



Saskatchewan's Solid Waste Management Strategy

2022-23 Annual Report

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Minister's Message

I am pleased to share the 2022-23 Annual Progress Report for Saskatchewan's Solid Waste Management Strategy. Since its release in 2020, the strategy has strived for a practical, sustainable and integrated solid waste management system specific to Saskatchewan. By doing so, it commits to reducing waste generated by 30 per cent by 2030 and 50 per cent by 2040 from 2014 baseline levels. This annual report fulfills Saskatchewan's commitment to track and report on the strategy.

Saskatchewan's Growth Plan envisions 1.4 million people living in the province by 2030. Reducing the waste that would otherwise be destined for landfill through waste reduction and diversion efforts will create a healthy, resilient environment and protect the well-being of residents and communities into the future.

In the three years since the launch of the strategy, progress has been made on many of the commitments and implementation remains on track. Some notable highlights include:

- The new *Household Packaging and Paper Stewardship Program Regulations* came into force on March 31, 2023. A new stewardship program plan to enhance the recycling of multi-material products under a full extended producer responsibility program is under review.
- The new Transfer Station Chapter was approved under the Saskatchewan Environmental Code and came into force on March 17, 2023. All 150 transfer stations that operate in the province are now regulated through this chapter. Under this chapter, municipalities will spend less time on permitting and reporting, and are provided with clear options on how to achieve environmental compliance.
- The feedback from the engagement sessions for yet another new Saskatchewan Environmental Code - the Compost Facility Chapter, will be summarized in a What We Heard report and used for further refinements to the chapter. The targeted date for implementation of the Compost Facility Chapter is March 2024.

- Waste audits were completed at government owned buildings and other facilities throughout the province, including four correctional facilities, four courthouses, Conexus Arts Centre in Regina and the Saskatchewan Polytechnic Regina Main Campus. Findings of all waste audits completed are reported under goal 6 of the strategy.
- New composting programs were also established at two Saskatoon government buildings in 2022-23. In 2024, composting will be available for the entire Saskatchewan Polytechnic Main Campus in Saskatoon.

The ministry continues to seek advice on provincial waste management and implementation of the strategy through the external Solid Waste Management Committee. This committee plays a critical role as we continue to add new ideas and efforts to achieve the strategy in the coming years. On behalf of the government, I thank committee members for their commitment to improve waste management in our province.

These accomplishments and many others are provided in this annual progress report, with many more to come. Taking strides to ensure effective waste management is essential to responsible growth. Both the Solid Waste Management Strategy and Saskatchewan's Growth Plan set a foundation to support a strong economy, strong communities, and strong families to build a stronger Saskatchewan.

Christine Tell
Minister of Environment



Saskatchewan's Solid Waste Management Strategy was released on January 23, 2020.

Overview

Vision

Working together to create a practical, sustainable, integrated solid waste management system that protects the environment and promotes economic development and innovation opportunities.

Target

Reduce the amount of waste generated per person by 30 per cent by 2030 and 50 per cent by 2040, based on 2014 baseline levels.

Most of the waste generated in the province ends up in Saskatchewan's landfills.

Diverting waste from landfill by recycling and composting can extend the life of landfills and avoid the potential risk of water pollution, soil contamination, greenhouse gas emissions and human health impacts. Saskatchewan has several stewardship programs for waste diversion. A list can be found at saskatchewan.ca/recycling.

Goals

The strategy focuses on six goals to achieve Saskatchewan's vision for waste management:

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 innovation and sustainable solutions** to manage waste.
6. **Demonstrate government leadership** in waste management.

Progress in 2022-23

Goal 1: Enhance education, awareness and technical understanding of waste management best practices and the risks of improper practices across Saskatchewan.

Key Actions

The Government of Saskatchewan focuses on education and awareness of solid waste management through presentations to several stakeholder groups. In 2022-23, the Ministry of Environment engaged stakeholders through presentations and media outreach. Several presentations were delivered to communicate strategy updates and other waste reduction initiatives including:

- The Association of Regional Waste Management Authorities of Saskatchewan Round-Up in October 2022.
- Saskatchewan Waste Reduction Council's Compost Field Day and the Fall Workshop in October 2022.
- Saskatchewan Waste Reduction Council Conference in April 2022.
- A webinar on Full Extended Producer Responsibility to the Saskatchewan Waste Reduction Council in May 2022.

A key piece of work supporting enhanced awareness is the multi-year communications strategy. For the first year of its implementation, the communication strategy focused on education and awareness campaigns to inform the public on waste reduction options through proper recycling and composting. Some activities included:

- On Oct. 17, 2022 a news release announced Waste Reduction Week and highlighted Saskatchewan's recycling programs and recycling statistics. In addition, a week-long online campaign focused on waste reduction topics including circular economy, textiles, e-waste, plastics and food waste.
- On Dec. 17, 2022, former Minister of Environment, Honorable Dana Skoropad, and representatives from SARCAN and Saskatchewan Waste Reduction Council (SWRC) took part in a media event to discuss tips on reducing waste during the holiday season. The event was covered by all major media outlets and coverage was very favourable.

- Following the December event, waste reduction tips were shared throughout the holiday season on the ministry's Facebook page. The posts were co-branded with the SWRC and linked to their website (saskwastereduction.ca).
- Between Oct. 30, 2022 and March 31, 2023, the ministry ran an online advertising campaign with the tagline #KnowItBeforeYouThrowIt. The goal of the campaign was to have people think about if and how they could recycle or reuse their waste instead of throwing it in the garbage. The campaign received over three million impressions, and more than 1,800 hits were tracked to saskatchewan.ca/recycling.
- The solid waste management facilities page on saskatchewan.ca was updated with additional guidance documents in support of landfill compliance assurance activities. These updated documents have been shared with stakeholders through SARM, SUMA and Government Relations and have received positive feedback.

Next Steps

The focus of the next year will be developing a resource toolkit to help municipalities understand the cost of waste management and benefit of stewardship programs. The ministry will begin engagement with municipalities on the toolkit in 2024.

Another area of focus will be to continue the important collaborative work between the Government of Saskatchewan and First Nations communities to increase education and awareness of provincially available waste diversion programs, waste management best practices and the benefits of regional collaboration.

Goal 2: Encourage regional collaboration to enhance the cost effectiveness of waste management infrastructure.

Key Actions

The second intake for the Integrated Bilateral Agreement for the federal Investing in Canada Infrastructure Program (ICIP) funding program application closed in September 2023. The funding program assists eligible municipalities to close and decommission unsustainable landfills, or to initiate projects that divert waste from landfills. The funding program will be ongoing until the \$50.3 million is fully allocated or until 2025.

- In 2022-23, Saskatchewan recommended 73 projects to the federal government for ICIP funding. Of these, 59 have been approved or conditionally approved and nine are under review. Three projects have been completed since the inception of the ICIP funding. Two projects withdrew their application from the funding process.

The ministry continues to encourage communities to consider the benefits of a regional approach to share solid waste management costs. The ministries of Environment and Government Relations continue to work with Indigenous Services Canada to develop integrated, regional waste management services for Indigenous and non-Indigenous communities across Saskatchewan through the First Nations Waste Management Initiative. Under this collaborative initiative, three regional landfill projects were planned:

- The North Central – (Lac La Ronge) Regional landfill is completed and is currently operational. Plans are in place to close eight more nearby landfills that do not subscribe to best management practices.
- A conditional ICIP funding has been issued in 2023 for the Northwest Regional Landfills project. This project will see two landfills constructed in 2024. Once completed, 18 more landfills that do not meet best management practices will be closed.
- The Northeast Regional Landfill project has just completed a feasibility study to determine the next stage.

All of these regional landfills will be set up to accept recyclables and compost with diversion programs in place.

The ministry completed a review and assessment of barriers to regionalization in 2021. The results of the report were shared with the Solid Waste Management Advisory Committee. The report shows that communities need continued support to develop long-lasting and mutually beneficial partnerships. These partnerships will help communities join regionalized waste management systems and take advantage of economies of scale. The ministry will investigate how to best support and provide guidance for those wishing to regionalize.

Next Steps

The ministry will update the regionalization guidance document in 2023-24 to reflect findings from the barriers report.

Compost facilities can easily integrate into regional waste management authorities. Larger facilities can accept a broader range of feedstocks (organic materials that make up compost) and divert more waste from landfills.

Goal 3: Provide a modern, efficient and effective regulatory system for waste disposal and management.

Key Actions

The Ministry of Environment is considering new code chapters as part of the Saskatchewan Environmental Code. This work builds on the commitment to review solid waste regulations by 2025, modernizing them and reducing red tape. This will allow for more consistent compliance and enforcement across the province.

The new Transfer Station Chapter was completed, and it came into force on March 17, 2023. The chapter reduces the time municipalities spend on permitting and reporting and provides flexibility in achieving environmental compliance. The chapter is used in regulating all 150 existing transfer stations and any other new facilities going forward.

The Compost Facility Chapter will offer a made-in-Saskatchewan, results-based and flexible approach to the siting, design, construction, operation, monitoring and closure of compost facilities. In winter 2022, through engagement with municipalities and industry experts, feedback on the draft chapter was provided for its improvement. A discussion paper with options to amend the current draft was prepared in April 2023.

A thorough regulatory review of *The Municipal Refuse Management Regulations* and associated programs was completed to ensure ongoing work to modernize solid waste regulations can advance in 2023-24. This work also meets the commitment under the strategy's third goal to initiate a thorough regulatory review.

The Solid Waste Management Advisory Committee was established in 2021 to provide ongoing support and oversight to the strategy's implementation. The committee includes representatives from industry and industry associations, recycling and stewardship organizations, municipal associations, regional waste authorities, and the Saskatchewan Waste Reduction

Council. Representatives from the Federation of Sovereign Indigenous Nations also participate in the committee as observers. Committee members:

- Advise government on new or emerging issues, trends and opportunities related to solid waste management.
- Recommend new or follow-up commitments to advance the Solid Waste Management Strategy.
- Provide recommendations on public engagement efforts the ministry may pursue for solid waste management.

Next Steps

Work continues to finalize and implement the Compost Facility Chapter in 2023-24. The ministry will also begin drafting new regulations to continue modernizing solid waste management.

Organic materials, like food waste and lawn clippings, make up a large portion of materials sent to the landfill. Diverting organic materials from landfills to composting facilities extends the life of a landfill.

Goal 4: Enhance waste diversion across Saskatchewan.

Key Actions

A full picture of waste composition in urban, rural and remote areas will help direct and inform waste diversion policies and programs. As part of the goal to enhance waste diversion, the strategy commits to reviewing all stewardship programs to identify opportunities for improvement.

In 2021 and 2022, the ministry engaged with stakeholders and interest groups to find opportunities to improve *The Household Packaging and Paper Stewardship Program Regulations*.

Amendment to these regulations would allow the shift to a full extended producer responsibility (EPR) program for the Multi-Material Recycling Program.

- The new *Household Packaging and Paper Stewardship Program Regulations* came into force on March 31, 2023.
- Multi-Material Stewardship Western has been engaging with municipalities, producers and other stakeholders. They submitted a new full program plan to the ministry in fall 2023 for approval.

The strategy also commits to improving waste diversion through organic waste management.

- Saskatchewan has 31 organics waste management facilities, all located in the southern half of the province. Of these, 26 accept leaf and yard waste only. Regina and Saskatoon accept leaf and yard waste and food waste. One of the facilities, located in Craik, uses pyrolysis to breakdown agricultural residues.
- Approximately 69 per cent of Saskatchewan residents have access to some type of organics management program (as compared to 84 per cent of Canadian residents) and 49 per cent have access to a source-separated organics program (as compared to 69 per cent of Canadian residents).

The Household Hazardous Waste Products Stewardship Regulations (HHWPS) require first sellers of household hazardous waste products to establish and operate a program for their collection and safe disposal. Currently, Call2Recycle operates a consumer batteries recycling program, and Product Care Association of Canada operates a program for waste household hazardous material and domestic pesticides.

Waste medical sharps can pose a threat to public health and safety, as well as the environment. The HHWPS regulations require a stewardship program for medical sharps. Municipal stakeholders and the Ministry of Health have shown support for a regulated program for the management of these items and the Ministry of Environment is currently working with industry on the development of a long-term plan for the management of medical sharps.

Next Steps

The ministry will continue with reviews of other recycling and stewardship programs throughout 2023-24. The recycling and stewardship programs planned for a review are scrap tires, electronic equipment and used petroleum and antifreeze products. The ministry is also exploring regulatory options for other products and materials identified in the Canada-Wide Action Plan for Extended Producer Responsibility.

A full EPR program will:

- Reduce financial and administrative burdens for municipalities
- Enable producers to recover materials and increase recycled content in products and packaging
- Lead to more consistent recycling services across the province

Goal 5: Foster innovative and sustainable solutions to manage waste.

Key Actions

The Government of Saskatchewan is no longer developing or implementing a regulatory greenhouse gas (GHG) offset program due to updates to the carbon pricing benchmark by the federal government's GHG offset credit system.

The federal government has indicated that it will begin regulating landfill methane recovery and destruction projects in 2024-25 to meet the Canadian GHG targets for landfills. This change means landfills can no longer earn carbon credits to offset GHG emissions.

The Ministry of Agriculture continues to support projects that identify innovative uses of agricultural-related by-products or waste. Not only does this create growth opportunities and enhance the competitiveness of small and medium-sized agri-businesses, but these projects divert waste that would otherwise be destined for disposal at landfills.

In 2022-23, funding was provided under the new Sustainable Canadian Agricultural Partnership, replacing the Canadian Agricultural Partnership that expired in spring 2023. Two new funding streams are now offered: Saskatchewan Lean Improvements in Manufacturing (SLIM) and Product2Market. The SLIM funding stream aims to assist agri-businesses in adopting best practices, new state-of-the-art technologies and enhanced processes that improve productivity, efficiency and reduce GHG emissions. The Product2Market funding stream provided research and development funding to support industry associations to increase domestic and international trade capacity for Saskatchewan agricultural products, as well as support marketing activities:

- *Red Leaf Pulp* is continuing with pilot studies to advance the processing of Saskatchewan-grown straw into pulp. Pilot studies will help upscale operations to meet demand for larger volumes needed in the pulp markets, as well as ensure risks are minimized in the sector to enable future operating investment.

- *Titan Clean Energy Projects*, which processes waste wood to produce biochar, is planning to expand its site in Craik. The company is also growing its use of agricultural residue in its operations.
- *Prairie Clean Energy* is planning to commission a plant in Saskatchewan that will produce solid fuel from flax straw.

Through the ongoing Agricultural Development Fund (ADF), the Ministry of Agriculture has supported both public and private research and development related to agricultural bio-related projects. In 2022-23, three new value-added ADF projects were funded that support this goal:

- Commercializing Green Extraction Technology of Phytosterols from Canola Oil Waste Stream.
- Feasibility study of Agricultural Biomass Power Generation in Saskatchewan.
- Up-cycling of plastic waste using ethanol and biodiesel.

Next Steps

The ministry will continue to support innovation for waste management and identify opportunities to promote and encourage new technologies to enhance waste diversion in a responsible manner. Jurisdictional scans of best management practice across Canada and Internationally to assess the feasibility of such technologies for Saskatchewan is planned for 2023-24.

Development of biofuels is an important value-added processing opportunity in the agricultural sector. Biofuels from unused crop residues, oilseed waste, animal waste and cooking oil/fat wastes help divert organics from the agriculture sector that would be destined for disposal at landfills.

Goal 6: Demonstrate government leadership in waste management.

Key Actions

The Ministry of Government Relations offers funding programs for projects focusing on landfill decommissioning, transfer station development and constructing new or expanded landfills. These funding programs are offered to municipalities participating in the Gas Tax Program and through Northern Capital Grants for northern communities. The initial funding program allocated project funding until 2014. A renewed funding program was initiated for 10 years (2014-2024) and was made up of two 5-year funding cycles for project intake. The current project intake is ongoing.

- Through the initial funding program, 154 solid waste management projects were approved for funding, and two remain to be completed since 2014.
- In the current intake, 72 projects have been approved, of which 48 are complete, and two more projects are pending approval.

The Ministry of SaskBuilds and Procurement is responsible for conducting waste audits at major facilities across government to improve the amount of waste diverted from audited buildings. For instance, the waste audit completed in September 2022 at the Ministry of Environment's main building in Regina indicates a waste diversion rate of 62.8 per cent and the diversion rate for 2013 was 25.1 percent. To improve future diversion rates, a new retrofitting pilot program to install hand dryers in the building is planned for 2024.

- Waste audits were completed at government-owned buildings and other facilities throughout the province, including four correctional facilities, four courthouses, Conexus Arts Centre in Regina and the Saskatchewan Polytechnic Regina Main Campus.
- In 2022-23, new composting programs were also established at two government buildings in Saskatoon.
- The Ministry of Parks, Culture and Sport has

decommissioned all but one landfill on provincial park lands. The last remaining landfill is in Lac La Ronge Provincial Park, located at Stanley Mission. Work to decommission it is ongoing. The Ministry of Parks, Culture and Sport has been working with regional landfill authorities whenever possible to ensure all provincial parks are serviced.

Demonstrating further leadership towards waste reduction and in the spirit of collaboration, the ministry has established regular meetings with counterparts in solid waste management in Manitoba and Alberta. Through these regular meetings, opportunities towards policy harmonization are being identified.

Next Steps

Due to the success in programs such as composting in government facilities in 2022-23, composting will be available for the entire Saskatchewan Polytechnic Main Campus in Saskatoon in 2024.

Monitoring and Reporting

Performance measures are used to monitor progress on commitments in the Solid Waste Management Strategy.

Amount of waste generated in kilograms per capita

Target

Reduce the amount of waste generated per person by 30 per cent by 2030 and 50 per cent by 2040, based on 2014 baseline levels.

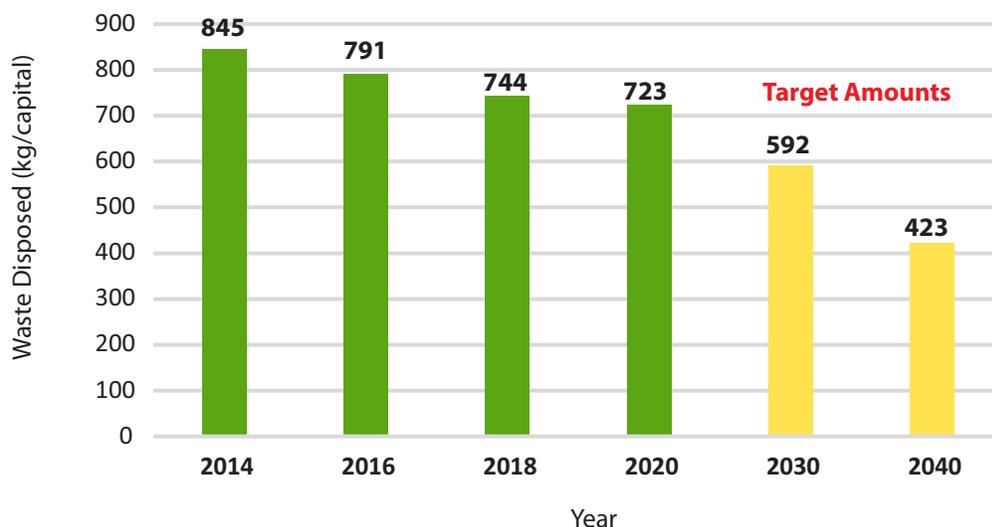
For this performance measure, waste generated refers to the amount of waste going to landfills.

Since 2014, waste generated in Saskatchewan has decreased from 845 kilograms per capita in 2014 to 791 kilograms per capita in 2016 and 744 kilograms per capita in 2018. In 2020, the waste generated was approximately 723 kilograms per capita. This indicates a decrease of 14.4 per cent from the 2014 base year.

The data comes from a Statistics Canada survey published every two years. Results for more recent years are not yet available, as data can take several years to be published. The ministry is looking at alternative measures to complement this data.

Why does this measure matter?
Reducing the amount of waste going to landfills increases their longevity and reduces negative impacts on the environment.

Amount of Waste Disposed(kg/capita)



Saskatchewan Waste Generated in KG per capita. The target amounts included reference targets that are set in the Solid Waste Management Strategy (30 per cent by 2030 and 50 per cent by 2040). Data for 2022 is not yet available.

Percentage of population served by a regional landfill model

As of 2022, at least 14.4 per cent of Saskatchewan's population is being served by a regional landfill, an increase from 13.5 per cent in 2020. This number comes from the Association of Regional Waste Management Authorities of Saskatchewan (ARWMAS), which represents most regional landfill authorities in the province.

The ministry continues to gather data on regional landfills not represented under ARWMAS. This will allow more accurate reporting on the percentage of the population being served by a regional landfill in Saskatchewan in the coming years.

Why does this measure matter?

Regional landfills can allow rural communities to share the costs, risks and liabilities associated with landfills.

Increasing the percentage of population served by a regional landfill makes waste management more affordable and efficient.

Number of landfills closed and decommissioned

Ensuring that landfills are constructed appropriately helps to protect the environment. The number of operating landfills in the province continues to decrease. Approximately 500 municipal landfills were operating in 2015. In the first quarter of 2023, there were 114 operating municipal landfills, which is a 71 per cent decrease.

This decrease is a result of landfill closures, landfill decommissioning and an increase in the number of regional landfills in the province. There are two northern regional landfills that will be constructed by 2024, resulting in more closures of non-compliant landfills. Transfer stations are anticipated to increase as well, due to the new Transfer Station Chapter.

Why does this measure matter?

Managing compliant landfills is costly. Reducing the number of operating landfills in the province enables the development of regional landfills and cost-sharing.

Operating Municipal Landfills

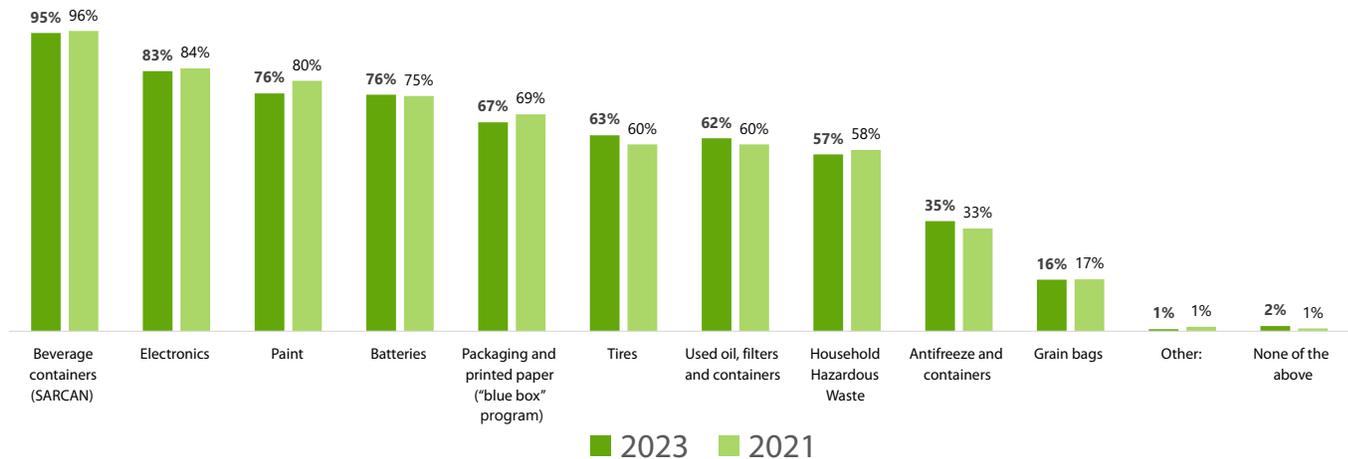


Percentage of population aware of provincial waste reduction and recycling programs

Saskatchewan's recycling numbers continue to increase. The 2023 public awareness surveys show that 90 per cent of those polled say they recycle waste. The figure below shows the level of awareness of the recycling programs in the province varies widely among programs and between the two years during which the survey took place. For example, in 2023, 95 per cent of those polled were aware of beverage container recycling by SARCAN, a change from 96 per cent reported in 2021. The awareness of the scrap tire recycling program however went up from 60 per cent in 2021 to 63 per cent in 2023.

Why does this measure matter?

The success of provincial waste reduction and recycling programs increases as more of the population becomes aware of their waste reduction and recycling options.



Survey results also shows that in general, Saskatchewan residents are satisfied with the Saskatchewan recycling programs and reported that these programs are effective at meeting the needs of their households. This result has increased from 82 per cent in 2021 to 84 per cent in 2023.

New investment to reduce, manage and divert solid waste from landfills

Managing solid waste requires investment in appropriate infrastructure, such as engineered landfills, recycling or eco depots, transfer stations, and composting facilities. The province is working on developing a metric for funds invested in solid waste management. Information for this metric will be collected from existing Statistics Canada data and included in future reporting.

Why does this measure matter?

Tracking investment in waste management systems may indicate improvements in diversion technology.

The most recent data from Statistics Canada reports there were 1,678 people employed in the waste management sector in the province in 2018. Changes to employment in the waste management sector can indicate increases or decreases in investment in this industry.

Number of landfill operators with landfill operator certification

The strategy commits to requiring all landfill operators to be certified by 2025. Work is underway on implementing a Saskatchewan-specific Landfill Operator Certification Program. Once the program is in place, reporting on this measure will begin.

Why does this measure matter?

Requiring all landfill operators to be certified will improve the health and safety of the province's waste management facilities. Having more landfill operators certified may also increase ownership in overall stewardship, leading to better landfill compliance.

Percentage of population with access to recycling programs

The ministry receives data on residential access to recycling programs from some stewardship program operators in a range of formats. The ministry is working on a project to map the accessibility of recycling programs in the province. This information will be used to better understand access to provincially regulated recycling programs in 2023-24.

Why does this measure matter?

Understanding the reach of recycling programs in the province allows government to focus on increasing access to recycling programs in areas with limited access, including rural and remote northern areas.

More Info?

More information about the Solid Waste Management Strategy is available at saskatchewan.ca/residents/environment-public-health-and-safety/saskatchewan-waste-management/solid-waste-management-strategy