



# Energy from Waste-Waste Management Advisory Committee (EFW-WMAC) Workplan (2021-2022)

## **1. Purpose**

- 1.1 The Regional Municipality of Durham's (Region) Energy from Waste-Waste Management Advisory Committee (EFW-WMAC) requires preparation of a Workplan for the coming year (2021-2022).
- 1.2 The purpose of EFW-WMAC Workplan is to focus on tasks that will assist with cost effective implementation of Waste to Energy and Waste Diversion initiatives and advise on innovative approaches for waste reduction.

## **2. Vision**

- 2.1 Reduce the amount of waste created in Durham region and manage the generated waste as a resource. Build an innovative waste to energy and waste diversion system, balancing financial needs and environmental sustainability.

## **3. Previous EFW-WMAC Workplan and Waste Diversion Background**

- 3.1 There was no previous EFW-WMAC Workplan.

### **Background**

- 3.2 The Region provides service to over 237,000 households, 212,000 single-family households, and 25,000 multi-family households according to 2019 records. Durham region is one of the fastest growing regions in Canada. By 2041, Durham region's population is expected to almost double, increasing to approximately 1.2 million people. This also means there will be a need for increased Green Bin and waste collection by 2041.
- 3.3 To meet the Province of Ontario's organics diversion targets of 70 per cent and 50 per cent respectively, for single family homes and multi residential buildings, a planned Mixed Waste Pre-sort and Anaerobic Digester facility has been approved by Council.

- 3.4 There has been a clear shift towards more medium (townhouse)- and high-density (apartment buildings) forms of housing in recent years.
- 3.5 Management of Greenhouse Gas (GHG) emissions from legacy closed landfills through innovative approaches is also part of the Waste Management and Waste to Energy Programs. An important prior decision by Region Council is that no new landfills will be created. This prior decision was one of the reasons for establishing the Durham York Energy Centre.
- 3.6 Also, End Producer Responsibility (EPR) continues to be implemented via the Resource Recovery and Circular Economy Act (RRCEA), 2016. The Act, and its regulations are in force to ensure Producers of products become more responsible for managing recycling and minimize product packaging. The Region's transition date for the Blue Box Program to Producers will be July 1, 2024.
- 3.7 The Hazardous and Special Products (HSP) regulations were released in February 2021 are in effect on October 1, 2021. At that time, most materials (not including refillable propane cylinders and fertilizers) managed in the existing program will be transitioned to the new producer responsibility regime.

#### **4. 2021-2022 EFW-WMAC Members and Workplan Elements**

- 4.1 The EFW-WMAC is composed of nine members:

George Rocoski, City of Oshawa

Greg Gordon, Town of Whitby - acclaimed as Chair, May 2021

Jim Vinson, Municipality of Clarington

Kerry Meydam, Municipality of Clarington

Phil Haylock, Municipality of Clarington - acclaimed as Vice Chair, May 2021

Rochelle Fleming, City of Pickering

Sami Elhajjeh, Municipality of Clarington

Venkata Daram, Town of Ajax

William Baszyk, Township of Brock

## Workplan Goals

- Emphasize rethink, reduce, and reuse principles as the first steps in reducing waste generation.
- Deliver cost effective waste management services to a rapidly growing and diverse population.
- Reinforce that producers and importers of designated products and packaging are to implement Extended Producer Responsibility (EPR). This will then cause adjustment to Region waste programs as required.
- Apply innovative approaches to Region waste streams to manage them as resources in a circular economy.

## 5. EFW-WMAC Workplan 2021-2022

### Workplan Overview

5.1 Given the EFW-WMAC committee resources and one year time horizon for the Workplan, tasks are defined below.

### Workplan Tasks

1. Anaerobic Digestion (AD):
  - i. Research and increase knowledge on AD technologies. Advise on other AD materials and organic wastes that are not currently diverted from landfill (examples: pet waste and diapers, which constitute significant volume in mixed waste garbage).
2. Green Bin usage:
  - i. Increase Green Bin usage - Green Bin usage is currently only 60 per cent, and garbage going to DYEC is approximately 40 to 50 per cent organic material that could go into the Green Bins.
  - ii. Consider promotion of a composting action plan.
3. Research, review and recommend additional waste/hazardous waste recycling efforts that have value for Durham region:
  - i. Small propane bottle (sent to landfill).
  - ii. Larger propane bottle recycling, 10-and 20-pound bottles
  - iii. Batteries (currently two curbside events per year)

- iv. Spent printer cartridges (value for recycling)
  - v. Other innovative reduce/re-use options (brainstorming)
4. Waste pre-sorting:
- i. Increase knowledge on waste pre-sorting including methods, environmental controls, and technological advances.
5. End Producer Responsibility (EPR):
- i. Assist with a communication of what EPR is, what will occur, and why.
6. Assess optimization of Brock and Scugog/Uxbridge township waste diversion programs (these areas of Durham region will grow along with Oshawa/Whitby/Ajax/Pickering. There is existing infrastructure for this. Transfer stations are an example of optimization.)
7. Durham York Energy Centre (DYEC) – EFW-WMAC team to increase knowledge of DYEC, complete a walkthrough detailing current facility status, emissions control, process capability (uptime).

## **6. EFW-WMAC Supporting Activities**

- 6.1 The Committee also has a role in participating in community outreach programs that support waste reduction and energy from waste awareness and appreciation in Durham region. Consideration of future planned activities is recommended once COVID-19 protocols allow them. Examples are in-person events, education and outreach, combine EFW-WMAC community activities at the same time as other Regional events.
- 6.2 Expanding knowledge of waste management and waste diversion technologies and principles by reviewing presentations and engaging in discussion on Regional Waste Management Strategies.

## **7. Community Outreach and Stewardship (potential actions)**

### **Promote a Waste Reduction Achievement Award**

- Presentation to community on some aspect of recycling, Waste to Energy, Waste diversion. (example: the source of microplastics and their effect on the environment).