

# T O R O N T O



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## LONG TERM WASTE MANAGEMENT STRATEGY

# TORONTO'S WASTE STRATEGY

Waste management in a large city like Toronto is a complex task. The Waste Strategy was developed over two years and is supported by extensive research, guidance from key stakeholders, and a comprehensive public consultation and engagement program. The Waste Strategy, which was approved by City Council in July 2016, recommends waste reduction, reuse, recycling, recovery and residual disposal policies and programs.

## GUIDING PRINCIPLES

**Reduce** the amount of waste we generate

.....

**Reuse** what we can

.....

Recycle and recover the remaining resources to  
**reinvest back into the economy**

.....

Embrace a **user-friendly** waste  
management system

.....

Balance **community,** the **environment,** and  
**financial sustainability**

.....

Ensure a **safe, clean, beautiful and healthy**  
city for the future

# TARGETS AND GOALS



# 70%

## Diversion of waste by 2026

This equals approximately **200,000 additional tonnes** being diverted from the landfill by 2026.

The Waste Strategy includes an aspirational goal to work towards a **Circular Economy** and **Zero Waste** future.

The Waste Strategy recommends waste reduction, reuse, recycling, recovery and residual disposal policies and programs that are environmentally sustainable, socially acceptable, and cost-effective.



This comprehensive strategy will guide waste management in Toronto for the next

# 30-50 years.



## WORKING TOGETHER TO ACHIEVE OUR GOALS



The Waste Strategy aims to achieve these goals with the rollout of several new programs supported with promotion and education, and in combination with an enhanced approach to enforcement of existing programs, services and by-laws.



Wast(ED) – Community Education Speaker Event  
April 29, 2015

# TORONTO SPEAKS

## HOW WE LISTENED

**You spoke, we listened.** Throughout the development of the Waste Strategy, thousands of participants from across the City provided feedback, engaged in dialogue and accessed key project information through a variety of consultation and engagement activities.

### Engagement activities included:



Arts & Entertainment Events



Community events, speaker events, and open houses



Education & Student Outreach



Website, surveys, and social media

40+ Events & Meetings

16,600+ Web Visitors

3,400 Survey Respondents

283 Tweets

## WHAT WE HEARD

Throughout consultation and engagement, a number of common themes emerged, which framed the final Waste Strategy.

### ZERO WASTE + CIRCULAR ECONOMY

Participants' input indicated support for working towards a **Zero Waste future**. Zero Waste prioritizes waste prevention and focuses on conserving resources and building a circular economy.



### THE 3Rs

Participants strongly supported **reduction, reuse, and recycling** programs, including food waste reduction, textile reuse, and mobile drop-off service.



### USER-FRIENDLY OPTIONS

Participants emphasized creating user-friendly and accessible programs with enhanced enforcement to support waste diversion.



### APARTMENTS, CONDOS & BUSINESSES

Participants identified apartments, condos and businesses as the largest opportunities for waste diversion improvements with more education and enforcement.



# WASTE MANAGEMENT IN TORONTO

**928,118 tonnes**  
of waste was collected

The City of Toronto supports an integrated waste management system that includes providing services from the initial generation of waste (or avoidance of generation) through to the monitoring of closed landfill sites, long after the waste has been disposed of and the site has been closed.

## RESIDENTIAL CUSTOMERS

**874,000**



### ANNUAL RESIDENTIAL GARBAGE COLLECTED

**389 kg** (Single family household)  
average

**461 kg** (Multi-residential household)  
average

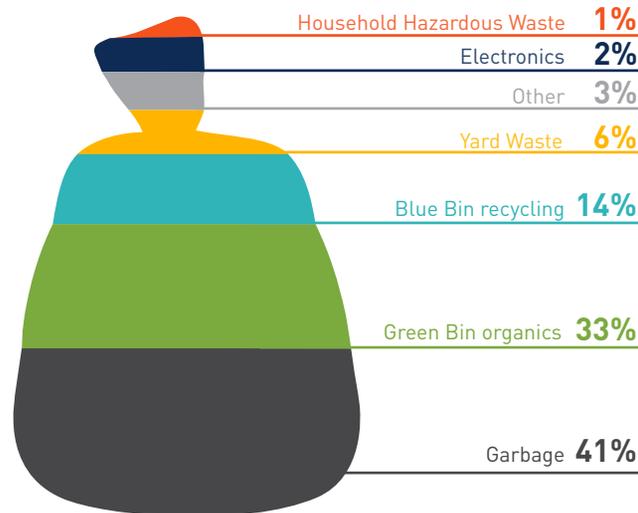
## NON-RESIDENTIAL CUSTOMERS

**17,300** Businesses, schools, charities, and religious institutions

### ASSETS

**1,600,000** Bins collected  
**600+** Trucks & Equipment  
**15** Facilities

## WHAT'S STILL IN OUR GARBAGE?

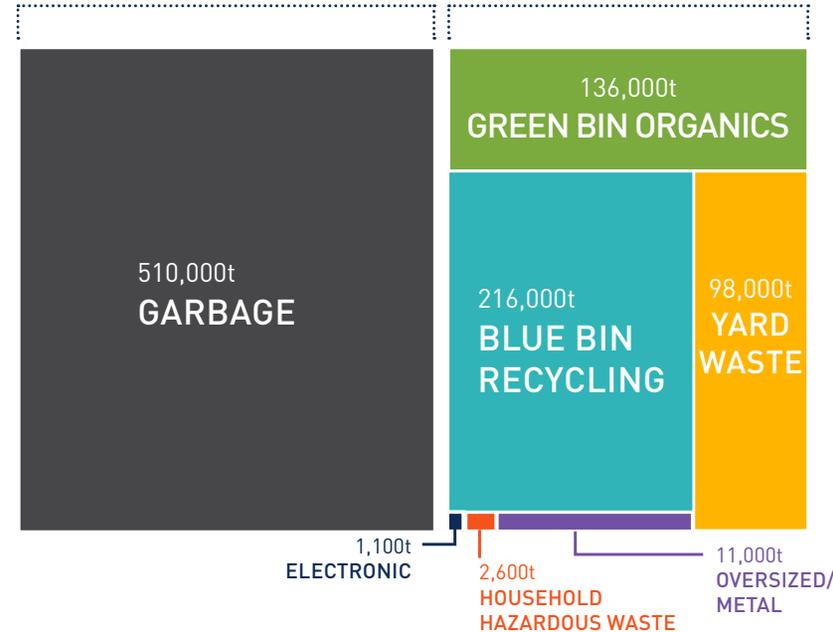


Single family waste

## Disposed

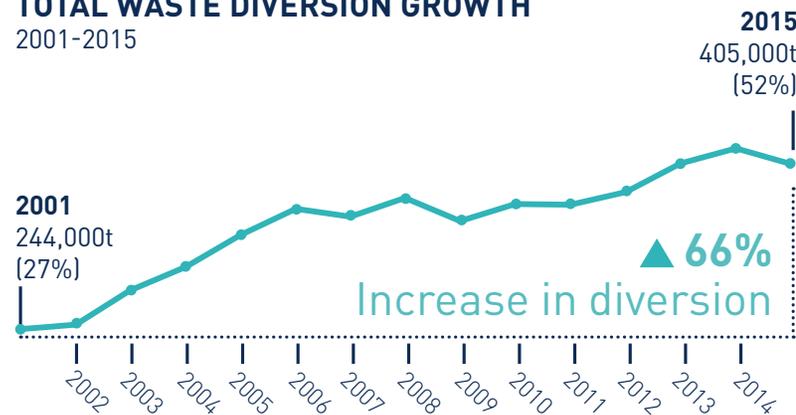


## Collected for diversion



## TOTAL WASTE DIVERSION GROWTH

2001-2015



# WASTE IN TORONTO IN 2015

# FOCUSING ON THE 3Rs

Toronto's Waste Strategy identified a number of recommendations that reflect the City's commitment to the 3Rs as an overarching goal of the Waste Strategy.

These recommendations were strongly supported through the consultation process and will be introduced to reduce the amount of waste requiring management by the City.



**REDUCE**



**REUSE**



**RECYCLE**



## FOOD WASTE REDUCTION STRATEGY

Information and outreach programs to educate residents about the benefits of food waste reduction from an environmental, social, and economic perspective.



## TEXTILE COLLECTION & REUSE STRATEGY

Development of a textile diversion awareness campaign and the provision of diversion opportunities that would enable textiles to follow the waste hierarchy, which prioritizes the 3Rs.

## OTHER REDUCTION & REUSE PROGRAMS



### Sharing Library

Sharing libraries allow the public to sign-out materials (e.g., tools, bikes, etc.).



### Support for Reuse Events

Reuse events allow residents to trade or swap materials in a convenient, yet structured way.



### Waste Exchange

Establish a waste exchange network with existing organizations that collect reusable materials.



### Drop-off Depots

Drop-off depots provide a convenient way to drop off divertable materials.

Multi-residential customers make up nearly 50% of Toronto's residential customer base, but have lower waste diversion rates than single family customers. This sector is experiencing rapid growth, which is expected to continue. Waste diversion for multi-residential customers was a key topic in the consultation process. This sector is an extremely important part of the overall Waste Strategy.



## SUPPORT FOR COMMUNITY COMPOSTING

Community composting initiatives such as a large backyard composter or a three-bin wooden composter.



## DATA MANAGEMENT AND ACCESSIBILITY

New technology for more efficient management of existing and new bins to provide data and statistics for each multi-residential building.



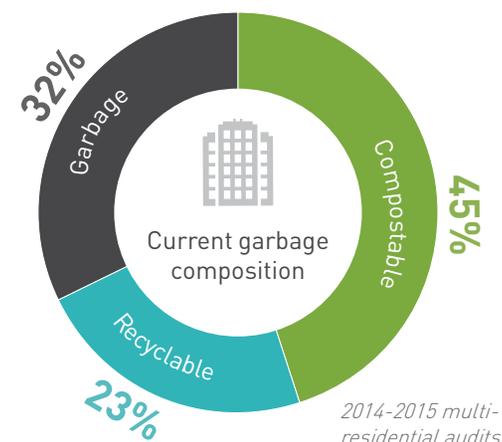
## MULTI-RESIDENTIAL POLICIES AND ENFORCEMENT

**Update Development Standards:** New requirements such as common area drop-off depots or flexible space to allow for the addition of future waste diversion programs.

**By-Laws and Enforcement:** Consider enacting new, legally permissible by-laws to mandate City-wide waste diversion requirements to all multi-residential buildings in Toronto.

In addition to these multi-residential specific options, the full scope of 3Rs (Reduce, Reuse and Recycle) recommendations presented on the previous page will also help to reduce waste and increase recovery of resources from this sector.

## 68% OF MULTI-RESIDENTIAL GARBAGE COULD BE DIVERTED



**MULTI-RESIDENTIAL Diverts 27%**



# STRATEGIES FOR APARTMENTS, CONDOS & CO-OPS

# BUSINESS & HOME RENOVATION WASTE STRATEGIES

## HOME RENOVATION WASTE

The City has a multi-pronged approach to reduce home renovation waste, including working collaboratively with provincial and federal levels of government to address home renovation waste diversion policies.



### DEPOTS AND POLICIES TO DIVERT HOME RENOVATION WASTE

Bins for home renovation waste at transfer stations and policies to increase diversion of home renovation waste.



### BANS ON SOME MATERIALS

Phased-in disposal bans on some home renovation materials at City transfer stations.

## BUSINESS WASTE

While a substantial quantity of waste from the Industrial, Commercial, and Institutional (IC&I) sector, which includes businesses, is managed by private companies, the City has implemented diversion strategies for the customers it does serve.



### EXPLORE ENFORCEMENT & BY-LAWS

Evaluate mandatory approaches to IC&I waste diversion regardless of service provider.



### EXPAND YELLOW TAG PROGRAM

Add more small commercial customers to the City's Yellow Tag program.

These recommended waste diversion strategies will help to ensure that diversion occurs for all businesses in the city.

# EXPLORING NEW TECHNOLOGIES TO RECOVER MORE RESOURCES

Following the reduction, reuse and recycling of materials, there are opportunities to **use technology to recover organics and recyclables** from the garbage stream and divert this material from landfill.

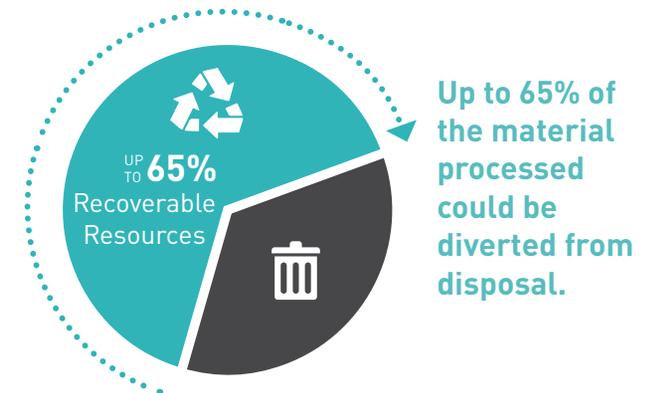


**Mixed Waste Processing Facility with Organics Recovery**  
The facility would receive and process garbage to recover recyclable materials followed by composting/digestion of the remaining material.

RECOVERABLE RESOURCES

Organics → Energy  
Organics → Compost

Recyclables → Plastics  
Recyclables → Metals



The City plans to test the feasibility of mixed waste processing with organics recovery over the next several years. If deemed necessary and valuable, a full scale mixed waste processing facility would process ~150,000 tonnes per year of mixed waste. Assuming 50% of the material can be captured as recyclables or compost, an estimated 75,000 additional tonnes of waste may be diverted from landfill disposal each year.



## DISPOSING RESIDUAL WASTE

The City emphasizes reducing, reusing, recycling, and recovering waste in order to preserve Green Lane Landfill disposal capacity.

### STRATEGIES TO EXTEND GREEN LANE LANDFILL'S LIFE

- » Continuing and expanding the focus on 3Rs
- » Enhancing diversion programs supported with community partnerships, comprehensive education and enforcement of by-laws
- » Strategically redirect some City of Toronto waste to other approved landfills
- » Adjust tipping fees to affect tonnes managed

## RECOVERY & DISPOSAL STRATEGIES

# FUTURE IMPLEMENTATION PLAN, TOOLS AND METRICS

## LONG TERM OUTLOOK

It is estimated that the implementation of the Waste Strategy will help to extend the lifespan of Green Lane Landfill to approximately **2040**.

## A GROWING SYSTEM

A growing population and factors like employment, product packaging, commerce activities, natural weather events and waste reduction and reuse activities impact how much waste Toronto will manage in the future. The Waste Strategy will be reviewed every 5 years to take into account the changing system.

## HOW WILL WE MEASURE SUCCESS?

The highlighted performance metrics below represent a portion of the metrics we will use to measure the impact of the new Waste Strategy, monitor trends associated with waste reduction and reuse strategies, and provide transparency on all aspects of waste management in Toronto.



Waste  
Generation



Textile Reuse or  
Recycling



Waste  
Diversion



Residual  
Disposal



Food Waste  
Reduction



Greenhouse Gas  
Emissions

## HOW WILL WE CONTINUE TO COMMUNICATE?

The City will continue to use existing promotion and education tools and will use a number of additional methods to enhance our programs, support the Waste Strategy, and to encourage reduction, reuse, and recycling of waste.



## OUTREACH & EDUCATION



Establish Advisory  
Groups



Incentivize and Support  
Volunteer Programs



Increase Multi-residential  
Outreach



Waste Reduction Outreach/  
Education Campaign



Expand Social Media  
Presence



Interactive Online Tools

# ROAD MAP FOR IMPLEMENTATION



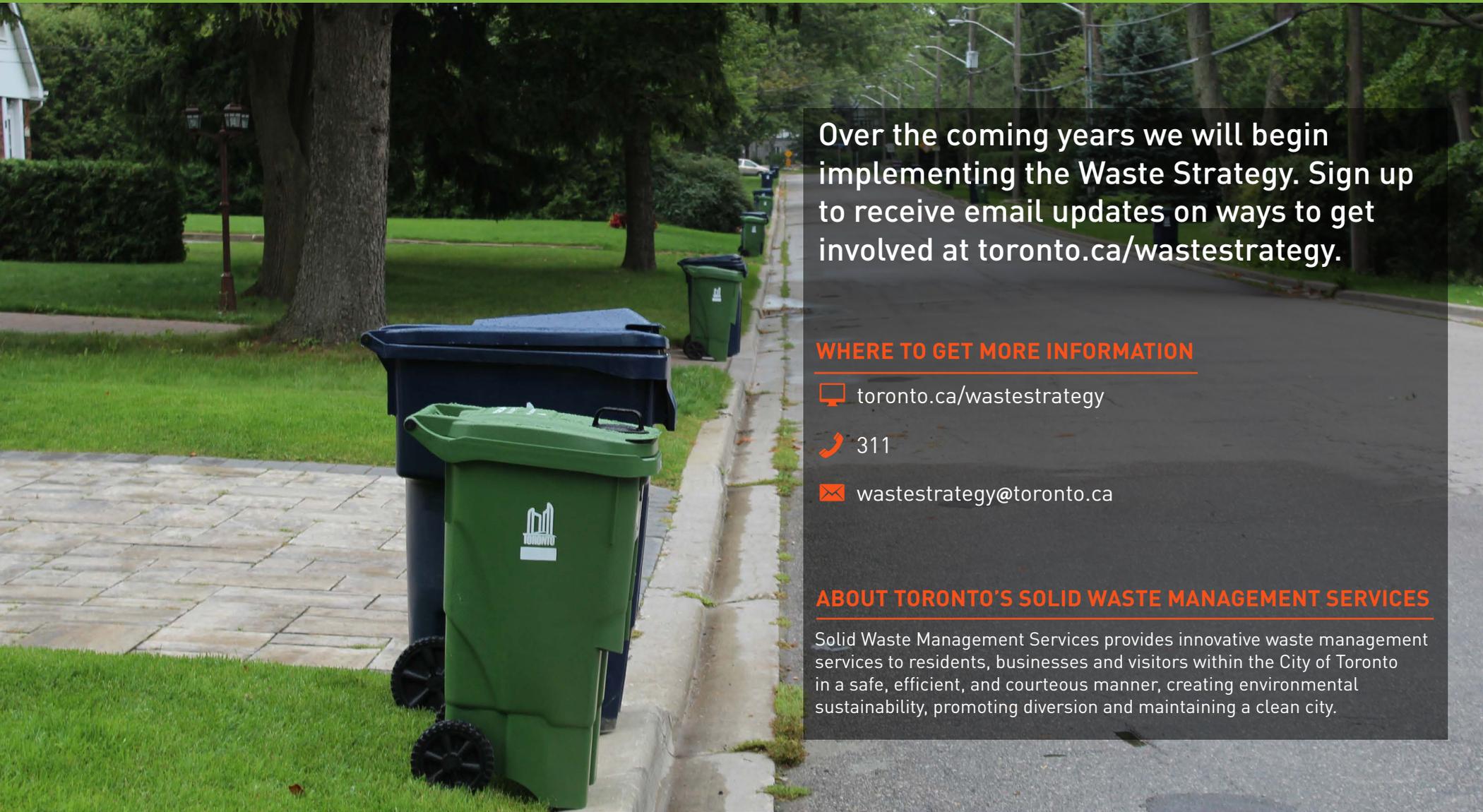
Ongoing **communication, education, enforcement, and promotion** are critical to our Waste Strategy throughout its duration.

5-year Review of Waste Strategy

## RECOMMENDATIONS

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Food Waste Reduction Strategy	Plan	Plan	Implement	Maintain						
Textile Collection & Reuse Strategy	Plan	Implement	Maintain							
Sharing Library	Plan	Plan	Implement	Maintain						
Support Reuse Events	Plan	Implement	Maintain							
Explore Opportunities for Waste Exchange	Plan	Plan	Implement	Maintain						
Mobile Drop-Off Depots			Plan	Implement	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain
Neighbourhood Drop-Off Depots					Plan	Plan	Implement	Implement	Implement	Implement
Mandatory Multi-Residential By-Law	Plan	Plan	Plan	Implement	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain
Updates to Current Multi-Residential Development Standards	Plan	Plan	Implement	Implement	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain
Support for Community Composting					Plan	Plan	Implement	Implement	Maintain	Maintain
Data Management & Accessibility			Plan	Plan	Plan	Plan	Plan	Implement	Implement	Implement
Expand Yellow Tag Program to More Businesses	Plan	Plan	Plan	Plan	Implement	Maintain	Maintain	Maintain	Maintain	Maintain
City Explores Mandatory Approaches to IC&I Waste Diversion		Plan	Plan	Plan	Implement	Implement	Implement	Maintain	Maintain	Maintain
Depots and Policies for Home Renovation Waste		Plan	Plan	Plan	Plan	Plan	Plan	Implement	Maintain	Maintain
Disposal Bans for Some CRD Materials						Plan	Plan	Plan	Plan	Plan
Mixed Waste Processing Facility w/ Organics Recovery	Plan									
Utilizing Disposal Capacity at Other Approved Disposal Sites	Implement	Maintain								
City Explores Control Mechanisms - Bans, By-Laws, & Acts	Plan	Plan	Implement	Implement	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain
Unit for Research, Innovation & a Circular Economy	Plan	Plan	Plan	Implement	Maintain	Maintain	Maintain	Maintain	Maintain	Maintain

■ Plan
 ■ Implement
 ■ Maintain



Over the coming years we will begin implementing the Waste Strategy. Sign up to receive email updates on ways to get involved at [toronto.ca/wastestrategy](https://toronto.ca/wastestrategy).

#### WHERE TO GET MORE INFORMATION

 [toronto.ca/wastestrategy](https://toronto.ca/wastestrategy)

 311

 [wastestrategy@toronto.ca](mailto:wastestrategy@toronto.ca)

#### ABOUT TORONTO'S SOLID WASTE MANAGEMENT SERVICES

Solid Waste Management Services provides innovative waste management services to residents, businesses and visitors within the City of Toronto in a safe, efficient, and courteous manner, creating environmental sustainability, promoting diversion and maintaining a clean city.