



Committee of the Whole Report

For the Meeting of June 17, 2021

To: Committee of the Whole **Date:** June 1, 2021
From: Philip Bellefontaine, Director, Engineering & Public Works
Subject: Options for Processing Kitchen Scraps Originating in Victoria

RECOMMENDATION

That Council direct staff to:

1. Continue hauling kitchen scraps to existing composting facilities on Southern Vancouver Island.
2. Continue to work with the CRD to monitor opportunities for regional organics processing with enhanced environmental benefits.

EXECUTIVE SUMMARY

Food and organics are responsible for roughly 28% of the material sent to landfill each year from Victoria and have been identified as a focus area in Zero Waste Victoria, the City's plan to reduce waste disposal by 50% by 2040.

On approval of Zero Waste Victoria in December 2020, Council postponed consideration of a motion to *direct staff to report back on options for the processing of kitchen scraps originating in the city with a focus on minimizing greenhouse gases (GHGs) and optimizing recovery and reuse of energy and nutrients* given regional analysis on the same issue was underway by the Capital Regional District (CRD).

Regional Organics Processing

In early 2021, CRD staff reported on the feasibility of an in-region organics processing facility (Attachments A and B), which indicated that:

- Roughly 24,000 tonnes per year of committed organic materials is required to make investment in a new organics processing facility competitive with the current practice of hauling material to existing composting facilities outside the region.
- Municipalities in the region with organics collection services control approximately 13,000 tonnes a year of kitchen scraps or mixed kitchen scraps and yard waste material.
- The tipping fee needed to fund the investment in a small capacity (10,000 tonnes) facility at Hartland is:
 - \$240 per tonne for a composting facility (43% higher than status quo)
 - \$276 per tonne for an anaerobic digestion facility (64% higher than status quo)
- The climate benefit of offsetting fossil-fuel natural gas with renewable gas produced from a small capacity anaerobic digestion facility is assessed to have a cost of \$515 per tonne of CO₂e avoided.

The CRD also assessed that there is currently enough existing organics processing capacity on Vancouver Island (70,000 tonnes of existing capacity and 45,000 tonnes currently under construction) to meet the needs of the region.

On May 12, the CRD Board decided to continue with the current practice of hauling organics to private composting facilities on Vancouver Island, while monitoring capacity and remaining prepared to support development of an in-region organics processing should conditions justify the opportunity. Victoria staff are aligned with the CRD conclusions that inform this regional direction.

City of Victoria Organics Processing

The City of Victoria collects roughly 4,000 tonnes of organic materials a year through municipal operations and the residential solid waste collection service. Kitchen scraps collected by the City are sent to a licensed industrial composting facility in Cobble Hill for processing, and yard waste is processed through either the City's compost operation at the Parks Yard on Nursery Road or at private yard waste composting facilities in the region. Analysis completed as part of the development of Zero Waste Victoria, indicates that an additional 6,500 tonnes of kitchen scraps are collected by private haulers from multifamily and commercial properties.

The feasibility of developing additional processing capacity within the City of Victoria would include consideration of land acquisition, zoning conditions, odour abatement, community impacts and cost. Capital and operating costs for the City of Victoria to develop an organic processing facility for material originating in the city, are assumed to be broadly consistent with those identified under the small facility scenario that was assessed by the CRD. These costs are significantly higher than the current practice of hauling material to existing composting facilities outside the region. The GHG abatement costs are also significantly higher than British Columbia's carbon tax and established carbon pricing benchmarks, suggesting that more cost-effective options are available to reduce GHGs.

Staff conclude that the costs and benefits do not warrant pursuing additional local organics processing in Victoria at this time but recommend continuing to work with the CRD to monitor and support future regional organics processing opportunities.

Alternate Option (Not Recommended)

Alternatively, Council may consider that staff assess the market interest in providing local organics processing for materials originating in Victoria. This option would follow the same Request for Expressions of Interest (RFEI) approach used by the CRD to gather market feedback and staff anticipate results to be consistent with the findings of the CRD.

Respectfully submitted,

Rory Tooke
Manager, Sustainability, Assets &
Support Services

Philip Bellefontaine
Director, Engineering & Public Works

Report accepted and recommended by the City Manager.

List of Attachments

Attachment A: Organics Processing Next Steps (CRD Environmental Services Committee Report)
Attachment B: Organics Processing Options: Screening Report (CRD/Reshape Strategies)