

2021 Integrated Waste Management Report

ISSUE

The City of Saskatoon (City) takes an integrated approach to waste management that includes waste reduction, reuse, recycling, recovery, and disposal. An integrated waste management system balances the protection of human and environmental health with affordability, convenience, and efficient use of resources. The *2021 Integrated Waste Management Report* provides information on the performance of the City's waste management programs, and tracks progress towards corporate waste diversion and greenhouse gas performance targets. The first progress report on the Solid Waste Reduction and Diversion Plan has been incorporated into this annual reporting.

BACKGROUND

At its meeting held on May 3, 2021, the Standing Policy Committee on Environment, Utilities and Corporate Services, received the 2020 Integrated Waste Management Report as information.

The *Solid Waste Reduction and Diversion Plan* was received by the Standing Policy Committee on Environment, Utilities and Corporate Service at its meeting on January 11, 2021. A report detailing the implementation plan and funding for 2022-2023 was received by the Standing Policy Committee on Environment, Utilities and Corporate Services at its May 3, 2021 meeting.

CURRENT STATUS

The *2021 Integrated Waste Management Report* outlines waste management services provided by the City; further detail is available in Appendix 1 - 2021 Integrated Waste Management Report and includes:

Waste Diversion Services

Waste diversion services include recycling depots, curbside and multi-unit recycling, curbside organics, compost depots, public space recycling, and household hazardous waste events. The City diverted 31,000 tonnes of materials from the City's landfill in 2021, contributing to the diversion rate of 24.7%.

Waste Disposal Services

The City provides waste disposal services to the community, including landfilling of garbage at the Saskatoon Regional Waste Management Centre, provision of containers and curbside collection of garbage from single-family residential households, and collection of garbage from many multi-unit residential households and some commercial customers.

In 2021, approximately 130,850 tonnes of material were accepted at the Saskatoon Regional Waste Management Centre. Of this, approximately 94,000 tonnes were garbage and required burial, 36,250 tonnes were clean fill used as landfill cover, and 500 tonnes were diverted for outbound recycling.

Education, Outreach, and Enforcement

With the emergence of the COVID-19 pandemic in March 2020, original plans for 2021 waste-related education and communications were impacted, and either modified or delayed in response. Two educational awareness campaigns were promoted in 2021 through various traditional and digital marketing channels, “Need Help Recycling: Ask the Wizard” in spring and “Naughty and Nice Recycling Advice” in winter. In addition, a multi-language add on was introduced to the Saskatoon Waste Wizard tool with 14 alternative languages that residents can use to search for proper disposal of garbage, recycling, and organic materials. Furthermore, Jonah continued his success from the previous summer and ran the YXE Waste Tour in the summer of 2021.

The City’s Environmental Protection Officers (EPO) play a critical role in the community by enforcing Bylaw No. 8310, The Waste Bylaw. The EPOs respond to hydraulic spills, complaints about illegal dumping, and waste and recycling issues. In 2021, a total of 662 education and warning notices were delivered and only 20 tickets were issued, demonstrating a compliance rate of greater than 98% with the education-first approach.

DISCUSSION/ANALYSIS

Waste Diversion and Greenhouse Gas Emissions Targets

The City has set performance targets relating to waste diversion and greenhouse gas (GHG) emissions. The targets are intertwined as successful waste diversion initiatives correspond directly to reductions in GHG emissions.

The City’s waste diversion target is to divert 70% of Saskatoon’s waste from the Saskatoon Landfill. The City’s 2021 diversion rate of 24.7% is a slight decrease from the previous year of 26% and continues to be below many other Canadian municipalities as well as the City’s waste diversion target. The decrease is within expected annual variation for a stable diversion rate. Annual variations in the weather likely contributed since 2021 was a dry year with very low precipitation. Saskatoon experienced only 180.7 millimeters of precipitation which is just over half of the average rate. This would generate less organic yard waste than wetter years. When there is drier weather, recyclable materials such as paper, cardboard and other mixed materials do not weigh as much as when wet leading to a decrease in total tonnage.

The *Solid Waste Reduction and Diversion Plan* outlines further actions needed to meet the 70% waste diversion target, which may be feasible as early as 2030.

The *Low Emissions Community Plan* includes two waste actions and milestone targets:

- Reducing organics by 90%, plastics by 95%, and paper by 90%, to reduce emissions by an estimated 1.3 million tonnes CO_{2e} by 2050; and
- Expanding the capture and destruction of landfill gas at the Saskatoon Landfill to reduce emissions by an estimated 1.9 million tonnes CO_{2e} by 2026.

Progress has been made on some actions, including the expansion of landfill gas collection, but the City is still far from reduction and diversion targets.

Solid Waste Reduction and Diversion Plan Progress Report

To achieve the 70% waste diversion target, the City is actively involved in a number of initiatives in the near term (2021–2023), medium term (2024-2025) or long-term (2026+). A progress report is available in Appendix 1 - 2021 Integrated Waste Management Report. In-progress actions that are expected to have a significant impact on the City's diversion rate include:

- Curbside Organics Program and Variable Rate Garbage Utility – In 2021, City Council resolved to fund the upcoming Curbside Organics Program as well as curbside garbage collections through utility fees. The Curbside Organics Program will launch in 2023, and a curbside variable rate garbage utility is planned for 2024. The anticipated diversion from the Curbside Organics Program is 8-12% and from the curbside variable rate garbage utility program is 5-17%. A contract with an organics processor has been finalized and cart procurement is in progress. Additional program updates and decisions will come forward to City Council in 2022.
- Recovery Park – In 2019-2020, City Council approved the plan and funding for Recovery Park. The project includes construction of a diversion area accessed before the scales, a four-lane scale and scale house, an after-scales diversion and garbage transfer area, staff and equipment facilities, a new access road to join to Dundonald Avenue, and a storm water retention pond. The project is in the implementation phase with construction on the site underway and preparation for procurement of diversion services in progress. Additional reporting is planned for Q1 2023.
- A regulatory approach for recycling and organics for the Industrial, Commercial, and Institutional sector was approved in early 2020. All businesses and organizations will be required to have a separate container for recycling, and those that generate food or yard waste as part of their operations will be required to have a separate organics waste container. Currently, the Waste Bylaw was updated to include the recycling and organics regulation for the ICI sector and the supporting program's design was completed. Recycling education phase is planned to launch in 2022, which is on track. Organics will take a similar approach, with a phase-in started in mid-2023 and enforcement in place in mid-2024. Once it is fully operational, the anticipated diversion from the Saskatoon Landfill is 5%.

Trends in Waste

The City monitors trends in waste related to changing recycling markets, COVID-19 impacts, plastic bans, extended producer responsibility programs, waste and climate change and waste-to-energy facilities.

Appendix 1 provides waste-to-energy developments, including processing cost per tonne and technology status. There have been no significant changes since last year.

OTHER IMPLICATIONS

There are no other implications directly resulting from this information report.

APPENDIX

1. 2021 Integrated Waste Management Report

Report Approval

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