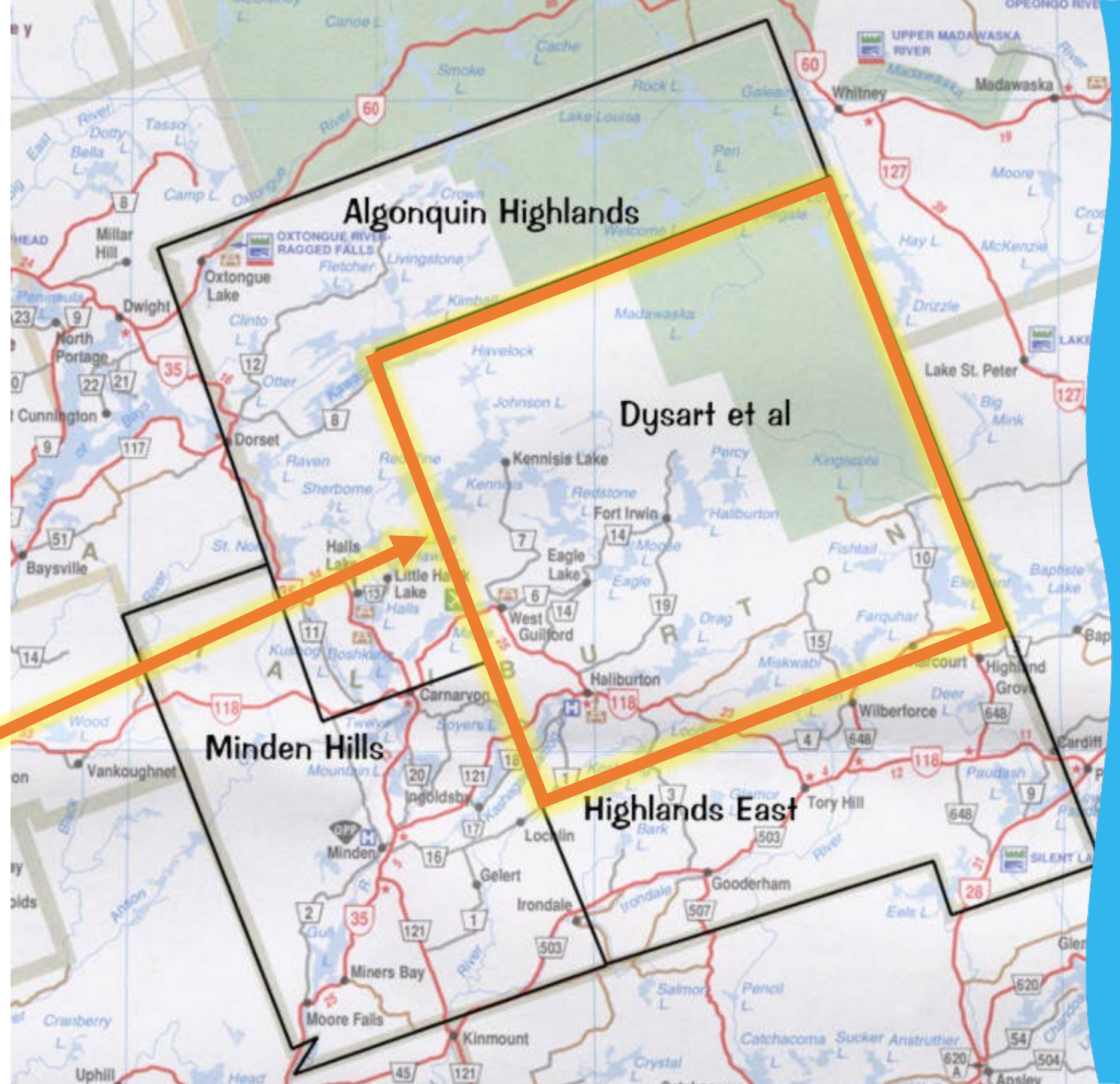
705-457-1740 www.dysartetal.ca



About Dysart et al

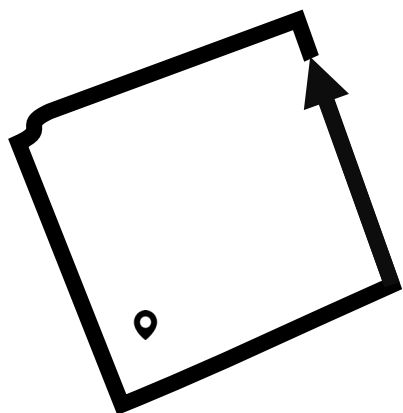
Haliburton County

also known as
Haliburton Highlands



About Dysart et al

Official Name:
The United Townships of
Dysart, Dudley, Harcourt,
Guilford, Harburn, Bruton,
Havelock, Eyre and Clyde



1,474.22 km²

Toronto is 631.1 km²

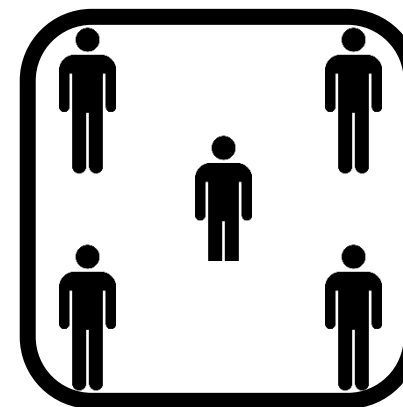


7,298

Households

3,957 households are
seasonal

*Toronto has 1,253,238
private dwellings*



**4.9 people
per km²**

*Toronto has 4,427.8
people per km²*



Waste Management in Dysart



**No curbside
collection**



5 Landfills/Depots

No weigh scales at any site

No electricity:

Harcourt, West Bay Landfills

No cellular reception:

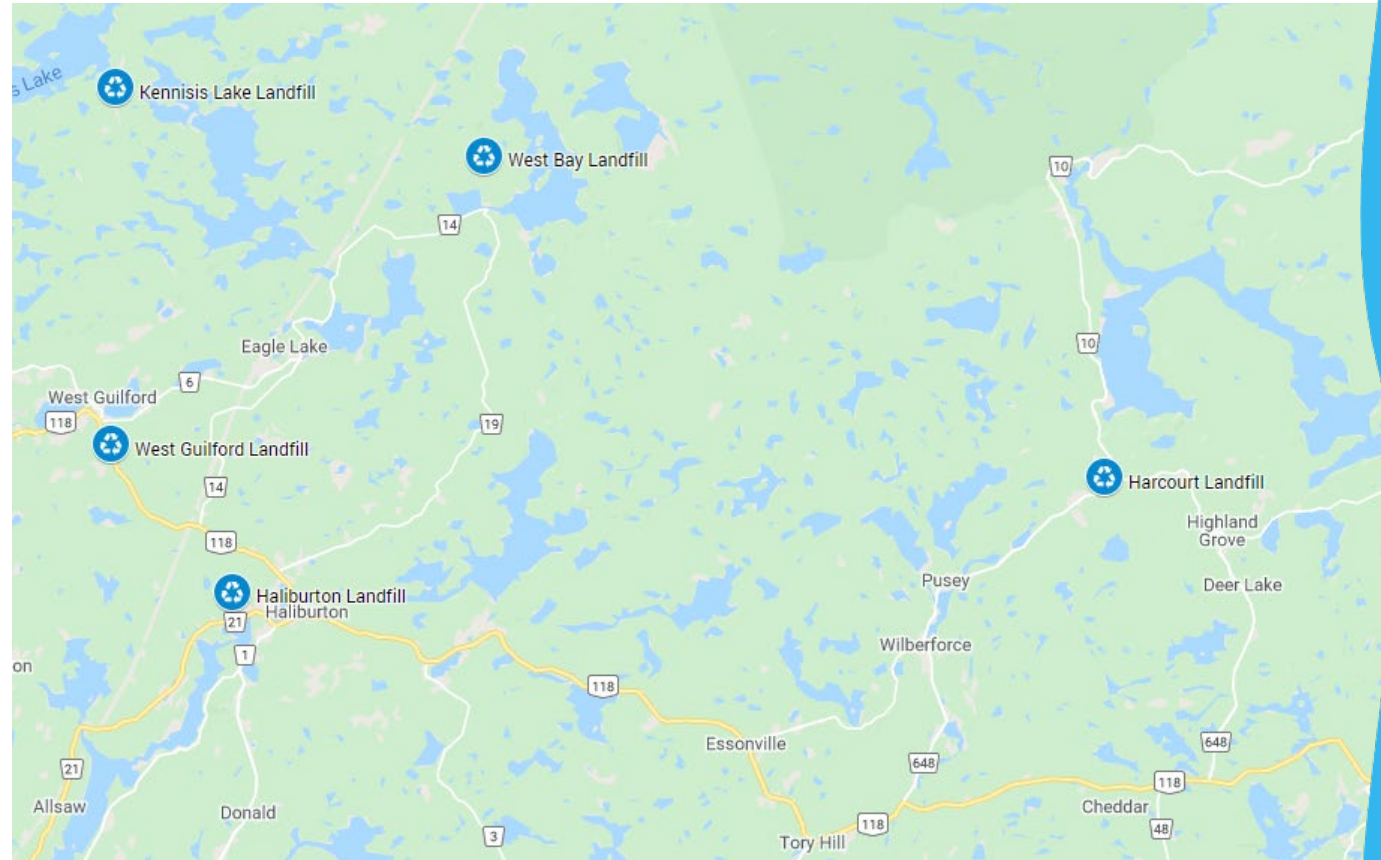
West Bay Landfill

Completely transferring garbage:

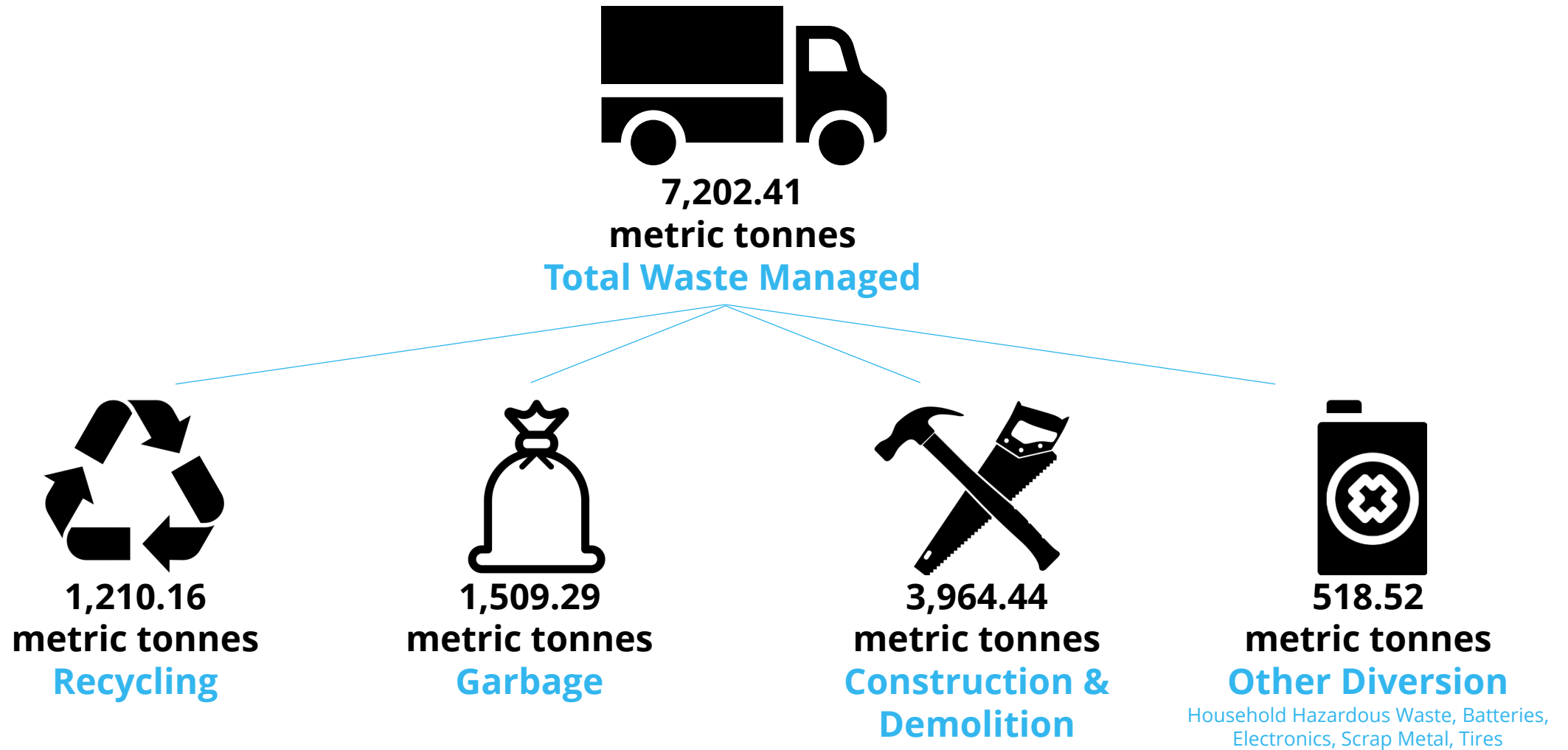
Haliburton, Kennisis Lake,
West Guilford Landfills

Landfilling garbage on site:

Harcourt, West Bay Landfills

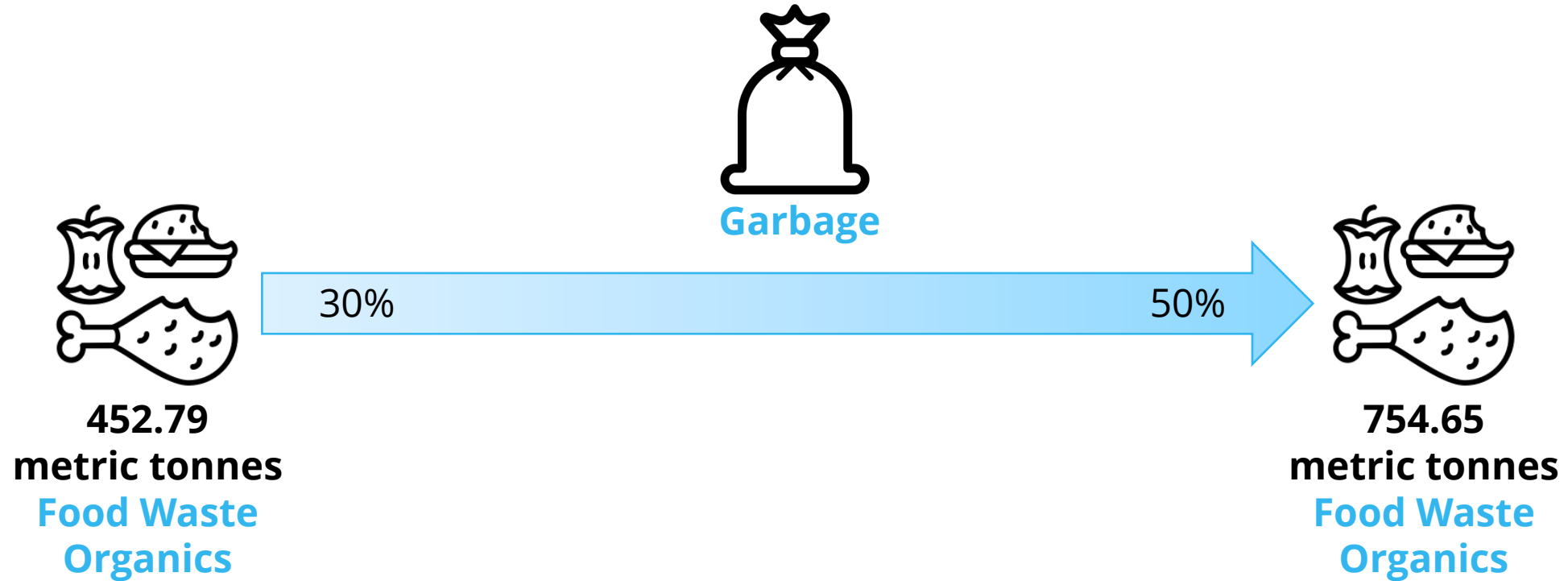


Metric Tonnes (2021)



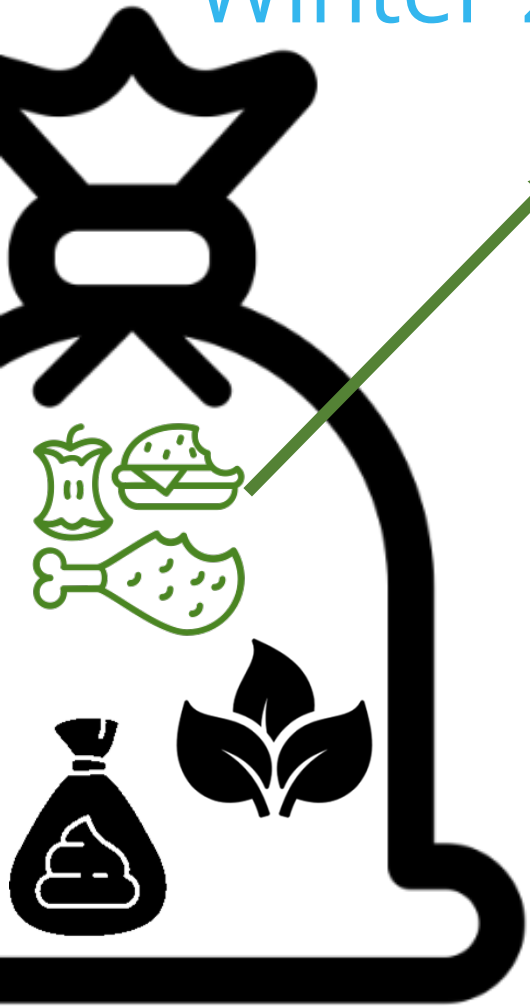
Food Waste

What's in the garbage?



Dysart's Waste Composition Study

Winter 2022



35.82% food waste

- 12.53% is *leftover food*
- 5.67% is *untouched food*
- 17.62% is *unavoidable food waste*





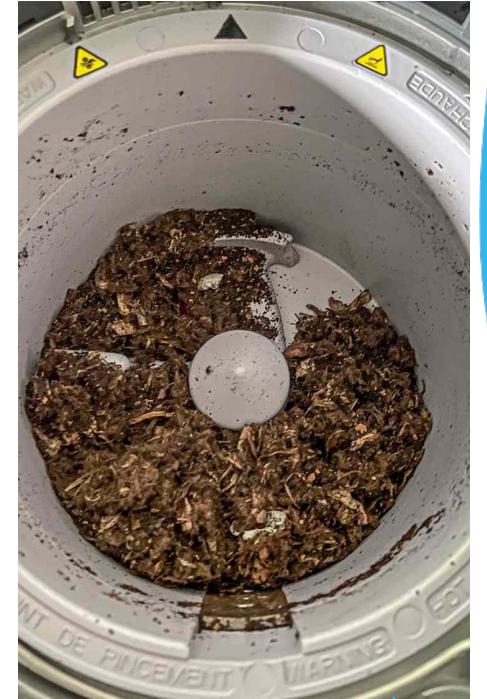
FoodCycler Pilot Project

Delegation to Dysart Council

October 26, 2021




About the FoodCycler



Cycle time of 4 to 8 hours

Staff Report

November 9, 2021



Municipality of Dysart et al

Committee of the Whole

STAFF REPORT

P.O. Box 369
135 Maple Avenue
Haliburton, ON
K0M 1S0
705-457-1740
www.dysartetal.ca
info@dysartetal.ca

To: Members of the Committee of the Whole
From: John Watson, Environmental Manager
Date: 09 Nov 2021
Re: FoodCycler Pilot Project

Recommendation:
Be it resolved that Committee of the Whole recommends that Council:

OPTION 1: allocate and approve \$10,000 net to the 2022 Environmental Management operating budget for a FoodCycler pilot project to take place in spring 2022, subject to funding from Impact Canada

or

OPTION 2: participate in a FoodCycler pilot project to take place in spring 2022 with no subsidy from the Municipality.

Background Information:
At the October 26, 2021 meeting of Dysart Council, representatives from FoodCycle Science presented a delegation regarding their FoodCycler composting device and a potential pilot project.

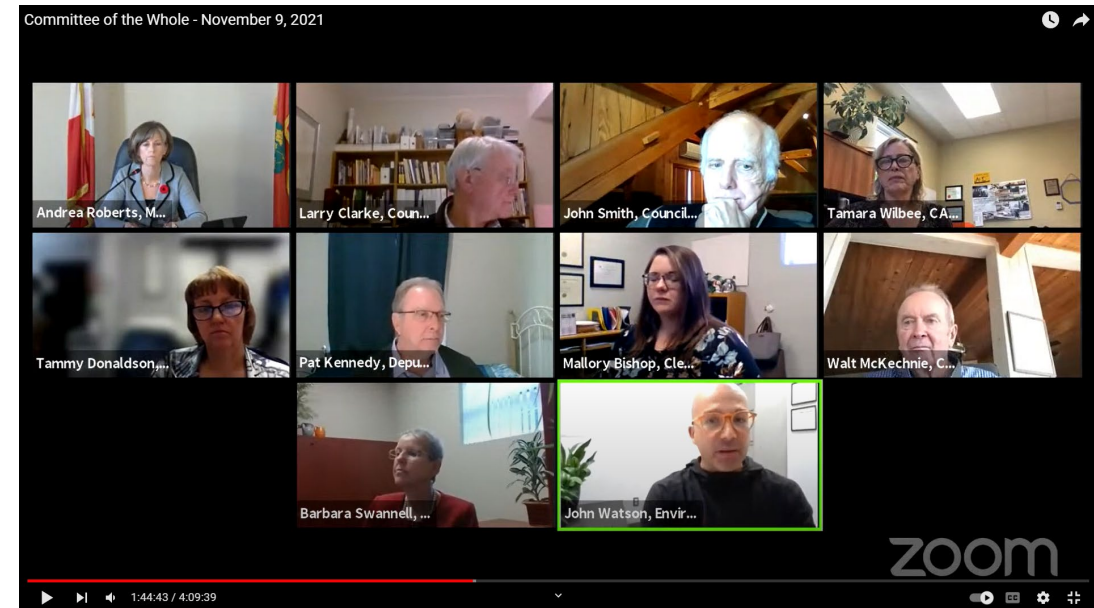
Council directed staff to return to the November 9, 2021 Committee of the Whole with a report on the cost and resources to participate in this initiative.

About FoodCycle Science and FoodCycler

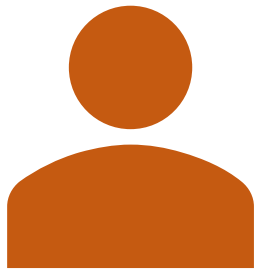
Founded in 2011, FoodCycle Science is a Canadian company that produces residential and commercial devices that use electricity to quickly compost food waste into a finished compost product.

FoodCycle Science's residential device is called FoodCycler. It is approximately 32 cm x 27.94 cm x 36.07 cm (approximately the size of a breadmaking machine). It can hold up to 1 kg (2.5 litres) of food waste. Using electricity, the device dries and grinds food waste into a dry, odourless, nutrient-dense by-product that is significantly reduced in weight and volume from its unprocessed state. The end product is free from bacteria, and weed seeds and food-borne pathogens are eliminated in the process. Each "cycle" of composting takes approximately four to eight hours. The FoodCycler uses 0.8 kWh of electricity (approximately 10 cents per composting cycle).

The FoodCycler is available for online purchase from Vitamix at a cost of \$500.00 plus applicable taxes.



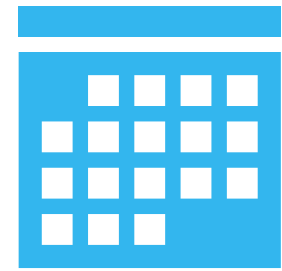
Council Approval



100
participants



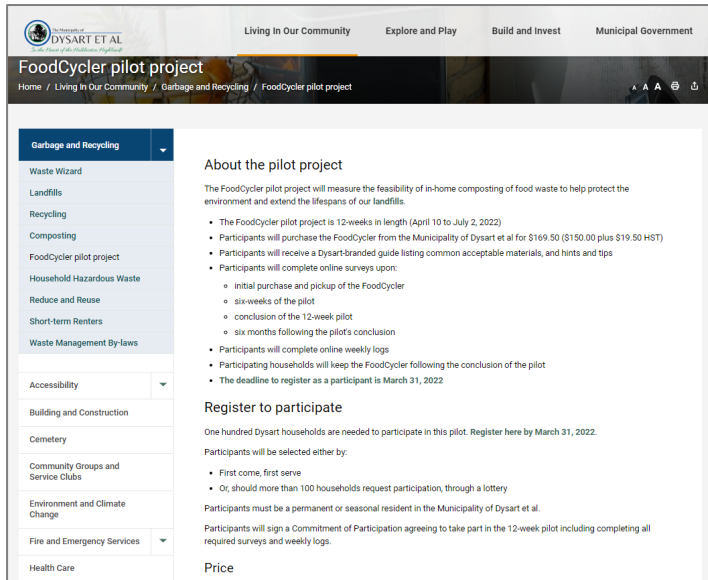
FoodCycler retail cost	\$500
Impact Canada subsidy	- \$250
Dysart et al subsidy	- <u>\$100</u>
Cost to Dysart participant	\$150.00 plus HST



12
week pilot

April 10 to
July 2, 2022

Pilot Project Initial Promotion



Website
dysartetal.ca/foodcycler



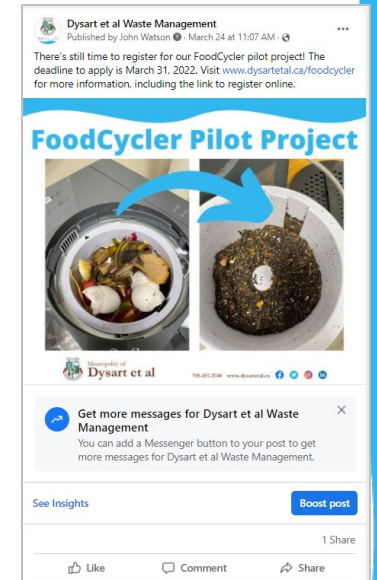
Media
Release



Newspaper
Advertisement

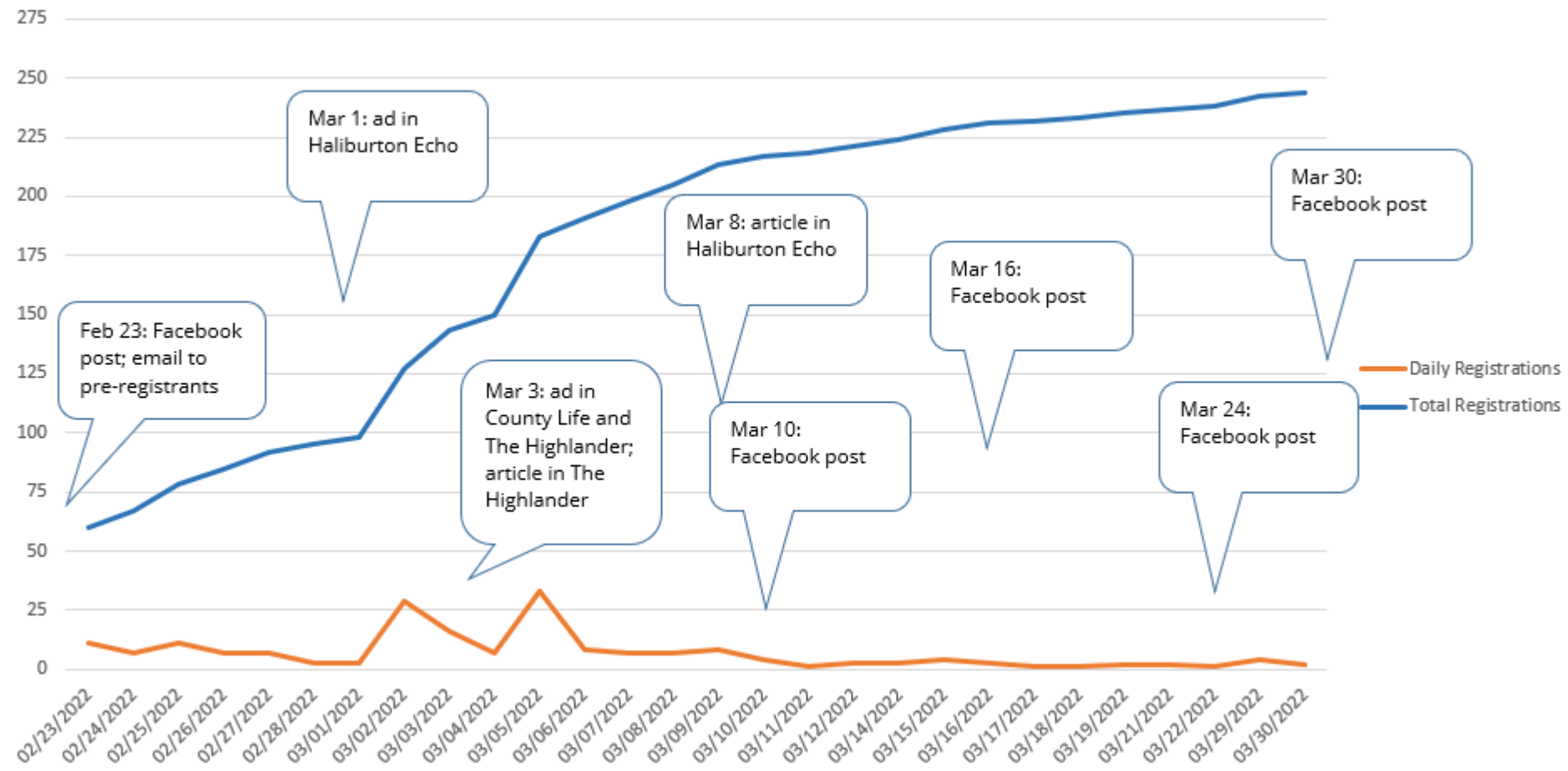


Social Media



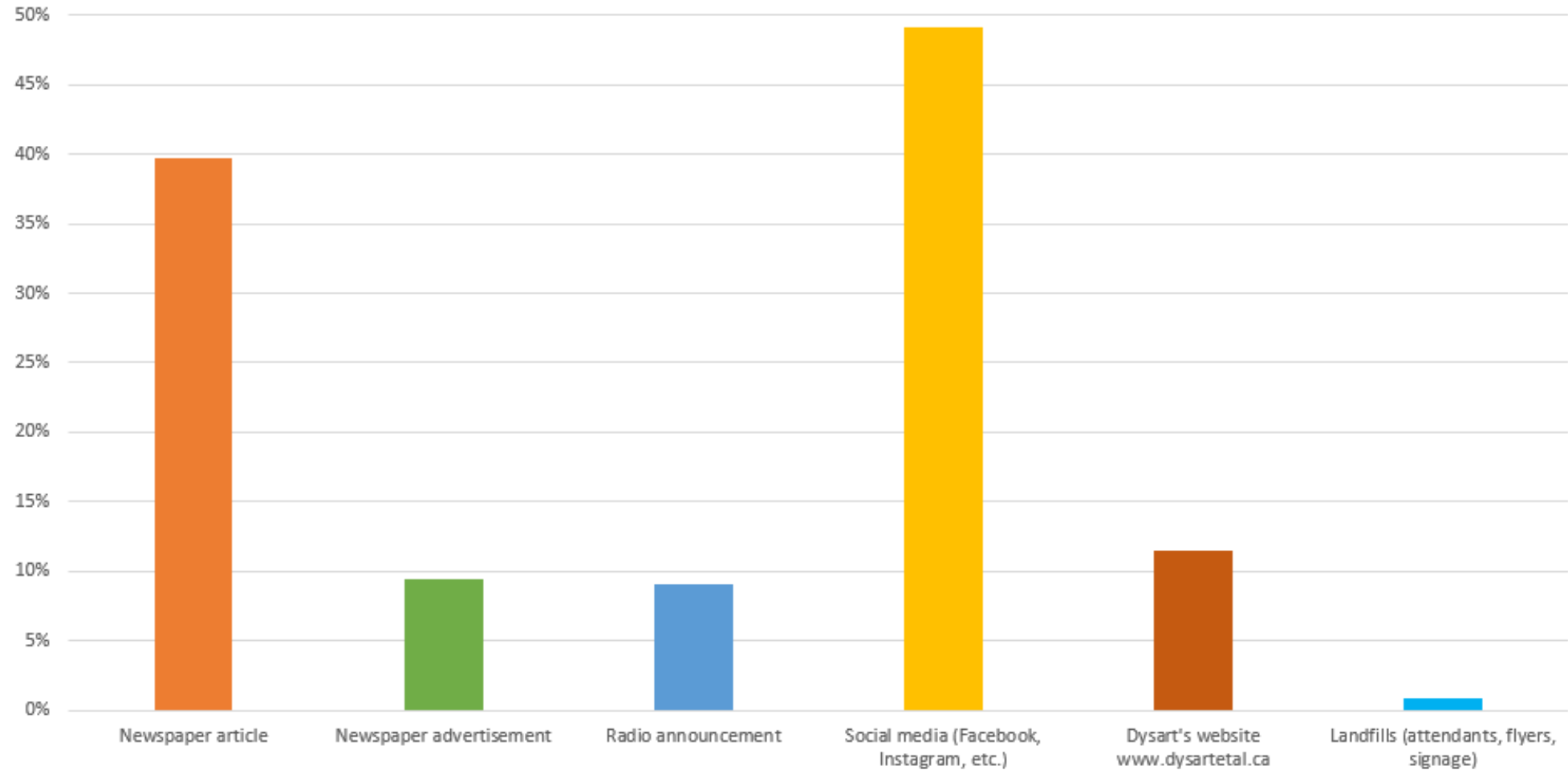
Pilot Project

Timeline of Registrants



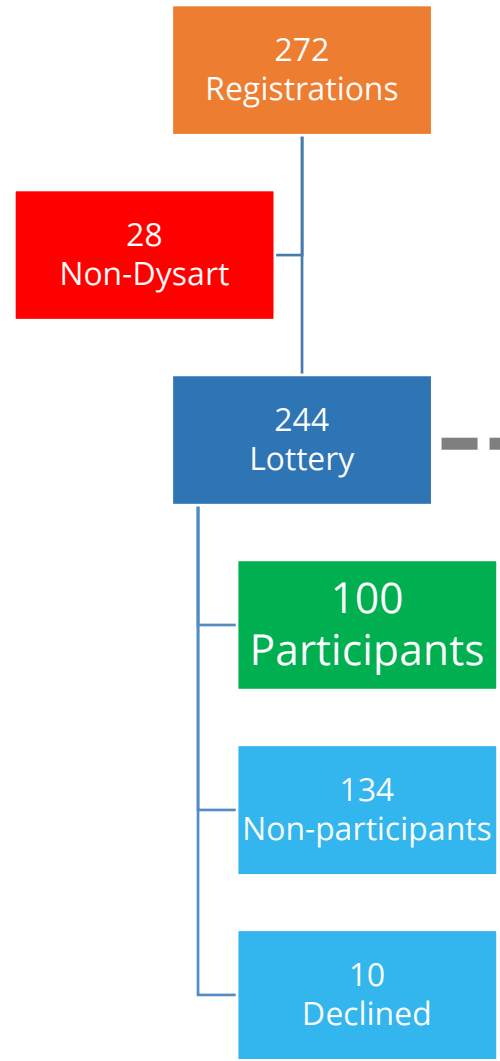
Pilot Project

How Did You Hear?



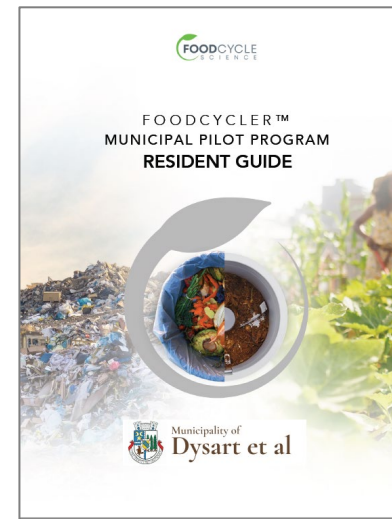
Pilot Project

Registrants & Participants



Pilot Project Participant Pickup

- Pay for FoodCycler using debit card or credit card
- Fill in *Commitment to Participate*
- Complete online survey using iPad
- Participant takes:
 - FoodCycler
 - *User Guide*
 - *Resident Guide*



FoodCycler pilot project

Commitment to Participate

I agree to participate in the Municipality of Dysart et al's FoodCycler pilot project for the entire duration of the pilot project, April 10, 2022 to July 2, 2022, including to:

- Purchase the FoodCycler for \$169.00 (\$150 plus \$19.50 PST). I recognize this price is subsidized by both the Municipality of Dysart et al and Food Cycle Science (FoodCycler) through Impact Canada.
- Use the FoodCycler in my Dysart household per the instructions provided, for the entire duration of the pilot project.
- Track the number of cycles I run of the FoodCycler each week of the pilot project (a simple tally sheet is provided).
- Complete online weekly logs. A link to each online weekly log will be emailed to me. Weekly logs will take no more than 5 minutes to complete.
- Complete three online surveys. A link to each online survey will be emailed to me. Surveys will take no more than 10 to 15 minutes to complete, and questions will relate to my experience using the FoodCycler, waste generation, and waste management practices.
- Not sell or transfer use of the FoodCycler during the pilot project.

I understand:

- The FoodCycler is covered by a one year standard manufacturer's warranty that ends April 10, 2023. FoodCycler will repair or replace any defects during the warranty period. All warranty service will be provided by contacting FoodCycler directly. The Municipality of Dysart et al will not provide any warranty or repair service for FoodCycler.
- All personally identifiable information will be removed before data collected through this pilot project will be shared with Food Cycle Science Corporation (FoodCycler) and Impact Canada.
- I can keep the FoodCycler following the pilot project's completion.

☐ (check box) I commit to fully participate in Dysart's FoodCycler pilot project

Signature: _____

Name (print): _____

Dysart address: _____

Phone number: _____

Email: _____

Date: _____

Municipality of
Dysart et al

705-873-1188 www.dysartet.al.ca

About the pilot project

The FoodCycler pilot project will measure the feasibility of in-home composting of food waste to help protect the environment and extend the lifespans of Dysart's landfills.

- The FoodCycler pilot project is 12-weeks in length (April 10 to July 2, 2022)
- Participants will complete online surveys at:
 - initial purchase and pickup of the FoodCycler
 - six-weeks of the pilot
 - conclusion of the pilot's conclusion
 - six months following the pilot's conclusion
- Participants will complete online weekly logs
- Participating households will keep the FoodCycler following the conclusion of the pilot

Pilot project timelines

Week	Date	Activity
	April 4 to 7, 2022	Purchase and pickup FoodCycler
	April 10, 2022	Sign Commitment to Participate
	April 16, 2022	Complete Online Survey 1
1	April 23, 2022	Pilot Project Starts!
	April 30, 2022	Complete Online Weekly Log
2	May 7, 2022	Complete Online Weekly Log
	May 14, 2022	Complete Online Weekly Log
3	May 21, 2022	Complete Online Weekly Log
	May 28, 2022	Complete Online Weekly Log
4	June 4, 2022	Complete Online Weekly Log
	June 11, 2022	Complete Online Weekly Log
5	June 18, 2022	Complete Online Weekly Log
	June 25, 2022	Complete Online Weekly Log
6	July 2, 2022	Complete Online Survey 4
6 months later	December 16, 2022	Complete Online Survey 4

About the FoodCycler

Founded in 2011, FoodCycle Science is a Canadian company that produces residential and commercial devices that use electricity to quickly compost food waste into a finished compost product.

FoodCycle Science's residential device is called FoodCycler. It is approximately 32 cm x 27.94 cm x 36.07 cm (approximately the size of a breadmaking machine). It can hold up to 1 kg (2.5 litres) of food waste.

Using electricity, the device dries and grinds food waste (fruit cores, vegetable peels, dairy, chicken bones, and more) into a dry, odourless, nutrient-dense by-product that is significantly reduced in weight and volume from its unprocessed state. The end product is free from bacteria and weed seeds and food-borne pathogens are eliminated in the process.

Each "cycle" of composting takes approximately four to eight hours. The FoodCycler uses 0.8 kWh of electricity (approximately 10 cents per composting cycle).

Acceptable Food Waste

☒ **Acceptable Food Waste**

Most fruit and vegetable scraps	Meat, seafood, and poultry scraps	Chicken bones, fish bones & shells	Eggs and egg shells	Cheese	Beans, seeds, legumes, cereal, oatmeal	Coffee grounds, tea
<input type="checkbox"/> Acceptable in Limited Quantities	Cake, bread	Rice, pasta	High sugar fruits (apples, bananas, melon, oranges, pineapple)	Sauces, yogurt	Jams, jellies	Peanut butter

Cut up prior to cycling: Corn cobs, corn husks, parsley, cilantro, asparagus, celery

*Be sure to mix these "Limited Quantities" items with other "Acceptable Food Waste" particles. Coffee grinds and/or citrus peels, if the items listed above are cycled without proper mixing the items may not process entirely, or your by-product could stick to the bottom and sides.

☐ **Unacceptable**

Hard, dense bones (beef, deer, rooster, pork, lamb, bison)	Candy, gum	Cooking oils and greases	Hard pits (peaches, apricots, nectarines)	Sticks and other hard shells
------------------------------------------------------------	------------	--------------------------	-------------------------------------------	------------------------------

Share your experiences using the FoodCycler on Facebook and Instagram! Use the hashtag #DysartFoodCycler and be sure to tag us: @dysartwaste, @dysartet.al and @thefoodcycler



Pilot Project Weekly Logs

- Emailed all participants each Saturday of the 12-week pilot project with a weblink to complete a SurveyMonkey
 - 4 questions

Dysart's FoodCycler pilot project - weekly log 4 due

 John Watson
To John Watson

Sat 2022-05-07 7:36 PM

Four weeks complete – time to fill in your weekly log


We've almost finished the fourth week of our FoodCycler pilot project (May 1 to 7).

Here's a link to complete the third weekly online log <https://www.surveymonkey.com/r/7K2X8GT>. Please complete this log even if you weren't able to use the FoodCycler this week. And if you're running a cycle this evening (Saturday), be sure to count that in this week's log.

On Tuesday, May 10, 2022, a [report on the FoodCycler pilot project](#) will be presented to Dysart's Committee of the Whole. This report summarizes some of the pilot results so far.

Now that we're having nicer weather, have you started to use the soil amendment created by the FoodCycler in your garden? Feel free to send me any pictures of your compost in use.

Cheers!

John Watson
Environmental Manager
 Municipality of Dysart et al
705-457-1740 x 659
jwatson@dysartetat.ca
www.dysartetat.ca
   

Download the Haliburton County Waste Wizard mobile app!

 Download on the App Store  GET IT ON Google Play

FoodCycler pilot project - Weekly Log 4

Complete the weekly log

May 1 to 7, 2022 was the fourth official week of Dysart's FoodCycler pilot project. Tell us how you used the FoodCycler. Each time you use the FoodCycler is referred to as a "cycle."

* 1. How many cycles of the FoodCycler did you run during the fourth week (May 1 to 7) of the pilot?

- | | |
|-------------------------|--------------------------------------------------------------------------------------------|
| <input type="radio"/> 1 | <input type="radio"/> 7 |
| <input type="radio"/> 2 | <input type="radio"/> 0 - I didn't have enough food waste to warrant running a cycle |
| <input type="radio"/> 3 | <input type="radio"/> 0 - I forgot to run a cycle |
| <input type="radio"/> 4 | <input type="radio"/> 0 - I was away |
| <input type="radio"/> 5 | <input type="radio"/> 0 - I couldn't because a mechanical or electrical issue prevented me |
| <input type="radio"/> 6 | |

* 2. During this week of using the FoodCycler, did you experience any issues?

- ☐ No issues
- ☐ Noise issues

Pilot Project Surveys

- Conducted three surveys
 - Initial pickup (done in-person using an iPad)
 - 18 questions
 - Week 6 (half-way)
 - 16 questions
 - Week 12 (pilot completion)
 - 20 questions

* 5. After six weeks, where in your home are you storing your FoodCycler bucket?

- ☐ Kitchen - on the counter
- ☐ Kitchen - in a drawer or cabinet
- ☐ Inside the FoodCycler machine
- ☐ Other (please specify)

* 6. Is the FoodCycler large enough for the quantity of daily food waste you generate?

- ☐ Yes - right size
- ☐ No - would want 1.5 times larger (3 L capacity)
- ☐ No - would want 2 times larger (4 L capacity)
- ☐ No - would want 2.5 times larger (5 L capacity)

* 7. After six weeks, are you running your FoodCycler more or less than you anticipated each week?

- ☐ Running it more than I thought I would
- ☐ Running it less than I thought I would
- ☐ Running it exactly as I thought I would



Staff Reports

April 12, May 10, June 14, August 9, 2022



Municipality of Dysart et al Committee of the Whole STAFF REPORT

P.O. Box 389
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Haliburton, ON
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705-457-1740
www.dysartetal.ca
info@dysartetal.ca

To: Members of the Committee of the Whole
From: John Watson, Environmental Manager
Date: 12 Apr 2022
Re: FoodCycler Pilot Project - Update 1

Recommendation:
Be it resolved that Committee of the Whole receive this report for information about the FoodCycler pilot project.

Background Information:
At the October 26, 2021 meeting of Dysart Council, representatives from FoodCycle Science presented a delegation regarding their FoodCycler composting device and a potential pilot project.

Staff to return to the November 9, 2021 Committee of the Whole with a report on the cost and resources to participate in this initiative. Subsequently, Council approved:

"To allocate and approve \$10,000 net to the 2022 Environmental Management operating budget for a FoodCycler pilot project to take place in spring 2022, subject to funding from Impact Canada."

While background planning was ongoing, after the passing of Dysart's 2022 budget on February 22, 2022, Dysart staff began the public aspects of the pilot project.

As a reminder, the cost per unit of the FoodCycler pilot project is:
Retail cost \$500.00
Impact Canada subsidy -\$250.00
Dysart et al subsidy -\$100.00
Cost to Dysart participant \$150.00 plus HST

Registrations

The registration process opened on February 23, 2022. It closed March 31, 2022.

272 registrations were received.

28 were from households outside of Dysart, and so were excluded from the registration process (they were notified to this affect).

Following is some information about the 244 Dysart registrants:



Municipality of Dysart et al Committee of the Whole STAFF REPORT

P.O. Box 389
135 Maple Avenue
Haliburton, ON
K0M 1S0
705-457-1740
www.dysartetal.ca
info@dysartetal.ca

To: Members of the Committee of the Whole
From: John Watson, Environmental Manager
Date: 10 May 2022
Re: FoodCycler Pilot Project - Update 2

Recommendation:
Be it resolved that Committee of the Whole receive this report for information about the FoodCycler pilot project;

And further that Committee of the Whole recommends Council direct staff to proceed with purchasing and re-selling 36 FoodCyclers to the original 144 pilot project registrants at a cost of \$250 plus \$15.49 administrative fee plus HST.

Background Information:
Pilot Project

Dysart's FoodCycler twelve-week pilot project started on April 10, 2022, and ends on July 2, 2022.

Survey 1 of Participants

One hundred Dysart households are participating in the pilot project. An initial online survey of the 100 participants highlighted the following information:

Household Type



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To: Members of the Committee of the Whole
From: John Watson, Environmental Manager
Date: 14 Jun 2022
Re: FoodCycler Pilot Project - Update 3

Recommendation:
Be it resolved that Committee of the Whole receive this report for information about the FoodCycler pilot project.

Background Information:
Pilot Project

Dysart's FoodCycler twelve-week pilot project started on April 10, 2022, and ends on July 2, 2022.

Online Weekly Logs

Each week of the pilot, the 100 participants are emailed an online weekly log to complete. The fourth to eighth online weekly logs revealed the following information:

	Week 4 ending May 7	Week 5 ending May 14	Week 6 ending May 21	Week 7 ending May 28	Week 8 ending June 4
How many cycles of the FoodCycler did you run during the week?	21.85% three times 24.74% two times	32.32% three times 22.22% two times	23.81% four times 11.9% three times 23.81% two times	25% three times 27.08% two times	20.99% three times 19.75% two times



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To: Members of the Committee of the Whole
From: John Watson, Environmental Manager
Date: 09 Aug 2022
Re: FoodCycler Pilot Project - Update 4

Recommendation:
Be it resolved that Committee of the Whole receive this report for information about the FoodCycler pilot project.

Background Information:
Pilot Project

Dysart's FoodCycler twelve-week pilot project started on April 10, 2022, and ended on July 2, 2022.

Online Weekly Logs

Each week of the pilot, the 100 participants are emailed an online weekly log to complete. The ninth to twelfth online weekly logs revealed the following information:

	Week 9 ending June 11, 2022	Week 10 ending June 18, 2022	Week 11 ending June 25, 2022	Week 12 ending July 2, 2022
How many cycles of the FoodCycler did you run during the week?	21.88% two times 18.75% three times	23.96% two times 15.63% four times	31.0% three times 17.0% two times	24.21% three times 18.95% two times
What did you do with the composted material (soil amendment) created by the FoodCycler?	47.92% added to garden 30.21% nothing yet	44.79% added to garden 31.25% nothing yet	47% added to garden 33% nothing yet	50.53% added to garden 27.37% nothing yet

Survey 3



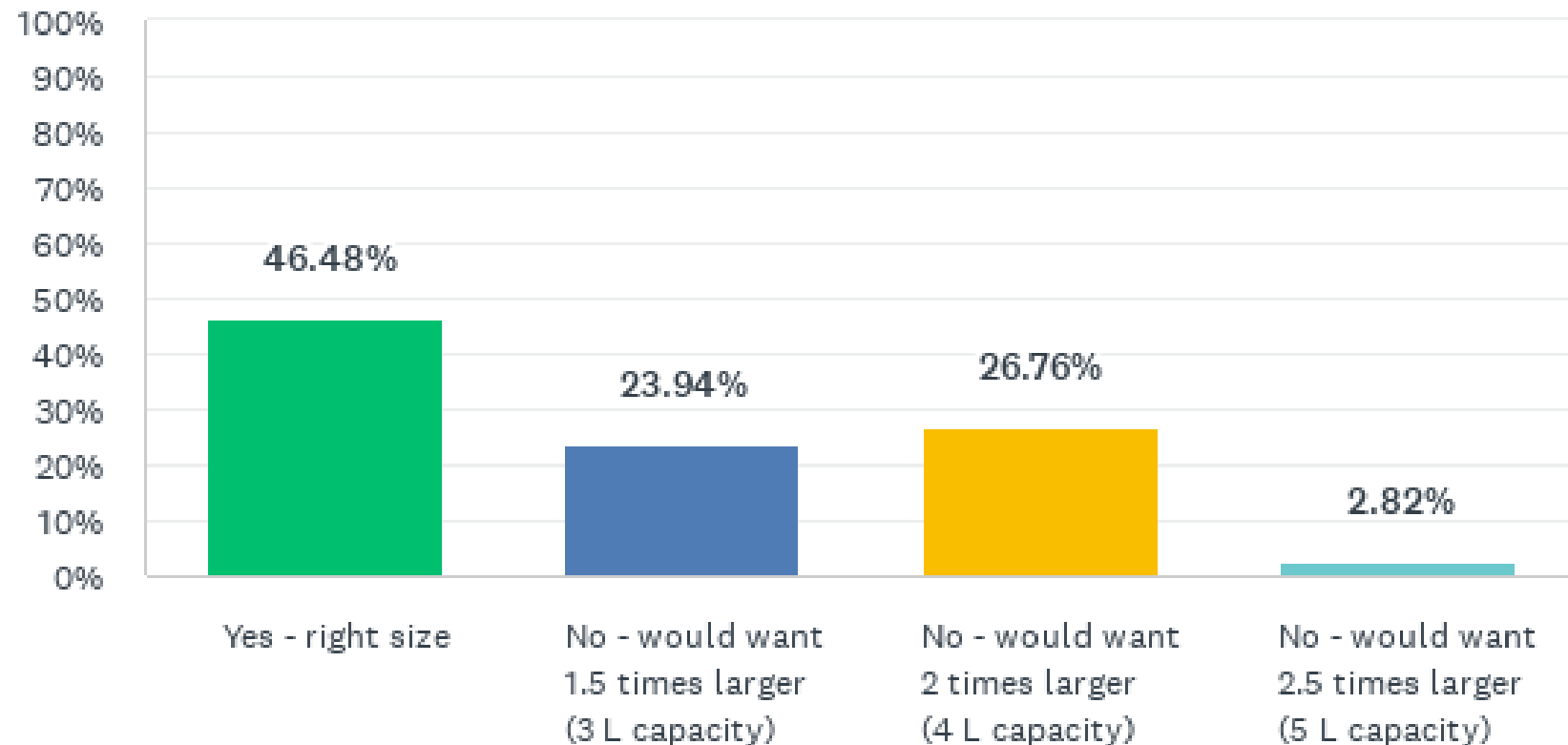
Pilot Project Weekly Log Results

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6 ending May 21	Week 7	Week 8	Week 9	Week 10 ending June 18	Week 11	Week 12
4 times						23.81%				15.63%		
3 times	27.55%	24%	21.35%	21.65%	32.32%		25%	25%	18.75%		31.0%	24.21%
2 times	16.33%	19%	21.35%	24.74%	22.22%	23.81%	27.08%	27.08%	21.88%	23.96%	17.0%	18.95%

Pilot Project

Survey 3 Results

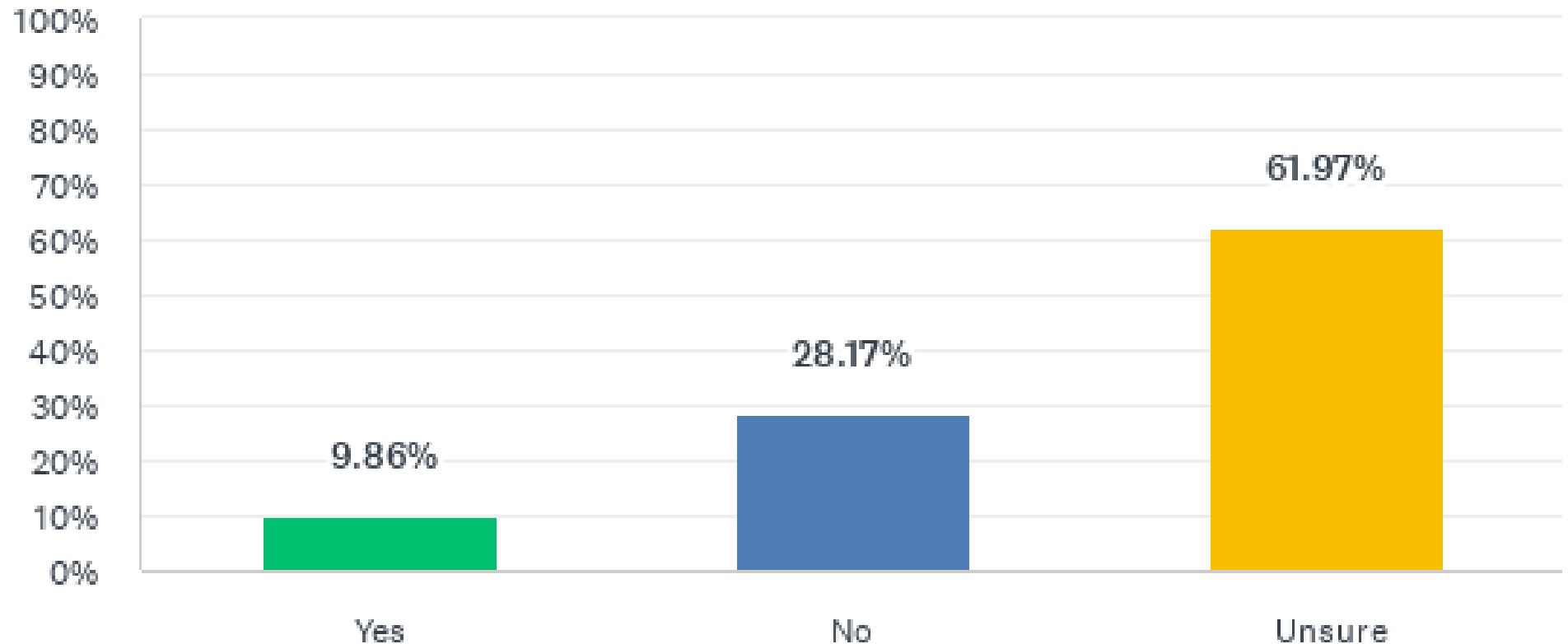
Is the FoodCycler large enough for the quantity of daily food waste you generate?



Pilot Project

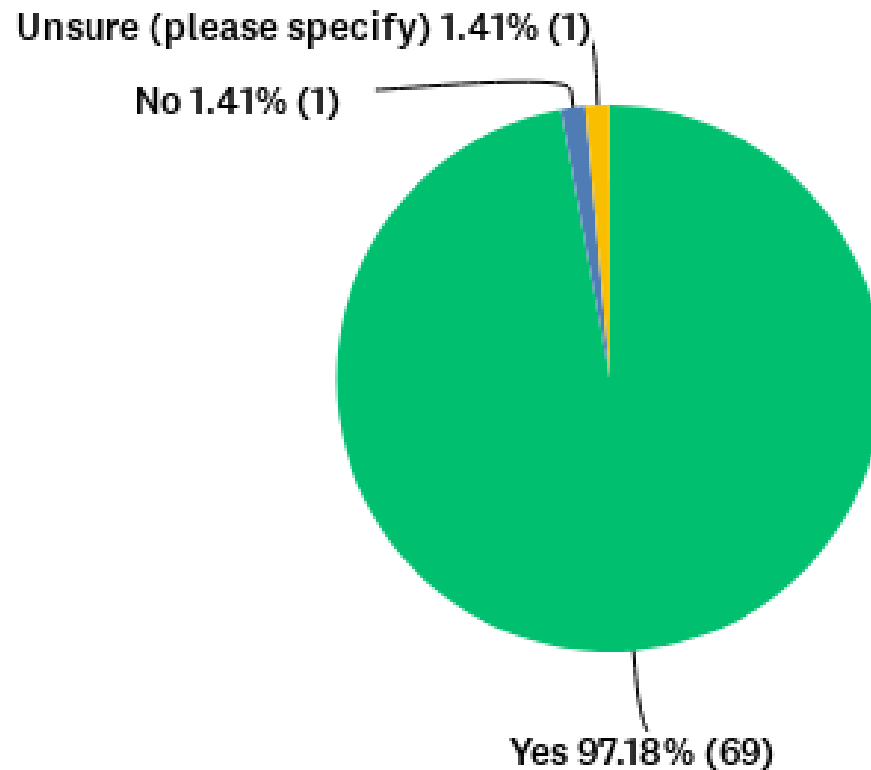
Survey 3 Results

After twelve weeks, did you experience increased electricity costs during the time you used the FoodCycler?



Pilot Project Survey 3 Results

The 12-week pilot project has ended. Do you anticipate you'll continue to use the FoodCycler after the pilot project is over?



Pilot Project

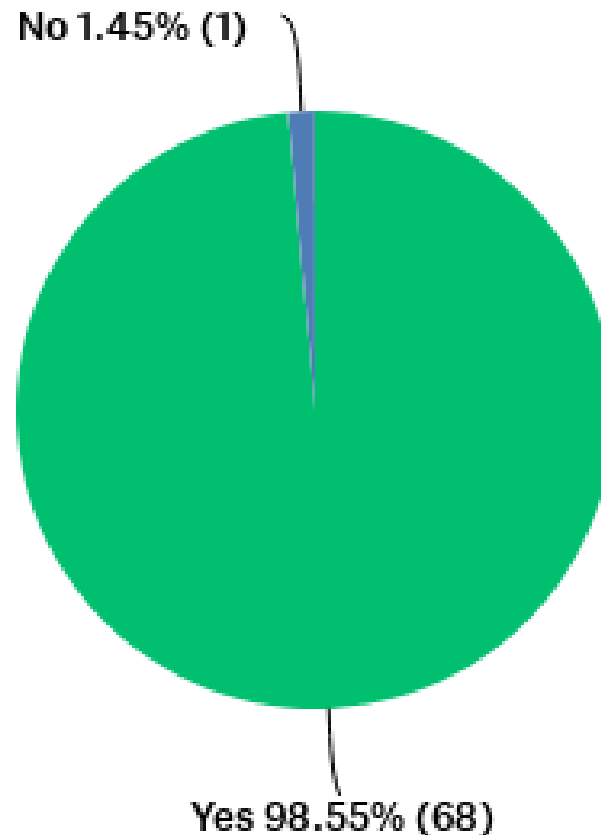
Survey 3 Results

On a 1-5 scale (1 being poor, 5 being excellent), how would you rate the FoodCycler as a way of managing food waste at home?



Pilot Project Survey 3 Results

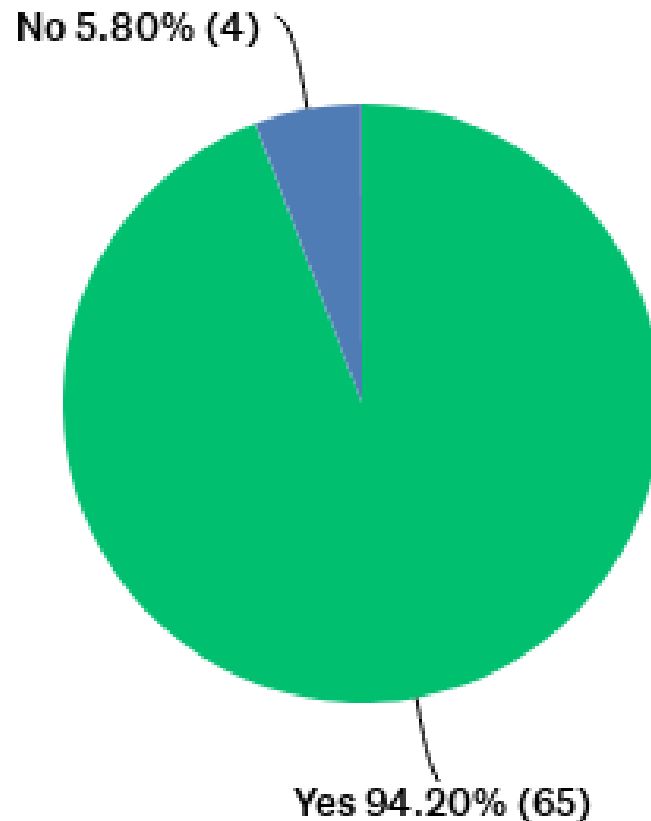
Should Dysart continue to offer the FoodCycler as a way to manage household food waste?



Pilot Project

Survey 3 Results

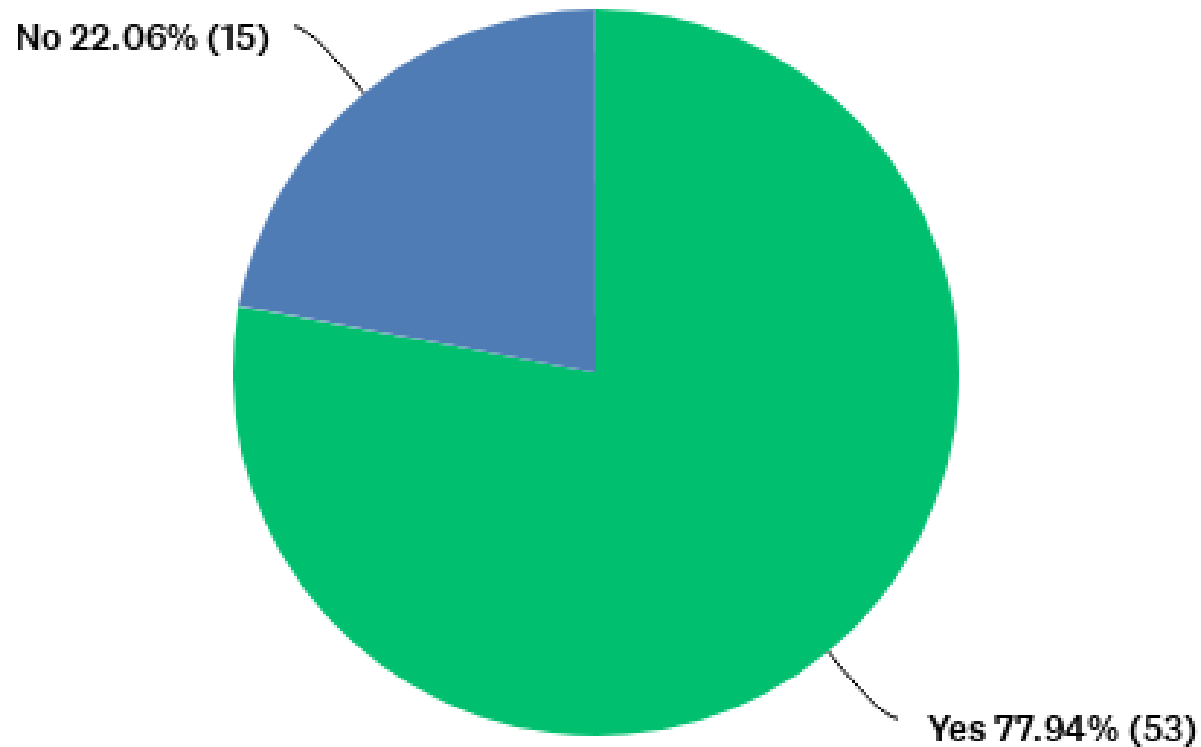
Should Dysart financially subsidize the purchase price of the FoodCycler for any additional Dysart household that wants to purchase one?



Pilot Project

Survey 3 Results

If federal/provincial funding was available, would you support Dysart providing a FoodCycler to every Dysart household at no cost?



Next Steps

Proposed County-wide Project



Committee of the Whole Staff Report

To: Chair and Members of the Committee of the Whole
Prepared By: Korey McKay, Climate Change Coordinator
Date: January 11, 2023
Report Number: PLN-02-2023
Subject: County-Wide FoodCycler Program Options

Recommendation:

BE IT RESOLVED that Haliburton County Committee of the Whole receive the January 11, 2023 report entitled County-Wide FoodCycler Program Options;
And that it be recommended to Haliburton County Council that \$120,000 be allocated to the 2023 climate change budget and be approved prior to the passage of the 2023 budget for an expanded FoodCycler program;
And that it be recommended that Haliburton County Council authorize the Warden and Clerk to sign an agreement between the County of Haliburton and Food Cycle Science for option "_____".

Background:

In 2020, Haliburton County Council and each local council approved a Corporate Climate Change Mitigation Plan. 12,230tCO₂e (tonnes of carbon dioxide equivalent) or 77% of our collective annual corporate greenhouse gas emissions are a result of decomposing waste in our landfill sites. This is equivalent to the greenhouse gas emissions from 3,747 passenger vehicles. A strategy within the plan includes exploring potential options for organics diversion for food waste, which would have the largest possible impact on reducing greenhouse gas emissions from our municipal operations.

Many landfill sites in the County are at or nearing capacity. In one municipality, waste is transported hundreds of kilometers to be disposed of. Managing waste results in substantial costs for our local municipalities. According to Dysart's recent waste composition study, 48% of local garbage is organics (18% unavoidable food waste, 13% leftover food, 11% tissue/paper towel, 6% untouched food). Diverting organic waste can reduce the weight and volume of garbage by nearly half and significantly reduce odours associated with garbage, therefore reducing trips by residents to landfill sites and the associated GHG emissions from transportation.

Food Cycle Science (FCS) is a Canadian company that produces devices about the size of a breadmaking machine that use electricity to quickly compost food waste into a dry and odourless compost product. The FoodCycler FC-30 and Maestro devices can process 2.5L and 5L (respectively) of food waste per cycle and convert it into a nutrient-rich soil amendment that is significantly reduced in weight and volume (up to 90%) from its unprocessed state. This by-product can be added to plants and gardens. Power consumption is approximately 0.8kWh for the FC-50 and 1.3kWh for the Maestro and the cycle takes less than 8 hours to complete (overnight). The devices are easy to clean and easy to operate, with quiet and odourless operation.

A FoodCycler offers >95% reduction in CO₂e compared to sending food waste to landfill. Organic waste that decomposes in an oxygen-free environment such as a landfill releases methane. Methane is a greenhouse gas that is up to 34 times more powerful than carbon dioxide over a century. Since the FoodCycler aerates the food waste while heating and pulverizing (introducing oxygen into the process), those environmentally damaging methane gases are not produced at all.



Proposed County-wide Project

	Option 1	Option 2	Option 3
Number of Units	2,500 units (500 units over 5 years)	1,000 units (500 units over 2 years)	500 units
Percentage of Households	12%	5%	2.5%
Costs	\$102,500 per year \$512,500 total	\$102,500 per year \$205,00 total	\$102,500

**DEFERRED UNTIL
JANUARY 25, 2023**

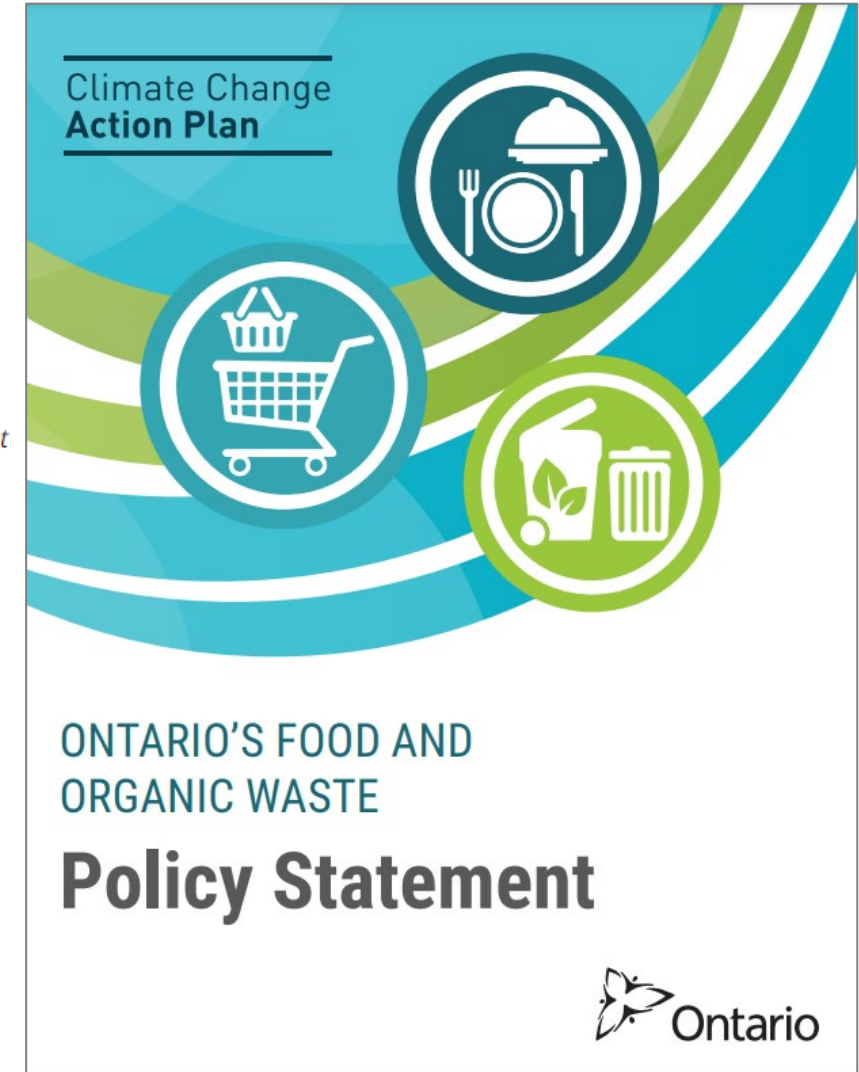
Ontario's Food and Organic Waste Policy Statement

- “Province-wide ban of organics from landfill”

4.2 *Municipalities in Southern Ontario* that, as of the effective date, do not provide curbside collection of source separated *food and organic waste* shall provide:

- Curbside collection of *food and organic waste* to single-family dwellings in an *urban settlement area* within a *local municipality* if the population of the *local municipality* is greater than 50,000 and the population density of the *local municipality* is greater than or equal to 300 persons per square kilometre.
- Collection of *food and organic waste* to single-family dwellings in an *urban settlement area* within a *local municipality* if:

 - The population of the *local municipality* is greater than 50,000 and the population density of the *local municipality* is less than 300 persons per square kilometre; or
 - The population of the *local municipality* is greater than 20,000 but equal to or less than 50,000 and the population density of the *local municipality* is greater than or equal to 100 persons per square kilometre.



Final Thoughts

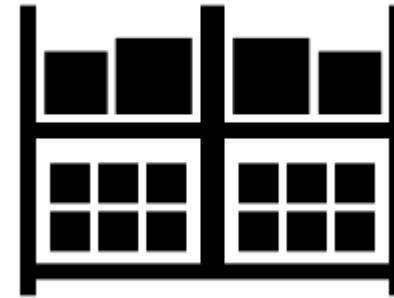
Things to consider



Skids



Shipping



Storage



Seasonal



Supplies



Square

Questions?

Contact

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Dysart Waste



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