



**The Regional Municipality of Durham**  
**Energy from Waste-Waste Management**  
**Advisory Committee**

**Tuesday, February 22, 2022**

**7:00 PM**

**Council Chambers**

**Regional Headquarters Building**

**605 Rossland Road East, Whitby**

In an effort to help mitigate the spread of COVID-19, and to generally comply with the directions from the Government of Ontario, **it is requested in the strongest terms that Members participate in the meeting electronically**. Regional Headquarters is closed to the public, all members of the public may view the [Committee meeting via live streaming](#), instead of attending the meeting in person. If you wish to register as a delegate regarding an agenda item, you may register in advance of the meeting by noon on the day prior to the meeting by emailing [delegations@durham.ca](mailto:delegations@durham.ca) and will be provided with the details to delegate electronically.

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**1. Roll Call**

**2. Declarations of Interest**

**3. Adoption of Minutes**

A) Of the EFW-WMAC meeting held on November 23, 2021

Pages 4 to 8

**4. Announcements**

**5. Presentations**

- A) Presentation by Angela Porteous, Supervisor, Waste Operations, and Gioseph Anello, Director, Waste Management Services, the Regional Municipality of Durham, regarding 'Long-Term Waste Management Plan 2021 Consultation, Final Long-Term Waste Management Plan 2021 to 2040 and first Five-Year Action Plan'.

Pages 9 to 23

**6. Delegations**

There are no delegations.

**7. Correspondence**

There are no items of correspondence.

**8. Administrative Matters**

- A) EFW-WMAC Work Plan – Next Steps

**9. Other Business**

- A) Update by Gioseph Anello, Director, Waste Management Services, the Regional Municipality of Durham, regarding Durham Region's Organics Management Project.
- B) Update by Gioseph Anello, Director, Waste Management Services, the Regional Municipality of Durham, regarding Extended Producer Responsibility.
- C) Update by Gioseph Anello, Director, Waste Management Services, the Regional Municipality of Durham, regarding the Durham York Energy Centre.

**10. Date of Next Meeting**

Tuesday, May 24, 2022 at 7 p.m.

## **11. Adjournment**

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## **The Regional Municipality of Durham**

### **Minutes**

#### **Energy From Waste – Waste Management Advisory Committee**

**Tuesday, November 23, 2021**

A meeting of the Energy From Waste – Waste Management Advisory Committee was held on Tuesday, November 23, 2021 in Council Chambers, Regional Headquarters, 605 Rossland Road East, Whitby, at 7:00 PM. Electronic participation was permitted for this meeting.

#### **1. Roll Call**

Present: G. Gordon, Whitby, Chair  
W. Baszyk, Brock  
R. Fleming, Pickering  
K. Meydam, Clarington  
G. Rocoski, Oshawa  
J. Vinson, Clarington

Absent: V. Daram, Ajax  
S. Elhajjeh, Clarington  
P. Haylock, Clarington, Vice-Chair

#### **Non-Voting Members**

Present: A. Burke, Senior Planner, Special Projects, Municipality of Clarington  
Councillor Jones, Local Councillor, Municipality of Clarington  
L. Kwan, Environmental Specialist, Covanta

#### **Staff**

Present: G. Anello, Director of Waste Management Services  
R. Inacio, Systems Support Specialist – Information Technology  
A. Porteous, Supervisor of Waste Services  
N. Prasad, Assistant Secretary to Council, Corporate Services –  
Legislative Services

#### **2. Declarations of Interest**

There were no declarations of interest.

**3. Adoption of Minutes**

Moved by G. Rocoski, Seconded by R. Fleming,  
That the minutes of the EFW-WMAC meeting held on Tuesday,  
September 28, 2021, be adopted.  
CARRIED

Moved by G. Rocoski, Seconded by R. Fleming,  
That the minutes of the Special EFW-WMAC meeting held on  
Thursday, October 14, 2021, be adopted.  
CARRIED

**4. Announcements**

There were no announcements.

**5. Presentations**

There were no presentations.

**6. Delegations**

There were no delegations.

**7. Correspondence**

There were no correspondence items.

**8. Administrative Matters**

- A) Update by Greg Gordon, EFW-WMAC Chair, and Phil Haylock, EFW-WMAC Vice Chair, regarding the finalization and presentation of the EFW-WMAC 2021 Annual Report for presentation to Durham Region's Works Committee on December 8, and to the Municipality of Clarington's Council on December 13, 2021
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G. Gordon advised that the EFW-WMAC Annual Report will be presented to the Works Committee on December 8, 2021 and to Clarington Council on December 13, 2021. He inquired whether there were any comments or suggestions from the committee.

Discussion ensued with respect to the importance of increasing education for the public regarding home composting as well as the Ministry of the Environment's Auditor's Report which highlighted recycling and waste management as an issue and organics recycling in multi residential buildings.

G. Gordon advised that the following additions will be made to the Annual Report:

- the Committee will review the Ministry of the Environment's Auditor's Report, specifically the comments on the gaps in waste management reduction and organics reduction; and
- under Summary of Work Done by the Committee, a statement dealing with communicating and outreach on home or community-based organics recycling

B) EFW-WMAC Work Plan – Next Steps

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G. Gordan suggested the following go forward action be added to the Work Plan: to partner with the Durham Region Works Department to help focus on the gaps in the Extended Producer Responsibility (EPR) regulation and what the Ministry of the Environment has identified in the Auditor's Report as gaps in waste management organics.

**9. Other Business**

A) Update by Gioseph Anello, Director, Waste Management Services, the Regional Municipality of Durham, regarding Durham Region's Organics Management Project

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G. Anello provided an update regarding Durham Region's Organics Management Project. He advised that staff is currently in the procurement process and have identified three prequalified potential contractors that will be responsible for the Organics Management Project, which includes the mixed waste pre-sort and the anaerobic digestion. He provided an overview of the procurement process and advised that the recommended proponent would be considered at the June 2022 Regional Council meeting.

Staff responded to questions with regards to whether there are other emissions emitted from the project; whether there are ongoing negotiations with the Municipality of Clarington; whether there is a visual aesthetics component to the bid; and when will the project be operational.

B) Update by Gioseph Anello, Director, Waste Management Services, the Regional Municipality of Durham, regarding Extended Producer Responsibility

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G. Anello provided an update regarding Extended Producer Responsibility (EPR).

G. Anello advised that Extended Producer Responsibility will transition the Blue Box program for Durham Region in 2024.

He advised that as the material recovery facility will become a stranded asset in 2024, staff will be looking at a procurement process which will require the proponent to operate the facility for a two year period and then lease the property for another five years to get the remaining value out of the equipment and the building.

C) Update by Gioseph Anello, Director, Waste Management Services, the Regional Municipality of Durham, regarding the Durham York Energy Centre

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G. Anello provided an update regarding the Durham York Energy Centre (DYEC).

G. Anello advised that the DYEC recently underwent a scheduled minor outage that started on September 25<sup>th</sup> and ended on October 7<sup>th</sup>. He advised that as certain components of the DYEC are coming to the end of their life, they have to be inspected and Covanta will be looking to do some major repairs next year.

G. Anello advised that as of the end of October 2021:

- the DYEC processed about 115, 000 tonnes;
- it generated about 84,000 megawatt hours of electrical energy;
- it has recovered 2,600 tonnes of ferrous metal and about 370 tonnes of non-ferrous metals; and
- the Region has had to bypass about 16,000 tonnes of waste to landfill due to the facility being down for maintenance and the capacity of the facility being exceeded due to the high heat value of the waste.

G. Anello further advised that there are no issues with regards to the continuous emissions monitoring and no exceedances have been reported since the last report. The next stack testing is being planned for the last week of November, 2021.

Staff responded to questions with regards to the location of the landfill the waste was diverted to; whether the facility resumed full operation after the October 7<sup>th</sup> scheduled maintenance; whether or not all AMESA related data (including lab analysis and monthly period sampling) have been retained at the DYEC since the samples of furans and dioxins started to be collected in the fall of 2015, and whether this information is retained at the site and available for the public to view.

Staff also responded to questions regarding whether the lab reports are sent only to Covanta; whether the AMESA samples sent to the lab include all the materials caught in the AMESA sampling train and are used to analyze the total quantity of dioxins and furans; whether there are any parts not analyzed; whether the monthly AMESA sampling collects continuously over all operating conditions and if there are any conditions where it would be turned off; whether the Region has a consultant for AMESA or for AMESA matters; whether there are any contractual agreements relating to the burner operations between Durham York and Covanta that could be impacted should Covanta be acquired by another entity; and whether staff has experienced any supply chain issues with the DYEC.

**10. Next Meeting**

The next regularly scheduled meeting of the EFW-WMAC will be held on Tuesday, February 22, 2022 in Council Chambers, at 7:00 PM, Regional Headquarters, 605 Rossland Road East, Whitby.

**11. Adjournment**

Moved by K. Meydam, Seconded by B. Bastyk,  
That the meeting be adjourned.  
CARRIED

The meeting adjourned at 7:56 PM.

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G. Gordon, Chair, Energy from Waste –  
Waste Management Advisory Committee

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N. Prasad, Assistant Secretary to Council





# Long-Term Waste Management Plan Development

Energy from Waste-Waste Management Advisory Committee  
February 22, 2022








# Development of Draft Waste Plan, Targets and Short, Mid and Long-term Actions

- 2020
  - Consultation on Vision, Guiding Principles and Objectives
  - Council approval in January 2021
- 2021
  - Development of Draft Waste Plan, Targets and Short, Mid and Long-term Actions
  - Consultation – Meetings, Surveys, Townhall, Online Meeting
  - Development of 5-Year Action Plan

# Waste Plan Consultation (2020-2021)

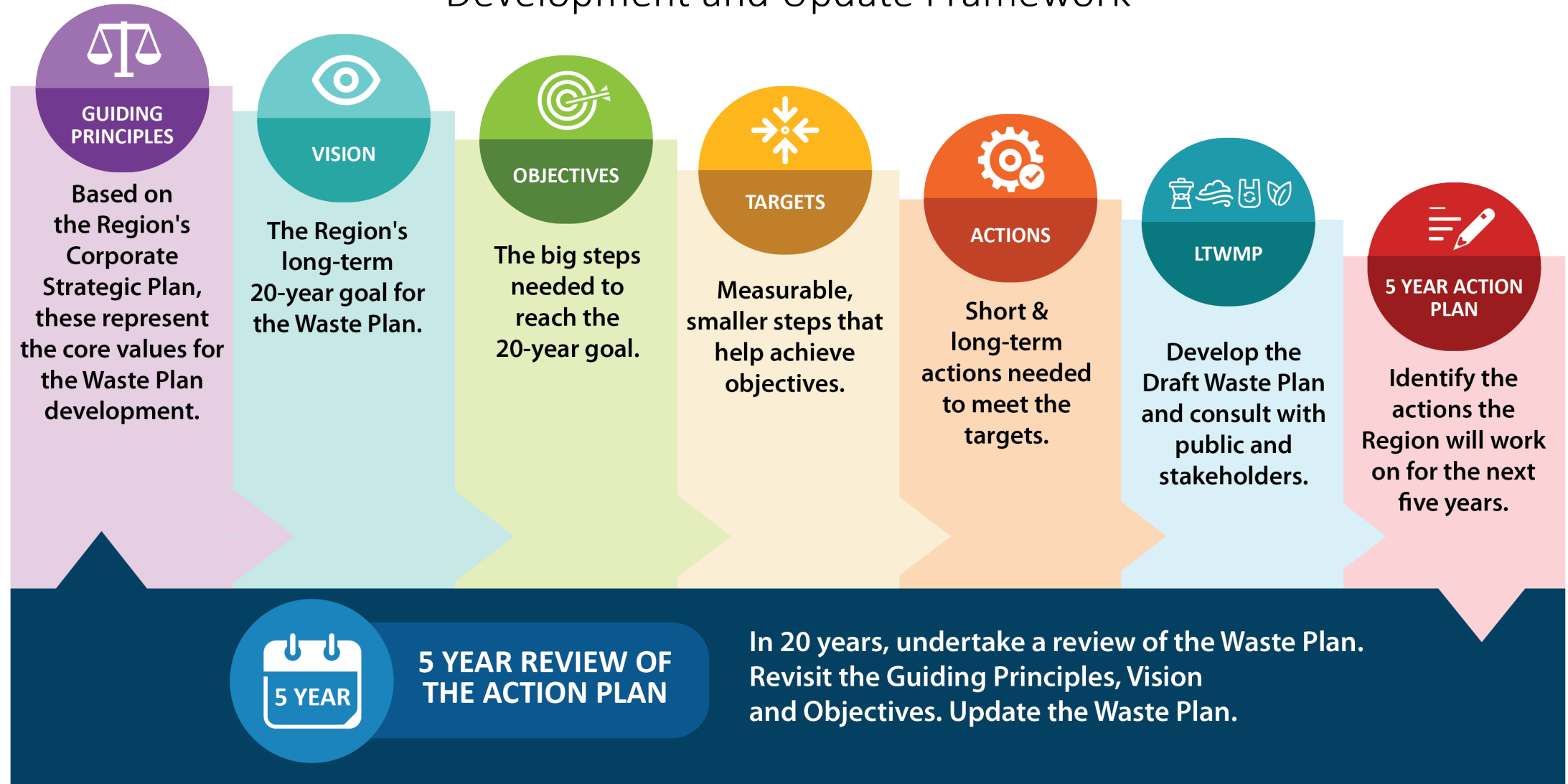
- 2 sets of workshops with Regional Staff and Local Municipality Staff each
- 12 meetings with Regional Committees
- 2 online meetings
- 3 surveys
- 2 virtual Townhalls
- Social media campaign (Facebook, Twitter), radio, newspaper and TV ads
- Waste App campaigns and notifications

# What We Heard

-  • Increase Promotion & Education to encourage participation
-  • Reduce Greenhouse Gases
-  • Collaborate with LAMs on reduction and reuse initiatives, Waste App, public education materials
-  • The Waste App is a popular way to access information about the Region's waste management programs and services
-  • Overall, residents are satisfied with the current hours of the WMF
-  • In the public survey, the top ranked target for annual reduction in garbage disposed is 20% over the next 20 years
-  • Increase diversion of organics at apartments

# Long-Term Waste Management Plan

## Development and Update Framework



# Waste Plan Targets and Actions



- **Targets**

Developed to meet the objectives



- **Measurements**

To assess the progress on meeting targets



- **Actions**

Developed for the Region and our community to contribute to meeting the targets

- **Timelines for actions:**



**Short-term:** (2022-2026)



**Mid-term:** (2027-2033)



**Long-term:** (2034-2040)



- **The targets and actions will be reviewed during these timelines**



- **Every five years, the Action Plan will be reviewed and updated**



# Objective 1 - Engage with residents to build an understanding and awareness of the 5Rs and the Region's waste management programs and services.



## Target 1A

Increase public engagement on the 5Rs through partnerships, increased accessibility, and different media.



## Measurement

Progress of actions comprising this target.



## Ongoing Actions

1A1 - Work with schools to provide educational content and increase rethink and reduce activities.

1A2 - Transition to a central access point for residents to obtain waste management information.

1A3 - Increase Waste app subscribers.

1A4 - Add a dedicated section to the Region's webpage on Reduction and Reuse.

1A5 - Investigate the feasibility of including locations of donation centres on the Waste app.

1A6 - Develop digital and/or in-person educational opportunities.

1A7 - Identify additional languages for publications, P&E materials and outreach events.



## Objective 2 - Reduce the quantity of waste we create



### Target 2A

Support residents in making behavioural changes to reduce food waste.



### Measurement

Reduce quantities of avoidable food waste in the Green Bin program. Reduction targets to be determined with implementation of regular waste audits.



### Ongoing Actions

2A1 - Continue with the Region's "Buy it, Eat it" food waste reduction campaign.



### Target 2B

Support residents in making behavioural changes to reduce the amount of waste generated.



### Measurement

Measure annual generation rates of garbage (kg per capita) to track progress in reducing garbage.



### Short-Term Actions

2B1 - Reduce quantities of materials generated such as durable goods, textiles and single-use plastics.  
2B2 - Develop a monitoring program to audit waste setouts and composition on a regular basis.



### Mid-Term Actions

2B3 - Evaluate partnerships with local charities.  
2B4 - Partner with local area municipalities on common messaging and approach to single use plastics and textiles.





## Objective 3 - Increase diversion of waste from disposal and support the circular economy



### Target 3A

Increase diversion of organics from disposal.



### Measurement

Increase Green Bin organics diversion from disposal up to 10% by 2026.



### Short-Term Actions

3A1 - Develop the Mixed Waste Pre-sort and Anaerobic Digestion Facility.

3A2 - Launch an enhanced Green Bin program for single-family residences.

3A3 - Encourage backyard composting.

3A4 - Expand collection services to Regional facilities and consider service for local area municipal facilities and other institutional users (e.g. school boards).



### Mid-Term Actions

3A5 - Expand collection services to more multi-residential buildings to divert more material.



### Target 3B

Revise Waste Management By-law 46-2011 to reflect changes to Regional collection and processing programs and services.



### Measurement

Revise By-law by 2026.



### Short-Term Actions

3B1 - Revise By-law to reflect new EPR programs.

3B2 - Revise By-law to include a new section for the Mixed Waste Pre-sort and AD Facility.

3B3 - Review options to collect waste in mid to high density developments.



## Objective 3 - Increase diversion of waste from disposal and support the circular economy – (Continued)



### Target 3C

Develop a transition plan that supports EPR programs.



### Measurement

Successful transition to EPR in 2024.



### Short-Term Actions

3C1 - Work with producers to understand how programs will be rolled out and the impact on the Region.

3C2 - Develop educational campaigns to inform residents of changes to programs.

3C3 - Transition the program(s) to producers.

3C4 - Explore opportunities to reuse or recycle HHW not covered under the regulations.

3C5 - Assess options for the Region's recycling facility and equipment.

3C6 - Evaluate if changes are required at Waste Management Facilities to adapt to EPR regulations.

3C7 - Pursue options for the Region to continue to provide recycling collection service to ineligible sources.



### Target 3D

Advocate for the expansion of existing EPR programs and for additional EPR programs to manage more materials.



### Measurement

Number of advocacy efforts undertaken.



### Short-Term Actions

3D1 - Continue to participate in the solid waste management committees of municipal advocacy organizations and related industry associations.

3D2 - Continue to participate in consultation opportunities for proposed Federal and Provincial waste management changes.



### Mid-Term Actions

3D3 - Advocate to the Federal and Provincial governments for new EPR programs to divert more materials from disposal.

3D4 - Advocate for existing programs to be expanded (e.g., recycling, hazardous waste, electronics).

3D5 - Provide comments on any proposed EPR regulations to ensure Durham Region's considerations are included.



## Objective 4 - Support the Region's greenhouse gas (GHG) reduction and climate change mitigation efforts



### Target 4A

Develop initiatives to offset or reduce GHG emissions from solid waste that contribute to Corporate GHG emissions.



### Measurement

Annual actions to implement initiatives to reduce GHG emissions to contribute to the Corporate GHG emissions reduction target of 40 per cent below 2019 levels by 2030 (and 100 per cent below 2019 levels by 2045).



### Short-Term Actions

4A1 - Explore opportunities to convert collection vehicles to use alternative fuels.

4A2 - Identify opportunities to convert biogas to Renewable Natural Gas at Region-owned facilities.

4A3 - Identify additional methodologies to determine GHG emission reductions and avoidance.

4A4 - Undertake additional analyses to review how to better recover energy resources from waste operations.



### Mid to Long-Term Actions

4A5 - Develop a carbon emissions management plan in partnership with the Region's Sustainability group.

4A6 - Work with other Divisions to leverage the Region's buying power to develop in-house Circular Economy Initiatives.

4A7 - Explore options to reduce GHGs at Waste Management Facilities (WMF) through wind/solar installations, carbon capture technologies and other methods to offset emissions.

4A8 - Explore opportunities to reduce emissions from some/all fleet vehicles through alternative fuels or technologies.

4A9 - Assess operational practices at WMFs that would reduce emissions from transportation.

4A10 - Technology review of CO<sub>2</sub> capture and utilization and/or offset options for expanded DYEC.



## Objective 5 - Protect or improve water, land and air quality in Durham Region



### Target 5A

Optimize the operation and utilization of Waste Management Facilities (WMFs).



### Measurement

Annual actions to optimize operations at WMFs.



### Short-Term Actions

5A1 - Explore options to optimize the Oshawa WMF (e.g., traffic flow, new indoor/outdoor facility).

5A2 - Investigate options to improve waste diversion performance at WMFs.



### Mid to Long-Term Actions

5A3 - Explore options to optimize Brock and Scugog WMFs.

5A4 - Evaluate business case to develop a new WMF or smaller drop-off depots.



### Target 5B

Increase accessibility of waste management programs and services.



### Measurement

Changes to operating hours and physical accessibility of WMFs.



### Short-Term Actions

5B1 - Investigate extending the hours of operation to make access to the WMFs more convenient for users.

5B2 - Assess accessibility of WMFs to ensure they are physically accessible.



### Mid to Long-Term Actions

5B3 - Explore options for assisted waste collection to help residents manage set out of materials.



## Objective 5 - Protect or improve water, land and air quality in Durham Region (Continued)



### Target 5C

Explore options to reduce environmental impacts of closed landfills and potential for future community use and/or naturalization.



### Measurement

Annual progress towards implementing alternative landfill cover systems at closed landfills and conversion for community use and/or naturalization.



### Short-Term Actions

5C1 - Evaluate outcome of pilot project at Oshawa Landfill for an alternative landfill cover system to reduce methane emissions.



### Mid to Long-Term Actions

5C2 - Evaluate additional options to minimize landfill GHG generation and other environmental impacts.

5C3 - Evaluate potential to implement the alternative cover system at other Region-owned closed landfills.

5C4 - Explore options to install solar covers at closed landfills.

5C5 - Evaluate potential to utilize closed landfills for community use.

5C6 - Explore options to naturalize closed landfills.

## Next Steps

- Committee and Council approve the Waste Plan and Action Plan – with any adjustments from review
- Five Year Action Plan, 2022 - 2026
  - Actions are aligned with the 2022 budget and capital forecast being presented in February
  - Implementation and work on 2022 actions can begin after budget approval
  - Progress on targets will be reported annually
  - After five years, the action plan will be reviewed at the start of 2026. Some actions may be carried forward, and a new Five-Year Action Plan 2027 - 2031, including some mid-term actions, will be developed



# Questions?

Angela Porteous, Supervisor, Waste Operations

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