

# City Operations Waste Services

Edmonton

## Organics Processing Program Update

**March 4, 2024**  
Utility Committee  
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## Background

- The 25-year Waste Strategy calls for expanding organic waste sorting to both residential collection services.
- Organic waste is processed at the EWMC and third-party processors.
- Processing organic waste diverts waste from landfill, produces compost and reduces greenhouse gas emissions.



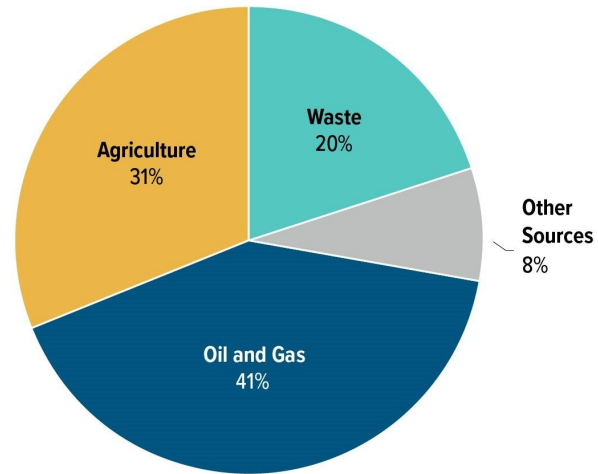
Compost Cure Site

# Climate and Greenhouse Gas Impact

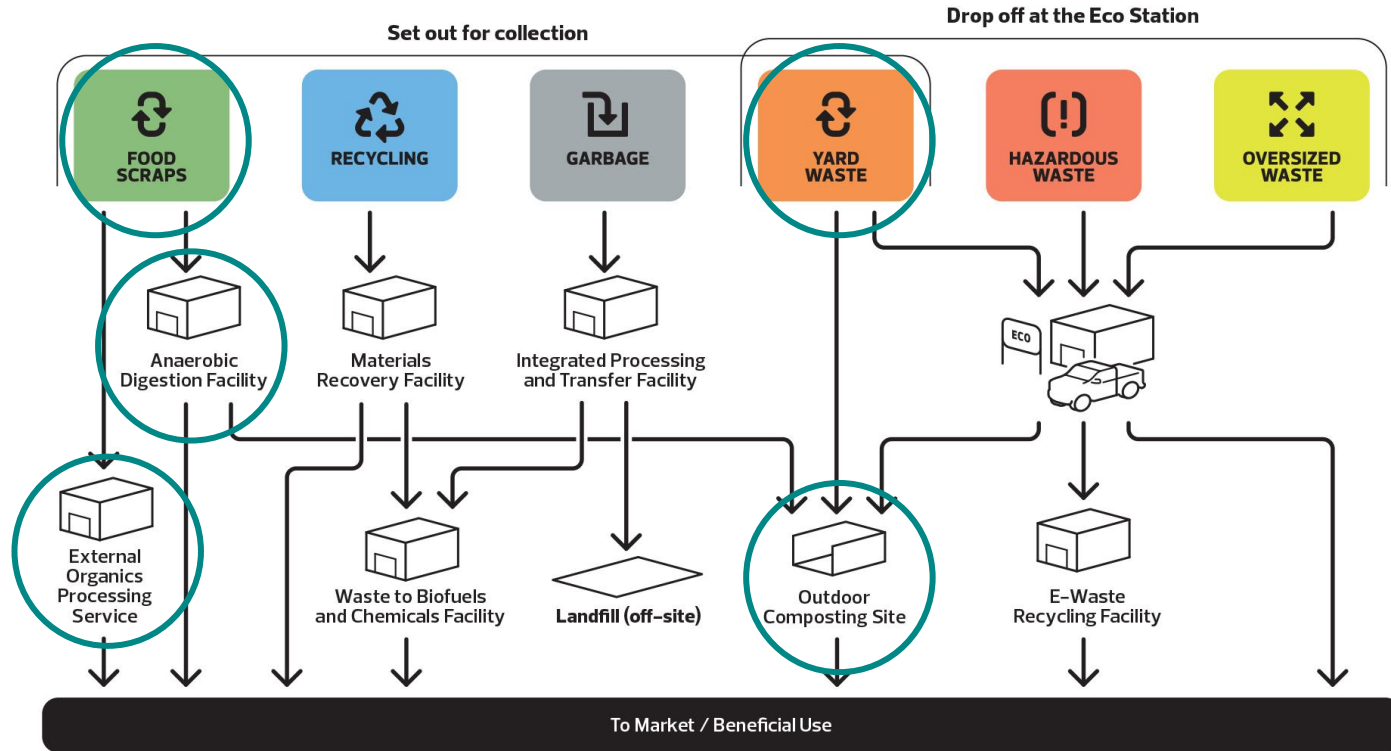
- Organic waste trapped in a landfill produces methane, a very harmful greenhouse gas when released into the atmosphere.
- Diverting organic waste from landfill has a substantial positive impact on climate change efforts.



Grass clippings and mixed garbage at the Integrated Processing and Transfer Facility



# Organics Processing Overview



## Organics Processing Overview: Food Scraps



Organic waste in food scraps carts (curbside and apartment/condo) is transported to third-party facilities for processing.

## Organics Processing Overview: Yard Waste



Yard waste collected at curbside and dropped off at Eco Stations is composted at the Compost Cure Site.



## Organics Processing Overview: Apartment & Condo

- Organic waste is separated out of mixed garbage collected from apartments and condos without three-stream collection.
- The High Solids Anaerobic Digestion Facility (HSADF) processes this waste.
- All organic waste was processed this way before the Edmonton Cart Rollout.



# Organics Processing Overview



- By 2027, all Edmontonians will have equitable access to three-stream waste sorting at their homes.
- In turn, the City will work to process all suitable organic waste residents sort and set out for collectors.



# Current Processing Program

## HSADF

- Very high operational costs to run
- Limited processing capacity
- Biogas produced contains high amounts of  $H_2S$
- Fluid distribution system subject to blockages
- Clean electricity produced intermittently



High Solids Anaerobic Digestion Facility

## Third-party Processors

- Limited capacity at third-party facilities

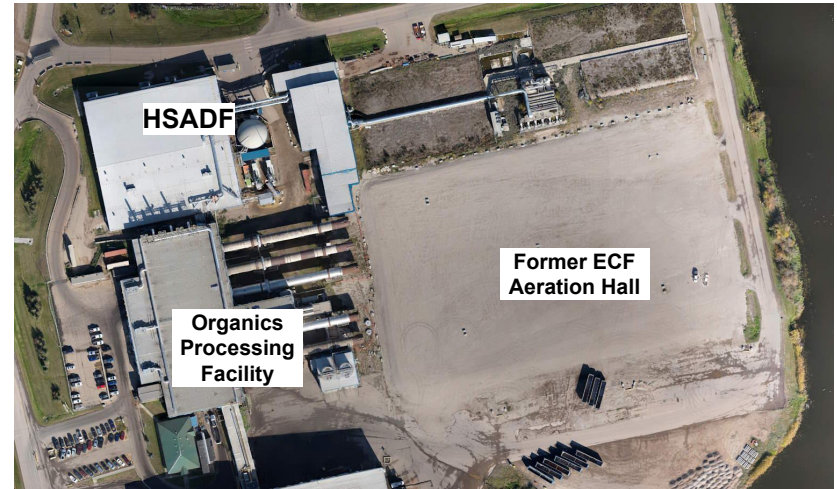
## Future Program Needs

- Expansion of residential organic waste collection will lead to 121,000 tonnes of organic waste needing processing by 2027.



# Potential Organics Processing Program Options

1. Additional outdoor composting site at the EWMC
2. Invest and upgrade in the HSADF to meet original facility goals
3. Increase use of third-party organics processing



Edmonton Waste Management Centre  
(partial view)

## Options Analysis

Analysis would consider (against a status quo program option)

- Program Outcomes
  - Alignment with corporate, branch and program goals
- Financial Analysis
  - Costs across a 20-year lifecycle



## Next Steps

- Options analysis on organics processing program's future
- September 3 report with updated program path forward



**Thank you. Questions?**

[edmonton.ca/waste](https://edmonton.ca/waste)

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