

## Chapter 20 Environment—Regulating Waste Diversion Through Recycling

### 1.0 MAIN POINTS

Saskatchewan produces the second highest amount of waste per capita in Canada.<sup>1</sup> The majority of the waste generated in the province is discarded in Saskatchewan's 203 landfills. Waste not diverted from a landfill potentially leads to greater risk of water pollution, soil contamination, greenhouse gas emissions, and negative human health impacts.<sup>2</sup>

The Ministry of Environment regulates eight waste diversion recycling programs. These programs are designed to divert various types of solid waste such as bottles, tires, packaging, and used oil. The Ministry generally uses a standard approach to regulate these programs. Its approach includes designing programs similarly (e.g., producers of the waste finance the program [levy fees on customers], program operators handle recycling activities, and program operators regularly report on activities).

However, the Ministry does not know whether its eight recycling programs contribute to the achievement of the provincial waste reduction goal. The goal is to reduce the amount of waste generated per person from the 2014 baseline by 30% by 2030, and by 50% by 2040.

To better regulate waste diversion through its approved recycling programs, the Ministry needs to make improvements in several areas. These include:

- Gaining a more robust understanding of the composition of waste entering Saskatchewan landfills, and then setting material-specific targets for each program (such as recycle 75% of household paper by 2025). This would provide clear direction on the extent of waste it expects each program to divert to help achieve the provincial waste reduction goal.
- Setting standard definitions for key information (including calculation methods) it requires program operators to report. Key information includes diversion and collection rates. Use of standard definitions would enable comparisons amongst operators of a program, different programs, and Canadian jurisdictions.
- Periodically reporting to senior management on the rate of waste diversion through recycling programs to help evaluate the success of the approved recycling programs.

Recycling helps repurpose materials that would otherwise end up in the landfill and is a key part of environmental sustainability and stewardship. Diverting waste from Saskatchewan landfills helps reduce associated greenhouse gas emissions. Reducing emissions of greenhouse gas in Saskatchewan is a central part of the Provincial Government's climate change strategy.<sup>3</sup>

<sup>1</sup> *Saskatchewan's Solid Waste Management Strategy*, p. 1.

<sup>2</sup> *Ibid.*

<sup>3</sup> [www.saskatchewan.ca/business/environmental-protection-and-sustainability/a-made-in-saskatchewan-climate-change-strategy/prairie-resilience](http://www.saskatchewan.ca/business/environmental-protection-and-sustainability/a-made-in-saskatchewan-climate-change-strategy/prairie-resilience) (20 October 2020)

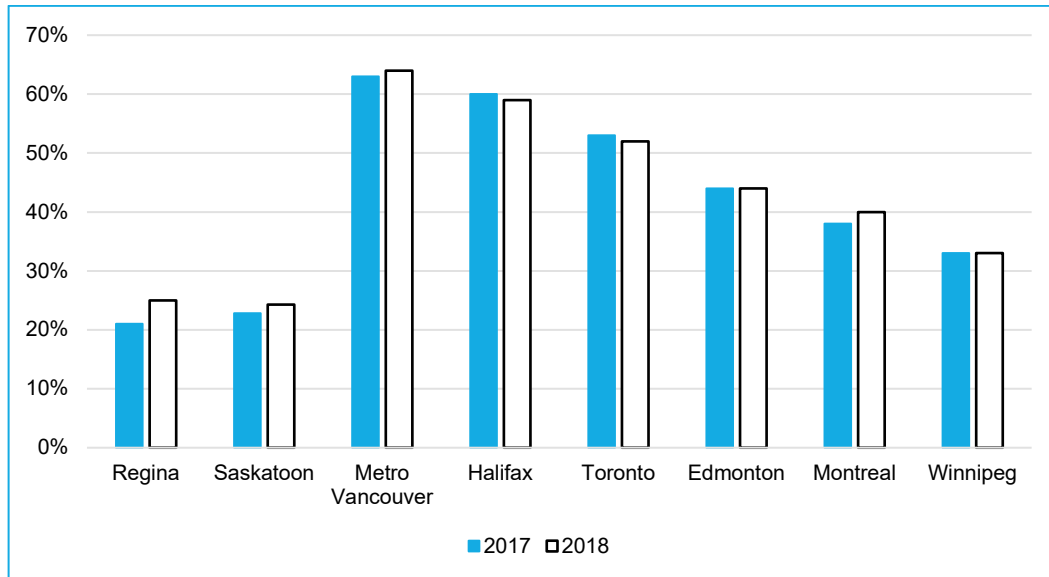


## 2.0 INTRODUCTION

This reports the results of our audit of the Ministry of Environment’s processes to regulate waste diversion through recycling. Waste diversion is reusing, recycling, or composting materials that would otherwise be discarded in a landfill. Recycling is one method to enhance waste diversion and protect the environment.

Saskatchewan has the highest number of landfills in the country and the lowest waste diversion rates.<sup>4</sup> **Figure 1** shows Regina and Saskatoon diverted less residential solid waste from landfills in 2017 and 2018 than six other Canadian cities.

**Figure 1—Percentage of Residential Solid Waste Diverted from Landfills in 2017 and 2018**



Source: [www.saskatoon.ca/sites/default/files/documents/2019\\_integrated\\_waste\\_management\\_report.pdf](http://www.saskatoon.ca/sites/default/files/documents/2019_integrated_waste_management_report.pdf) (15 October 2020)

Every year, each Saskatchewan resident generates at least 842 kilograms (1,856 pounds) of waste—roughly the weight of 60 regular (75 litre) household bags of garbage per person per year. The 207 transfer stations located across the province temporarily store waste and diverted materials for transportation to a regional landfill or recycling facility.<sup>5</sup> The majority of the waste generated in the province is discarded in Saskatchewan’s 203 landfills.<sup>6,7</sup>

The time it takes waste to decompose in a landfill varies significantly. **Figure 2** indicates orange peels can decompose in 6 months whereas waste like styrofoam and tinfoil never decompose.

<sup>4</sup> *Solid Waste Management Advisory Committee Recommendations Summary*, p.1.

<sup>5</sup> *Saskatchewan’s Solid Waste Management Strategy*, pp. 1–2.

<sup>6</sup> Municipalities are responsible for operating landfills subject to Ministry of Environment’s regulatory requirements. Some municipalities may have their own recycling programs.

<sup>7</sup> *Saskatchewan’s Solid Waste Management Strategy*, p. 1.

**Figure 2—Estimated Decomposition Rates in a Landfill**

Item	Estimated Decomposition Time
Orange peel	6 months
Milk cartons	5 years
Batteries	100 years
Paper	2 weeks
Plastic Bottle	450 years
Plastic Bags	10—1,000 years
Styrofoam	Never
Tinfoil/Aluminum foil	Never

Source: [www.thebalancesmb.com/how-long-does-it-take-garbage-to-decompose-2878033](http://www.thebalancesmb.com/how-long-does-it-take-garbage-to-decompose-2878033) (07 July 2020).

## 2.1 Solid Waste Management Strategy—Enhancing Waste Diversion

The Ministry of Environment is responsible for managing and protecting Saskatchewan's environment for the well-being of the province and its people.<sup>8</sup>

In January 2020, the Ministry released the *Solid Waste Management Strategy* with a provincial goal to reduce waste generated per person from the 2014 baseline of 842 kg per person by 30% by 2030 to 589 kg per person, and by 50% by 2040 to 421 kg per person.<sup>9,10</sup> This goal aligns with the Canada-wide goals that federal, provincial, and territorial governments have endorsed.

As shown in **Figure 3**, one of the Strategy's six goals is to enhance waste diversion across Saskatchewan. Related key actions include reviewing the household paper and packaging program (see **Figure 4**) to identify opportunities for improvement, and reviewing and assessing barriers to access to recycling programs and identifying options to reduce them.<sup>11</sup>

**Figure 3—Solid Waste Management Strategy Six Goals**

1. Enhance education, awareness and technical understanding of waste management best practices and the risks of improper practices across Saskatchewan
2. Encourage regional collaboration to enhance the cost effectiveness of waste management infrastructure
3. Provide a modern, efficient and effective regulatory system for waste disposal and management
4. Enhance waste diversion across Saskatchewan
5. Foster innovative and sustainable solutions to manage waste
6. Demonstrate government leadership in waste management

Source: *Saskatchewan's Solid Waste Management Strategy*, p. 7.

The Strategy includes further actions and a broad timeline for implementing its six goals. It identifies risks to diverting waste through recycling, such as cost, changing international markets (i.e., lack of international buyers for recycled products), and access to recycling programs, and includes how the Ministry plans to address each risk.

<sup>8</sup> *Ministry of Environment Plan for 2020–21*, p. 3.

<sup>9</sup> *Saskatchewan's Solid Waste Management Strategy*, p. 1.

<sup>10</sup> [www.saskatchewan.ca/government/news-and-media/2020/january/23/solid-waste-management-strategy](http://www.saskatchewan.ca/government/news-and-media/2020/january/23/solid-waste-management-strategy) (26 June 2020).

<sup>11</sup> *Ministry of Environment Plan for 2020–21*, pp. 3–4.



## 2.2 Ministry Responsibility for Regulating Recycling Programs

The Ministry of Environment regulates waste management through *The Environmental Management and Protection Act, 2010*. Since the late 1980's, Saskatchewan has increased the number of regulated waste diversion recycling programs; the Ministry refers to these as Extended Producer Responsibility programs. In this chapter, we refer to them as regulated waste diversion recycling programs.

As shown in **Figure 4**, at August 2020, the Ministry regulates eight waste diversion recycling programs designed to divert various types of solid waste such as bottles, tires, packaging, and used oil. These programs make a producer of the waste (e.g., company manufacturing a product, or importer of a product) physically and/or financially responsible for proper management of the product at the end of its useful life.<sup>12</sup> The producer of these wastes can absorb the program costs or pass them on to a consumer.<sup>13</sup>

**Figure 4—Saskatchewan's Waste Diversion Recycling Programs at August 2020**

Recycling Program	Program Operator	Year Program Started	Current Regulations
Beverage Container	Saskatchewan Association of Rehabilitation Centres (SARC)	1988	<i>The Environmental Management and Protection (General) Regulations</i>
Scrap Tires	Tire Stewardship of Saskatchewan Inc.	1998	<i>The Scrap Tire Management Regulations, 2017</i>
Used Oil and Antifreeze	Saskatchewan Association for Resource Recovery Corporation	1997	<i>The Used Petroleum and Antifreeze Products Stewardship Regulations</i>
Waste Paint	Product Care Association of Canada	2005	<i>The Waste Paint Management Regulations</i>
Electronic Equipment	Electronic Products Recycling Association	2007	<i>The Electronic Equipment Stewardship Regulations</i>
Household Packaging and Paper	Multi-Material Stewardship Western Inc. <sup>A</sup>	2016	<i>The Household Packaging and Paper Stewardship Program Regulations</i>
Agricultural Packaging (e.g., grain bags)	CleanFARMS Inc.	2017	<i>The Agricultural Packaging Product Waste Stewardship Regulations</i>
Household Hazardous Waste	Product Care Association of Canada Call2Recycle Canada Inc.	2021 2021 <sup>B</sup>	<i>The Household Hazardous Waste Products Stewardship Regulations</i>

Source: Adapted from information provided by the Ministry of Environment.

<sup>A</sup> Municipalities who run their own blue box recycling programs are a shared responsibility between industry and the municipality. Materials collected are reported through Multi-Material Stewardship Western Inc.'s annual report.

<sup>B</sup> The Ministry approved these program operators in 2020. They are expected to start operations in 2021.

The Ministry makes its Environmental Assessment and Stewardship Branch responsible for the oversight of the waste stewardship and recycling programs in addition to the environmental assessment program and other related activities. The Branch Plan sets out

<sup>12</sup> *Saskatchewan's Solid Waste Management Strategy*, p. 2.

<sup>13</sup> [www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/overview-extended-producer-responsibility.html](http://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/overview-extended-producer-responsibility.html) (10 May 2020).

how it plans to meet the goals set out in the Strategy. The Branch has 16 full-time equivalent positions, and its 2020–21 budget is \$1.7 million.<sup>14</sup>

Recycling helps repurpose materials that would otherwise end up in the landfill and is an important part of environmental sustainability and stewardship. Ineffective processes to regulate waste diversion through recycling increases the risk of increased waste in landfills across the province.

Managing landfills can help reduce associated greenhouse gases emissions, thereby helping Canada meet its greenhouse gas emission goal. In December 2015, Canada agreed to reduce greenhouse gas emissions by 30% below 2005 levels by the year 2030.<sup>15</sup>

### 3.0 AUDIT CONCLUSION

**We concluded that, for the 12-month period ended August 31, 2020, the Ministry of Environment had, other than in the following areas, effective processes to regulate waste diversion through recycling.**

**The Ministry needs to:**

- **Use material-specific targets to assist in determining whether approved waste diversion recycling programs contribute to the achievement of the provincial waste reduction goal**
- **Obtain a more robust understanding of the composition of waste entering Saskatchewan landfills**
- **Use standard definitions for key information (including calculation methods) it requires operators of regulated recycling programs to report**
- **Analyze the reasonableness of information received from recycling program operators**
- **Periodically report to senior management on the rate of waste diversion through regulated recycling programs**

**Figure 5—Audit Objective, Criteria, and Approach**

**Audit Objective:** The objective of this audit is to assess whether the Ministry of Environment has effective processes for the 12-month period ended August 31, 2020 to regulate waste diversion through recycling.

**Audit Criteria:**

Processes to:

1. **Plan for waste diversion through recycling**
  - 1.1 Establish short and long-term waste diversion strategies and targets
  - 1.2 Plan to collect reliable waste diversion information
  - 1.3 Coordinate with key stakeholders (e.g., program operator, municipalities) to achieve waste diversion targets through recycling

<sup>14</sup> The 2020–21 Ministry budget included \$32 million in funding to the Saskatchewan Association of Rehabilitation Centres for the beverage container program.

<sup>15</sup> *Prairie Resilience: A Made-in-Saskatchewan Climate Change Strategy*, p. 2.



- 1.4 Establish measures for waste diversion through recycling
- 1.5 Inform key stakeholders about strategies
2. **Establish appropriate recycling programs**
  - 2.1 Set appropriate requirements (e.g., program criteria, approval terms, conditions)
  - 2.2 Inform key stakeholders about requirements
  - 2.3 Verify applications meet program requirements
  - 2.4 Issue appropriate program approval
3. **Monitor extent of waste diversion through recycling**
  - 3.1 Receive regular reporting on key recycling activities
  - 3.2 Track actual waste diverted through recycling (from approved program operators)
  - 3.3 Collect and use reliable information to evaluate the impact of waste diversion through recycling
  - 3.4 Take action as necessary (e.g., increase public awareness, propose legislative changes, cancel program)
  - 3.5 Report waste diversion results to senior management and the public

**Audit Approach:**

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Ministry's processes, we used the above criteria based on our related work, reviews of literature including reports of other auditors, and consultations with management. The Ministry's management agreed with the above criteria.

We examined the Ministry's plans, timelines, and reports relating to regulating waste diversion through recycling. We assessed program operator plans, agreements, and reports for consistency with the regulations. We analyzed information the Ministry received from program operators. In addition, we used an independent consultant with subject matter expertise in the area to help us identify good practice and assess the Ministry's processes.

## 4.0 KEY FINDINGS AND RECOMMENDATIONS

### 4.1 Approach to Approve Operators of Recycling Programs Standardized

The Ministry of Environment consistently used a standard approach to approve recycling program operators.<sup>16</sup> It assessed program plans, appropriately approved, and communicated the approval to operators.

We found the Ministry used regulations to set recycling program requirements for seven of eight of its regulated programs. For one, the beverage container program, it set program requirements through its agreement with the program operator.<sup>17</sup>

Our review of the regulations listed in **Figure 4** found them to be generally consistent. Having generally consistent regulations helps move towards harmonization of recycling programs across Canada. Such harmonization would support the development and use of consistent environmental measures and regulations across Canada.<sup>18</sup>

Recycling program regulations set out who is responsible for the physical waste at the end of its life; who pays the costs associated with the program (e.g., recycling options, fees); how the program will be financed including how customers/industry remit fees, if applicable; and how the costs are allocated.<sup>19</sup>

<sup>16</sup> Program operators are responsible for running the applicable recycling program. This includes collecting recyclable products and related fees from municipalities and performing end of life functions for the waste.

<sup>17</sup> The agreement between the Ministry and the Saskatchewan Association of Rehabilitation Centres includes all of the program requirements, including how to make changes to the program.

<sup>18</sup> [www.cme.ca/en/search.html?keywords=harmonization&submit=&search](http://www.cme.ca/en/search.html?keywords=harmonization&submit=&search) (15 October 2020).

<sup>19</sup> *The Scrap Tire Management Regulations, 2017* do not include provisions about cost allocation; rather the approved program plan includes conditions about cost allocation.

For each regulated recycling program (other than the household paper and packaging and beverage container programs), the program operator uses environmental handling charges levied by the retailer to fund the recycling program (e.g., rental of facilities, purchasing of equipment, advertising costs). Retailers collect recycling fees upon sale of a product (such as the tire recycling fee of \$25 for every new vehicle sold, or \$5 for every passenger light truck tire sold) and remit the fees collected to the program operator.

For the household paper and packaging program, municipalities operate the recycling program and receive funding from the program operator based on their population. Retailers of products remit fees to the household paper and packaging program operator.

Other than the beverage container program, each set of regulations required interested potential program operators (applicants) to submit a program plan for the Ministry's review and Minister's approval, and included provisions on how to make changes to the program.

We found the expected content of these approved plans to be generally consistent (see **Figure 6**). We also found the Ministry included conditions in the approval of program plans (e.g., notify the Ministry of any changes to the program) in addition to regulatory requirements (e.g., must reapply every five years). Six recycling programs have a five-year renewal process. The scrap tire program has a three-year renewal process, and the beverage container program has a four-year renewal process.

**Figure 6—Expected Content of Plans for Recycling Programs**

Through regulations, the Ministry requires applicants to submit program plans with information on:

- Who is responsible for the physical waste at the end of its life
- Who pays the costs associated with the program in the program's agreement, program plan, or regulations (e.g., recycling options, fees)
- How the costs are allocated
- How the program will be financed including how customers/industry remit fees, if applicable
- What to report to whom and how often
- Creation of an advisory committee—out-of-province program operators like Product Care Association of Canada and CleanFARMS Inc. must keep Saskatchewan's interest in mind (typically done by having Ministry staff or Saskatchewan residents on its advisory committee)
- How disputes, if any, will be resolved

Source: Adapted from regulations related to Ministry of Environment regulated waste diversion recycling programs.

The Ministry uses a consistent approach to assess the completeness of program plans applicants submit. It uses a template to assess the completeness of the program plan against the related regulations. The Ministry works with applicants to address gaps, if any. The Ministry issues a program approval letter to the successful applicant (program operator). The letter communicates the Minister's approval of the plan, and refers to the related regulations and conditions to operate the program.

As shown in **Figure 4**, by August 2020, the Ministry had approved eight program operators for the seven recycling programs that required a program plan.<sup>20</sup> The Ministry only received one application for each program other than the household hazardous waste program; where it received and approved two applications.

<sup>20</sup> The household hazardous waste program has two program operators, but they operate programs for different types of waste (i.e., household batteries, pesticides, and other household hazardous material).



Each of the eight approved program plans we reviewed included all of the requirements from the related regulations. For each of these, we found the Ministry approved the program plan within six months of its receipt of the application (timely). For the beverage container program, the Minister communicated its re-approval of the program operator by signing a four-year agreement with the Saskatchewan Association of Rehabilitation Centres in March of 2020.

Using a standard process for approving program operators for recycling programs helps the Ministry assess applicants fairly and consistently.

## 4.2 Documented Definitions Needed for Key Information Program Operators Must Report

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The Ministry of Environment does not have written definitions and calculation methods for key information it requires operators of waste diversion recycling programs to report.

The Ministry primarily uses regulations to set out information program operators must report (for the beverage container program, the signed agreement in effect sets out reporting requirements). For example, it requires each program operator to report, at least annually, on return volumes, and return, recovery, or collection rates along with information on program costs. It requires each program to provide it with annual audited financial statements.

The Ministry has not defined, in writing, the meaning of the key terms (e.g., what constitutes a return, recovery rate, diversion rate). Also, it has not set out in writing or given program operators written guidance on how to calculate key information (e.g., how to measure collection or recovery, expenses to include when calculating cost per tonne). The Ministry does not require program operators to provide detail in their reports to enable it to determine how information reported was measured, or its source.

Our review of the 2018 and 2019 reports from each program operator found that they did not explain in the reports how they determined the information reported or the source. Consistent with Ministry requirements, reports included only audits of the annual financial statements.

We also found program operators and Ministry staff use the terms diversion rate and recovery rate interchangeably even though the meaning of these terms differ.<sup>21</sup> Also, six of the eight regulated recycling programs report recovery rates; whereas two programs (i.e., the electronics and used oil and antifreeze programs) report collection rates.

Not having well-defined terms or calculation methods for reporting key information increases the risk of program operators reporting inconsistent information. Information is most valuable when it is comparable. Having standard definitions for key information that program operators must report would enable comparisons among operators of the same program, among programs, and among jurisdictions. Having written definitions of key information would require program operators to report consistently; even when operators change.

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<sup>21</sup> Diversion rate is a calculation showing how much waste is diverted from landfills from reducing waste generated, reusing goods, or recycling. Recovery rate or collection rate is a calculation comparing the total products sold in a given year to the amount saved from landfills by recycling.



1. We recommend the Ministry of Environment set written standard definitions for key information (including calculation methods) it requires operators of waste diversion recycling programs to report.

### 4.3 Understanding of Waste Composition Needed

The Ministry of Environment has not obtained a robust understanding of the composition of waste entering Saskatchewan landfills.

The *Solid Waste Management Strategy* recognizes the use of the regulated waste diversion recycling programs to divert certain waste from entering landfills. It also recognizes others such as municipalities may have their own waste diversion programs.

As part of the Strategy's goal to demonstrate government leadership, the Ministry plans to conduct waste audits at government facilities every five years to obtain a better understanding of waste generation across government.<sup>22</sup> It plans to use the results of the audits to establish baseline information for each of these government facilities and inform targets for reduction.<sup>23</sup>

However, we found the Ministry does not have similar plans for its regulated waste diversion recycling programs even though most of these programs have been in place for more than a decade (see **Figure 4**).

The Ministry noted it had not set incremental targets as it first needs to better understand the type of waste generated in the province and entering landfills. It has not set out a timeframe to conduct this work.

Municipalities and private organizations are responsible for operating landfills that the Ministry regulates. The Ministry has not imposed regulatory requirements requiring municipalities and private organizations to track the type and volume of waste disposed into their landfills. At August 2020, most municipalities and private organizations do not voluntarily collect or track this information.

Having a better understanding of the waste types and volume entering Saskatchewan landfills would help the Ministry identify waste diversion options. For example, if mattresses are a high volume form of waste, a mattress-recycling program may be warranted. Also a more robust understanding of waste entering landfills would help inform the activities of its regulated waste diversion recycling programs.

By not understanding the waste type and volume disposed of in landfills, the Ministry is unable to determine how much of each type of waste the province is diverting from landfills and set incremental targets. Obtaining this information will allow the Ministry to determine if it requires additional recycling programs or needs to make revisions to existing programs.

2. We recommend the Ministry of Environment obtain a more robust understanding of the composition of waste entering Saskatchewan landfills.

<sup>22</sup> A waste audit involves gathering information on the amount and type of waste being discarded and where the waste comes from. This typically involves taking a sample of waste from a landfill and sorting, weighing, and recording the different types of waste. ([ketek.ca/waste-auditing/?qclid=EAlalQobChMI8tyXu7e37AIVAtvACh2u6Q9kEAAAYASAAEgKRVfD\\_BwE](https://www.ketek.ca/waste-auditing/?qclid=EAlalQobChMI8tyXu7e37AIVAtvACh2u6Q9kEAAAYASAAEgKRVfD_BwE)) (15 October 2020).

<sup>23</sup> *Saskatchewan's Solid Waste Management Strategy*, p. 11.



## 4.4 Recycling Program Specific Targets Needed

The Ministry of Environment has not set recycling program specific targets for regulated waste diversion recycling programs.

When setting incremental targets specific to waste diversion recycling programs, the Ministry should also consider establishing economic (e.g., net cost per unit of material recycled) and accessibility (e.g., percentage of population with access to waste management services) measures. For example, when the Ministry consulted with stakeholders on its Strategy, it heard that just over half of respondents (52%) identified geographic location as a barrier to appropriate waste management in the province (i.e., distance to closest recycling depot excessive).<sup>24</sup> In remote locations, the cost to transport waste to neighbouring landfills or recycling depots is high, resulting in a higher cost per tonne of waste diverted.<sup>25</sup> The Ministry currently has only environmental measures (e.g., weight of waste diverted from landfill). Good practice indicates waste diversion measures should cover all three categories (i.e., economic, accessibility, and environmental).

Our review of 2018 and 2019 annual reports submitted by program operators found one operator had set some targets, and reports against them in its annual reports. The approved program plan and regulations for this program do not refer to these targets. We did not see any evidence of the Ministry seeking explanations from the operator for not achieving these targets.

Unlike other jurisdictions (e.g., British Columbia and Ontario), the Ministry only uses its province-wide goal to measure its waste diversion. As noted earlier, this is a nationally endorsed Canada-wide waste reduction goal. In addition to the Canada-wide goal, British Columbia and Ontario have set material-specific targets for an intervening period (e.g., recycle 90% of household paper by 2020).<sup>26</sup> Targets for intervening periods are often referred to as incremental targets.

Setting specific goals for each regulated waste diversion recycling program would help the Ministry decide and communicate the extent it expects each program to contribute towards the provincial waste reduction goal—to reduce waste generated per person by 30% in 2030 and 50% in 2040 from 2014 levels.<sup>27,28</sup> In addition, this would help the Ministry determine to what extent each program is to enhance waste diversion in Saskatchewan (one of the six goals set out in the Solid Waste Management Strategy).

Establishing material-specific recycling targets for regulated waste diversion programs would allow the Ministry to monitor progress and adjust strategies sooner for identified concerns (i.e., if incremental targets are not met).

**3. We recommend the Ministry of Environment use material-specific targets to assist in determining whether waste diversion recycling programs contribute to the achievement of the provincial waste reduction goal.**

<sup>24</sup> *Saskatchewan Waste Management Strategy— What We Heard Spring 2017 Engagement*, p. 6.

<sup>25</sup> *Ibid.*

<sup>26</sup> [recyclebc.ca/wp-content/uploads/2020/06/RecycleBC2019-Final.pdf](https://recyclebc.ca/wp-content/uploads/2020/06/RecycleBC2019-Final.pdf) (21 August 2020).

<sup>27</sup> *Saskatchewan's Solid Waste Management Strategy*, p. 1.

<sup>28</sup> Waste generated per person was 842 kg in 2014.

## 4.5 Systematic Approach to Check Compliance with Reporting Requirements

The Ministry systematically confirms program operators of regulated waste diversion recycling programs comply with program reporting requirements.

The Ministry maintains a template for each regulated waste diversion recycling program. We found the templates list information program operators must report.

The Ministry monitors its receipt of reports, and follows up with program operators when it does not receive reports. Upon receipt of each report from a program operator, the Ministry compares information in the report to the related templates, and documents the results of its comparison.

We found the Ministry received reports from all program operators when expected (annually for all programs other than the scrap tire program; quarterly for the scrap tire program).

For each of the seven 2019 program operator annual reports we reviewed, the Ministry completed the template as expected. We found each of the annual reports contained the same type of information as in the prior year reporting period.

Using a well-defined approach to monitor receipt and content of required reports helps the Ministry determine, within a reasonable time, compliance of program operators with the reporting requirements of the regulated waste diversion recycling programs. Timely monitoring enables identification of need for further action, if required.

## 4.6 Analysis of Program Operator Information Needed

The Ministry of Environment does not have sufficient processes to analyze the reasonableness of program information reported on regulated waste diversion recycling programs (e.g., trend analysis using several years' worth of program information).

Unlike other Canadian jurisdictions, it does not undertake any additional verification steps even on a periodic basis. For example, some other Canadian jurisdictions (e.g., Ontario, British Columbia, New Brunswick) select a sample of program operators and perform a detailed review of the statistical information reported. In British Columbia, a recycling program operator hired an accounting firm to report on the reasonableness of the following annual report disclosures about the description of how products recovered were managed, total amount of product sold and collected, location of collection facilities, and description of performance for the year compared to established targets.<sup>29</sup>

While obtaining this level of verification over reported information is consistent with good practice, it can be costly.

The Ministry's current assessment of reasonableness of program information reported is limited to comparing the current year information to the preceding year. Determining if trends exist requires the Ministry analyze key performance measures over several years (e.g., five) to obtain an understanding of program performance.

<sup>29</sup> [recyclebc.ca/wp-content/uploads/2020/06/RecycleBC2019-Final.pdf](https://recyclebc.ca/wp-content/uploads/2020/06/RecycleBC2019-Final.pdf) (21 August 2020).



Also, under *The Environmental Management and Protection Act, 2010*, the Ministry is responsible to establish a system of monitoring that includes activities that have or may have an adverse effect, including discharges and waste management.<sup>30</sup>

Not analyzing the reasonableness of program information received increases the risk the Ministry is using unreliable or incorrect information when overseeing regulated waste diversion recycling programs.

4. We recommend the Ministry of Environment analyze the reasonability of program information reported by regulated waste diversion recycling programs.

## 4.7 Success of Regulated Recycling Programs Not Yet Assessed

The Ministry does not yet regularly assess whether its regulated waste diversion recycling programs divert a sufficient amount of waste from landfills at a reasonable cost.

During its review of program operator's reports, the Ministry considers if there is more the program operator could report on. For 2019, the Ministry identified suggestions for additional reporting for one recycling program.

While the Ministry regularly receives program information from program operators, it does not use the information to determine the effectiveness of the program. For example, it does not consider trends in key information such as collection, program cost, and rates of collection or diversion.

Our analysis of trends of key information from reports of each regulated program for up to a five-year period found the recovery rates changed by different rates over the period analyzed. For example, as **Figure 7** shows, the scrap tire program increased its recovery rate from 2014 to 2019 by 10.9%, whereas the beverage container program increased its recovery rate by 0.8%.

**Figure 7** also shows the percent change of cost per unit appropriately decreased when recovery rates increased for the scrap tire and waste paint programs. The cost per unit decreased by 1.4% for the scrap tire program and by 25.6% for the waste paint program.

**Figure 7—Recycling Program Performance from Base Year to 2019**

Program	Base Year <sup>A</sup>	2019 Recovery Rate %	Recovery rate % change base year to 2019	Cost per unit % change base year to 2019
Beverage Container	2014	87.2	0.8	8.3
Electronic Equipment	2014	Not Available <sup>B</sup>	Not Available <sup>B</sup>	(5.9)
Scrap Tires	2014	75.4	10.9	(1.4)
Used Oil and Antifreeze	2014	Not Available <sup>B</sup>	Not Available <sup>B</sup>	4.9
Waste Paint	2014	8.0 <sup>C</sup>	37.9	(25.6)

<sup>30</sup> *The Environmental Management and Protection Act, 2010*, s.3 (1) (c) (ii).

Program	Base Year <sup>A</sup>	2019 Recovery Rate %	Recovery rate % change base year to 2019	Cost per unit % change base year to 2019
Household Paper and Packaging <sup>D</sup>	2016	77.4	24.8	87.6
Agricultural Packaging <sup>E</sup>	2018	50.7	(34.1)	14.2

Source: Adapted from information provided in program operator annual reports.

<sup>A</sup> Base year is either 2014 to show a five-year period, or the year the program started.

<sup>B</sup> The program operator's annual report does not include the recovery rate.

<sup>C</sup> Paint is designed to be used up. The program operator only recovers unused paint, so the recovery rate does not reflect paint individuals use up.

<sup>D</sup> The Ministry approved the program in October 2015.

<sup>E</sup> 2018 reporting period is from the date the Ministry approved the program (January 25, 2018).

At August 2020, the Ministry had not formally assessed whether the regulated waste diversion recycling program was sufficiently successful in diverting waste from landfills when renewing program operator contracts.

In recent years, the Ministry revised recycling program regulations to require periodic reviews of recycling programs. It expects to do these reviews in conjunction with the next renewal of programs (e.g. every five years for most programs). Its first formal review of a recycling program is scheduled for October 2020 for the scrap tires program.

However, not having material-specific targets or well-defined terms for key information reported may diminish the value of this first review. Targets or clear baselines are key to determining whether a program is working as intended and making a sufficient difference in diverting waste. See **Recommendations 3** about the need for material-specific waste diversion targets, **1** about defining key terms and calculation methods for key information reported, and **5** about periodically reporting to senior management.

## 4.8 Better Reporting on Regulation of Waste Diversion Needed

The Ministry of Environment regularly reports to senior management about implementing the household hazardous waste program on an overall basis. It does not regularly report results of its other regulated waste diversion recycling programs.

We found it provides quarterly reports on its action plan to develop and implement the provincial household hazardous waste program.<sup>31</sup> This reporting includes some gaps the Ministry identified in the household hazardous waste program, and how the Ministry plans to address these gaps (e.g., staggering program reviews to streamline the approval process).

As described in **Section 4.4**, material-specific recycling program targets would assist the Ministry in regulating waste diversion. In addition, it would help them determine and report on the extent to which these programs contribute to meet goals established in the *Solid Waste Management Strategy* (such as its goal to enhance waste diversion across Saskatchewan).

<sup>31</sup> The household hazardous waste programs referred to are those run by Product Care Association of Canada (pesticides and other household hazardous material) and Call2Recycle Canada Inc. (consumer batteries). Municipalities also run household hazardous waste recycling programs; however, these do not fall under the Ministry's responsibility.



Since the Ministry only set the waste diversion goals included in the Strategy in January 2020, by August 2020, it had not reported progress on these goals.

Without regular reporting on the rate of waste diversion through recycling programs, senior management does not have adequate information for informed decision-making about recycling programs.

- 5. We recommend the Ministry of Environment periodically report to senior management on the rate of waste diversion through regulated recycling programs.**

## 4.9 Action Taken on Complaints Related to Regulated Recycling Programs

The Ministry of Environment followed up and acted upon public inquiry or complaints about regulated waste diversion recycling programs. In addition, it enforced regulations related to the waste recycling programs for identified non-compliance.

The Ministry indicated it receives only a few complaints from the public about the regulated waste diversion recycling programs. During the twelve month period ending August 2020 (the audit period), the Ministry received many inquiries and some complaints about regulated waste diversion recycling programs. For example, the Ministry received a complaint about these programs around the closure of a recycling depot. We found the Ministry responded to this complaint within seven days of its receipt, and its response seemed reasonable.

From time-to-time, program operators report concerns about retailers not complying with regulations for the waste diversion recycling programs. The Ministry can fine commercial retailers for not complying with these regulations.<sup>32</sup>

We noted one instance of the Ministry fining a tire retailer in January 2020 for non-compliance with regulations (not remitting tire fees owed to the tire program operator). The retailer later complied (i.e., paid the fine in March 2020, and remitted the fees owed to the tire program operator in July 2020).

Taking timely action on complaints and non-compliance assists the Ministry in identifying and resolving identified issues quickly. This allows the Ministry to fulfill its role as a regulator (i.e., monitoring program operators and addressing non-compliance) and helps the Ministry in meeting its waste diversion through recycling goals.

## 5.0 SELECTED REFERENCES

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<sup>32</sup> The Ministry has the authority to fine retailers under *The Summary Offences Procedure Regulations, 1991*.

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