

Calgary Composting Facility Capacity

Sarah Smith, Manager, Infrastructure and Program Management

Report #IP2022-0018

ISC: Unrestricted



Recommendations

CITY OF CALGARY

RECEIVED
IN COUNCIL CHAMBER

FEB 1 5 2022

ITEM: 11.4.1 | 192022-0018

That the Standing Policy Committee on Infrastructure and Planning recommends that Council:

- Direct Administration to negotiate and execute all amendments to the Composting Facility Project Agreement
 to expand the Calgary Composting Facility (the "Facility") to accommodate an additional 60,000 tonnes per
 year of Single-Family Residential food and yard waste (the "Project").
- Direct Administration to develop a biogas offtake strategy for the Facility and negotiate and execute any definitive agreements required to implement that strategy.
- 3. Approve a capital budget appropriation of \$50 million to Program 258 Facilities and Equipment funded from a combination of sources, including self-supported debt for the expansion of the Calgary Composting Facility.
- 4. Give first reading to Bylaw 11B2021, being a bylaw authorizing The City to incur indebtedness for financing the Project.
- 5. Direct Administration to develop a cost estimate for increased storage capacity to mitigate intermittent odour issues.



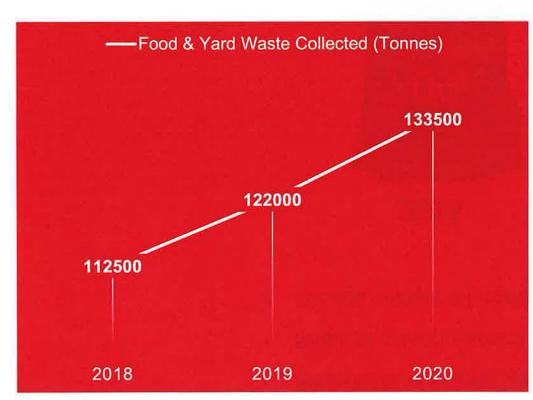
Why does Calgary compost?

- Enables Calgarians to waste less and conserve more
- Extends life of existing landfills
- Reduces greenhouse gas emissions
- Creates nutrient rich compost





Calgary Composting Facility



Single-Family Households organics

- Design / Build / Operate delivery model
- Public-Private Partnership (P3 Policy CFO011)
- 100,000 tonnes / year organics design capacity
 - Volumes higher than anticipated
 - Contingency capacity fully used
 - Additional shift, equipment operating longer
- 60,000 tonnes / year additional capacity required



Work Completed



Jurisdictional Review

lessons learned of others

Outsourcing vs Expansion
Suppliers' experience is critical
Odour issue management



Market Sounding

opportunities for outsourcing

Private sector Interest Insufficient regional capacity



Technical Assessment

best value technologies

Business Case best value option

Triple bottom line

Proven technologies assessment Value Management study



Business Case - Options Evaluated



Best value to Calgarians

Strategic

Economic

Financial

Deliverability & Operations



- 1
- Expansion
- Minimizes Risk Service Delivery and Environmental compliance
- Environmental Benefits Reduction in greenhouse gas emissions
- 0.2 tonnes CO2e vs 0.9 tonnes CO2e (Landfilling) per tonne organics



Expansion – Best Value to Calgarians





Expansion Project Delivery





Recommendations

That the Standing Policy Committee on Infrastructure and Planning recommends that Council:

- 1. Direct Administration to negotiate and execute all amendments to the Composting Facility Project Agreement to expand the Calgary Composting Facility (the "Facility") to accommodate an additional 60,000 tonnes per year of Single-Family Residential food and yard waste (the "Project").
- 2. Direct Administration to develop a biogas offtake strategy for the Facility and negotiate and execute any definitive agreements required to implement that strategy.
- 3. Approve a capital budget appropriation of \$50 million to Program 258 Facilities and Equipment funded from a combination of sources, including self-supported debt for the expansion of the Calgary Composting Facility.
- Give first reading to Bylaw 11B2021, being a bylaw authorizing The City to incur indebtedness for financing the Project.
- Direct Administration to develop a cost estimate for increased storage capacity to mitigate intermittent odour issues.