

# Saskatchewan's Solid Waste Management Strategy

























The strategy aims to improve the health of Saskatchewan's people and environment, and stimulate new growth opportunities to attract investment into the province.

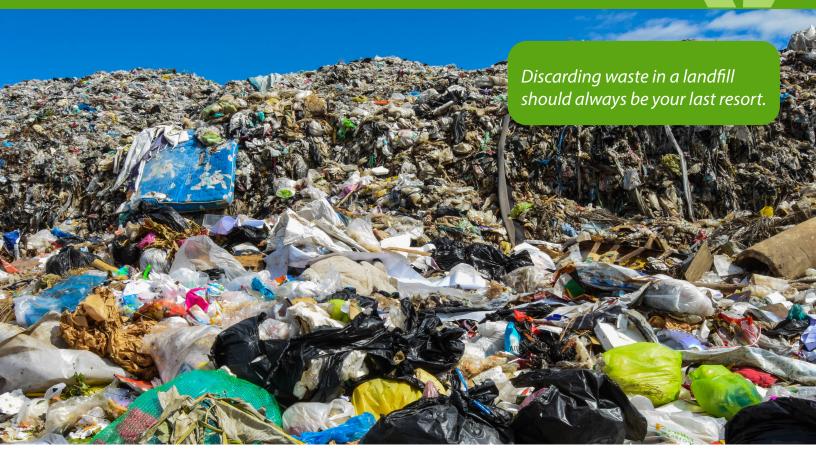
#### Vision

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









#### Introduction

Saskatchewan produces the second-highest amount of waste per capita in Canada. Every year, each resident of the province 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.

In an effort to change that statistic and move toward more responsible waste management, the Ministry of Environment has developed a *Solid Waste Management Strategy*. The strategy, which outlines longer-term goals for waste reduction in the province, was designed to address the ongoing challenges of waste management and identify potential new economic opportunities for the industry.

The strategy supports the goals of the new Saskatchewan Growth Plan, which envisions 1.4 million people living in the province by 2030, and 100,000 more people working. A strong and growing economy translates into a need for greater and more efficient services, and a better quality of life for Saskatchewan residents.

Taking strides to ensure effective and opportune waste management in the future is essential to responsible growth. Implementing the Solid Waste Management Strategy will be key to the process.

Discarding waste in a landfill should always be your last resort. Waste that is not diverted from a landfill potentially leads to greater risk of water pollution, soil contamination, greenhouse gas emissions and human health impacts. However, landfills still represent important infrastructure for materials that cannot be reused, recycled or repurposed. To promote the sustainable operation of landfills, it is necessary to ensure that regulatory requirements are clear, focused on achieving desired environmental outcomes, and recognize the diversity of Saskatchewan's environment and the needs of its residents.

Along with its federal, provincial and territorial partners, Saskatchewan has signed on to the Canada-wide aspirational goal of reducing waste generated per person by 30 per cent by 2030, and 50 per cent by 2040 from 2014 baseline levels. This means reducing waste to 589 kg/person by 2030 (30 per cent) and 421 kg/person by 2040 (50 per cent).

Meeting these targets will require dedicated efforts to educate and better inform waste management decisions by all Saskatchewan residents. It will also require innovation and local solutions to better understand the value of the province's waste as a resource and build upon the success of Saskatchewan's established recycling and waste stewardship programs.

The primary outcome of this strategy is improving the health of Saskatchewan's people and environment, and stimulating new growth opportunities to attract investment into the province.



# Current state of waste management and reduction in Saskatchewan

The majority of the waste generated in the province ends up in Saskatchewan's 203 landfills, of which 186 are managed by municipalities and 17 are industrial/private landfills.

While an appropriate number of landfills for Saskatchewan has not been defined by the province, municipal landfill numbers have decreased significantly over the last five years – from 500 in 2015 to 186 in 2019. Regardless of the number, it is important that all operating landfills are compliant with provincial rules and regulations in order to protect human health and the environment.

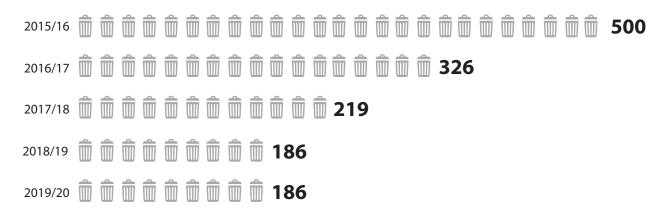
Based on a number of factors, including improved data collection and continuing education on compliance requirements, many municipalities are realizing the true costs of proper waste management. Several have recognized that it is more efficient to share the costs of managing a compliant landfill; and 17 regional authorities have been formed to develop regional landfills. In addition, some major centres in the province accept waste from smaller surrounding municipalities. There are currently 207 transfer stations across the province to temporarily store waste and diverted materials for transportation to a regional landfill or recycling facilities.

Since implementation of the province's first recycling program (beverage containers) in 1988, Saskatchewan has made great strides in preventing certain kinds of waste from entering landfills. Over the last 30 years, the province has implemented several regulated Extended Producer Responsibility (EPR) programs, in which the producer is physically and/or financially responsible for proper management of the product at the end of its useful life. Saskatchewan implemented the first EPR programs in Canada for recycling electronics and agricultural grain bags.





#### Operating municipal landfills by fiscal year



Saskatchewan regulates EPR programs for the following products, which are currently operated by the corresponding stewardship organization:



used oil and antifreeze – Saskatchewan Association for Resource Recovery Corporation;



scrap tires - Tire Stewardship Saskatchewan;



waste paint - Product Care;



electronic equipment – Electronic Products Recycling Association;



household packaging and paper – Multi-Material Stewardship Western Inc.; and

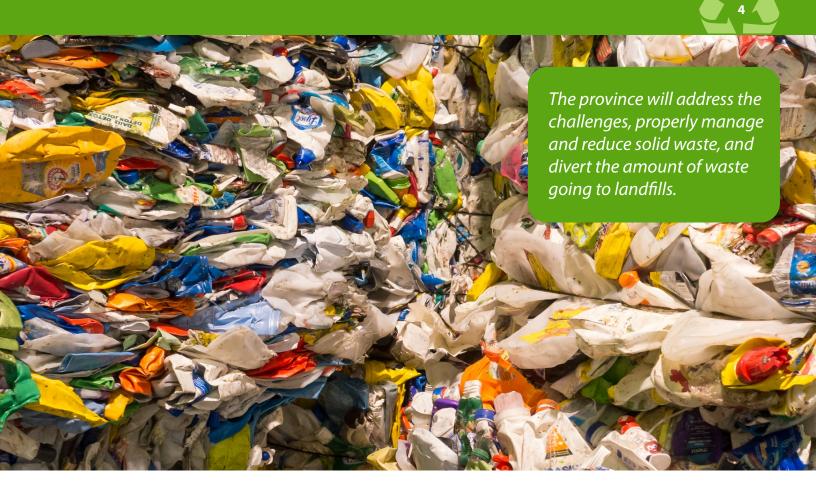


agricultural packaging (grain bags) - Cleanfarms.

Although not an EPR program, Saskatchewan also has a system for the collection and recycling of non-refillable beverage containers, operated by SARCAN under contract with the provincial government.

In addition, Saskatchewan recently created new regulations for a household hazardous waste product stewardship program, fulfilling a priority expressed by citizens and municipalities across the province.

In some cases, waste products can be recycled to create new products. For example, scrap tires can be shredded and used to make rubber paving stones, rubber mulch, highway aggregate and an alternative to weeping tile. Plastic containers can be used to make wood alternatives, and glass containers can be crushed to make reflective paint for road use. These are just a few examples of how the province's waste is being used to create new products.



# Provincial waste management challenges

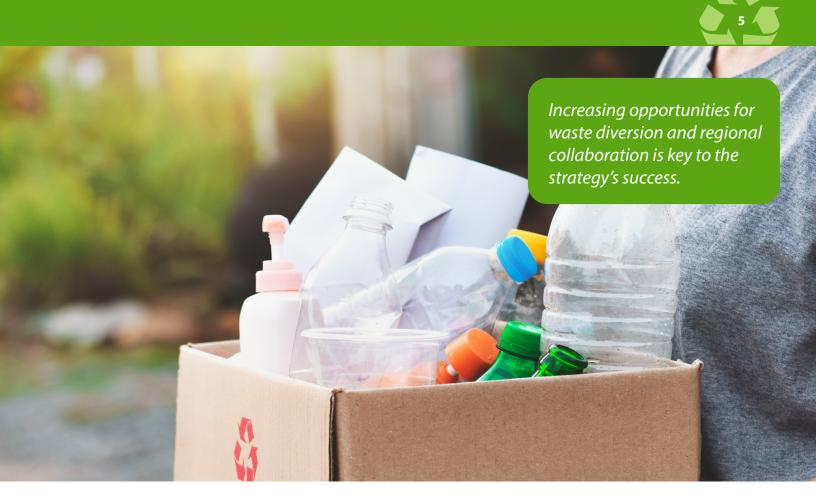
Current challenges facing solid waste management and diversion include:

- little knowledge about the risks and costs associated with waste and improper waste management across all sectors (public and private) of the province;
- shifting international market demand for Canadian recyclable materials;
- the high cost of recycling compared to the cost of landfilling waste, undermining the economics and profitability of recycling;
- consumer trends that result in internationally sourced products with packaging materials that cannot be recycled in current systems;
- low waste diversion rates in northern and remote communities due to geography and long distances to recycling facilities;
- illegal dump sites that may cause soil, water and air pollution;
- high volumes of waste materials not being diverted from landfills (e.g. organics, construction and demolition waste, etc.);
- improper disposal and landfilling of organic waste produces methane, a greenhouse gas (GHG) that contributes to climate change;

- municipalities that do not have the financial means to properly manage a landfill in order to protect human health and the environment;
- longer haul distances to regional landfills, impacting highway infrastructure and releasing GHG emissions;
- public safety concerns at northern landfills, where animal and human contact is high; and
- lack of reliable baseline data to help develop and improve waste management practices and gauge the success of current diversion efforts and/or the need for new diversion programs.

In addition, international markets are starting to ban the import of plastics and other material, which had previously been recycled in those jurisdictions. This places more pressure on recycling programs because the end markets for these products are becoming limited.

This strategy outlines specific goals and commitments the province will make to address these challenges, properly manage and reduce solid waste, and divert the amount of waste going to landfills.



### What is the basis for the strategy?

For many years, the Government of Saskatchewan has been focused on working with communities and partners to reduce waste and improve waste management in the province. In the spring of 2017, the Ministry of Environment sought feedback from individuals, municipalities, First Nations communities, manufacturers, private landfill operators, academia and recycling organizations through an online survey, in-person engagement sessions and the receipt of written submissions.

In addition, government established the Solid Waste Management Advisory Committee in 2018, a group made up of municipal and industry leaders with an understanding of waste management challenges in Saskatchewan. The Committee led further consultation efforts with municipalities, recycling organizations, private landfill operators and members of the public, resulting in a list of recommendations for the ministry to consider in developing the strategy

Based on the public engagement process and the work of the Committee, key themes were identified for the strategy. They include:

- enhancing education and awareness of issues and opportunities related to waste and waste diversion;
- increasing opportunities for waste diversion and regional collaboration;
- modernizing provincial rules and regulations and ensuring consistent enforcement;
- ensuring the necessary government resources are dedicated to overseeing waste management programs, and consideration for external supports to enhance program delivery (e.g. advisory committee, waste management authority);
- encouraging innovation and market development for new technologies and solutions to reduce and/or add value to waste (e.g. waste as a resource);
- expanding the list of products to be diverted from landfills through the EPR model;
- enhancing capacity for waste management operators;
- providing equitable access for diversion across the province; and
- enhancing government leadership on issues related to waste management.



Feedback from the 2017 public engagement activities and Advisory Committee recommendations is consistent with discussions taking place locally, nationally and internationally on the issue of waste in the environment – in particular, plastic waste. Municipalities across Canada are exploring options to reduce and even ban single-use plastics, such as plastic grocery bags. The private sector is also taking action through the introduction of alternatives for single-use plastics, such as paper straws.

The impact of decisions by some countries to ban or restrict the importation of plastic for recycling is being felt in local recycling programs. However, this development may present an opportunity for solutions, and could encourage investment in new or expanded facilities.

Recent national and international dialogue on the impacts of plastic waste in the environment have resulted in actions to achieve zero plastic waste. In 2018, the G7 nations, including Canada, agreed to the Oceans Plastic Charter, which contains commitments to work with industry to reduce plastic waste. Building on this work, the Canadian Council of Ministers of the Environment (CCME) created the *Strategy on Zero Plastic Waste*<sup>1</sup>, which was agreed to by all provinces and territories in fall 2018.

The national strategy – which focuses on keeping plastics out of the environment – is being implemented in two phases. The *CCME Canada-wide Action Plan on Zero Plastic Waste* Phase 1 includes the following priority action areas: extended producer responsibility; single-use and disposable products; national performance requirements and standards; incentives for a circular economy; infrastructure and innovation investments; and public procurement and green operations.

These actions not only support progress on the waste reduction targets of 30 per cent by 2030 and 50 per cent by 2040, but also align with many goals and commitments in the provincial strategy.



<sup>&</sup>lt;sup>1</sup> 2019. Canadian Council of Ministers of the Environment. "Strategy on Zero Plastic Strategy". URL: https://www.ccme.ca/en/current\_priorities/waste/waste/strategy-on-zero-plastic-waste.html



# Vision and goals for the provincial strategy

Based on information and factors considered during development of this strategy, Saskatchewan's vision for waste management is *Working together to create a practical, sustainable, integrated solid waste management system that protects the environment and promotes economic development and innovation opportunities.* 

This vision statement reinforces many of the considerations that groups and individuals believed were necessary for a successful strategy, including cooperation, viewing waste as resource, sustainable solutions for future generations, expansion of waste diversion opportunities, the need for ongoing education, and increased capacity to facilitate improved waste management decisions and practices.

To move the province towards this future state, the strategy focuses on six goals:

- 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.
- 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.
- Demonstrate government leadership in waste management.



# Putting the strategy into action

Goals and commitments to achieve waste reduction targets



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

Education and awareness of issues and solutions related to effective waste management will help people better understand what they can do to reduce waste going to landfills, and manage the remaining waste that does go to landfill.

To enhance education and awareness, the **ministry** will:

- new
  - lead and collaborate with stakeholders and stewardship organizations to develop a comprehensive communications strategy regarding solid waste and waste reduction in Saskatchewan, which will include a multi-year education campaign to raise awareness of this strategy and change behaviour to reduce and divert residential and non-residential waste;
- new
- work with the Northern Lights Chapter of the Solid Waste Association of North America to implement a Saskatchewan-specific Landfill Operator Certification Program requiring all landfill operators to be certified by 2025;
- new
- work with the Saskatchewan Urban Municipalities Association (SUMA) and the Saskatchewan

Association of Rural Municipalities (SARM), for municipalities to conduct education and awareness of waste issues and solutions in their communities;

- work with the Ministry of Education to review provincial curricula to ensure students have a general understanding of risks associated with waste; measures that can be taken to identify those risks; and the ability to propose solutions to mitigate human and environmental health concerns due to waste;
- engage First Nations communities to allow the ministry to better understand the challenges related to on-reserve waste management; and
- collaborate with First Nations communities to increase education and awareness of waste diversion programs, waste management best practices and the benefits of regional collaboration.



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

Many municipalities and First Nations communities are voluntarily forming regional waste management authorities to share the costs of waste management across a larger population. This has resulted in the closure of many unsustainable, stand-alone landfills that pose significant financial, environmental and human health risks and liabilities.

This strategy encourages municipalities to take advantage of regional opportunities to manage solid waste and reduce these risks. To enhance the uptake of regional solutions for waste disposal and diversion across Saskatchewan, the **ministry** will:

 work with the Ministry of Government Relations and the federal department of 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;

- work with the federal government through the Investing in Canada Plan to close and decommission unsustainable landfills or enhance existing municipal or regional waste management facilities;
- provide cost-shared grants to support non-capital activities associated with pursuing regional work (e.g. governance capacity, consultations, etc.), coordinated by Saskatchewan's municipal associations (SUMA, SARM, New North, etc.) and the Ministry of Government Relations; and
- collaborate with municipalities to review and assess barriers to participation in regional solutions and identify options to reduce them. The Ministry of Environment will share its findings by fall 2021.





#### Provide a modern, efficient and effective regulatory system for waste disposal and management.

A common message coming out of the spring 2017 public engagement activities and the Advisory Committee recommendations was the need for consistent enforcement and application of rules and regulations to address matters related to landfill management in Saskatchewan.

To address these issues, the **ministry** will:

- review The Municipal Refuse Management
  Regulations and its enforcement to remove
  administrative red tape from the regulations and
  compliance. At a minimum, this review will occur
  every 10 years;
- initiate a thorough regulatory review of The Municipal Refuse Management Regulations and associated programs with the goal of modernizing regulations to ensure their ongoing effectiveness, efficiency and relevancy, taking into consideration best practices from other jurisdictions within and outside of Canada. The review will take place within five years;

 establish a Solid Waste Management Advisory Committee with representation from key client groups to provide ongoing support and oversight of this strategy's implementation, within one year of implementing the strategy;

- finalize a composting guidance document and update all landfill and waste management guidance documents to ensure the availability of compliance requirements and expectations by April 2020;
- recommend development of Saskatchewan
   Environmental Code chapters for transfer stations and composting facilities for implementation in 2022-23, in consultation with the Saskatchewan Environmental Code Advisory Committee; and
- review ministry personnel and technical capacity requirements for waste management programs to ensure efficient and effective oversight and delivery of landfill regulations and programs.



#### Enhance waste diversion across Saskatchewan.

New waste diversion streams are needed, such as food waste and organics, and improved accessibility to diversion facilities in northern and remote areas. To meet the province's goals, addressing the diversion of non-residential wastes is also critical.

To enhance waste diversion, the **ministry** will:

- new
- implement a provincial stewardship program for material identified in the recently approved Household Hazardous Waste Product Stewardship Regulations;
- review all stewardship programs for effectiveness and efficiency to identify opportunities for improvement, including the potential creation of new stewardship programs. The first priority will be the program for household paper and packaging, with a review commencing in 2020-21;
- support Recycle Saskatchewan and its efforts to identify opportunities for increased accessibility to waste diversion options in northern and remote regions;

- engage with stakeholders, including municipalities, restaurants, wholesale food distributors and the public, to reduce food waste to help meet waste reduction targets. Government will report on the outcomes of the engagement by summer 2021;
- engage with stakeholders, including municipalities, private landfills, recycling organizations and private sector businesses to develop a diversion program for non-residential waste by spring 2022; and
- explore regulatory options for products and materials identified in the Canada-Wide Action Plan for Extended Producer Responsibility, including construction and demolition materials; furniture, textiles and carpets; appliances (including ozone-depleting substances); and mercury-containing lamps and products.



#### Foster innovative and sustainable solutions to manage waste.

Waste disposal and diversion present a challenge that requires creative new ideas, while providing added benefits to the economy.

To foster innovative and sustainable solutions for waste reduction, **government** will:

- work with clients to identify and advance offset projects in support of Prairie Resilience the province's climate change strategy which will allow large emitters to purchase offset credits to help achieve their GHG emission reduction targets. Eligible projects may include waste management practices that go beyond business-as-usual activities or regulatory requirements, such as: regionalized waste facilities with methane capture; organic composting programs; incinerated-waste-to-energy projects; and afforestation at closed landfills;
- continue to support innovation for waste management through initiatives such as the Government of Saskatchewan Innovation Challenge;
- identify opportunities to enhance communications of investment opportunities in waste management and diversion fields;



- engage all key clients in exploring the potential benefits of a landfill levy, similar to what is used in Manitoba. The proceeds from the levy would be used to fund waste reduction and diversion efforts across the province, including investment for the research and development of new technologies. A report on engagement activities and findings will be made public in spring 2022;
- continue to provide research and development funding for value-added processing to advance economic development initiatives for bio-related projects (e.g. biofuels) developed from unused crop residues, oilseed waste, animal waste and cooking oil/fat wastes;
- review waste management and reduction technologies and solutions in other jurisdictions across Canada and internationally, and assess their feasibility for Saskatchewan; and
- promote and encourage projects showcasing new technologies to manage waste and enhance diversion, with an eye towards commercialization (e.g. incineration and waste to energy).







#### Demonstrate government leadership in waste management.

Another common theme identified throughout the development of this strategy was the Government of Saskatchewan must be a champion for waste management and diversion in the province. Since government has the authority to shape policies and rules, it is well-positioned to influence waste reduction and diversion efforts.

To champion and demonstrate leadership for waste management and diversion, **government** will:

- fund solid waste management initiatives through the Gas Tax Fund and the Northern Capital Grants Program, administered through the Ministry of Government Relations;
- pursue existing or develop tailor-made funding mechanisms with organizations across the Government of Saskatchewan, the federal government or other provinces and territories to implement and sustain best practices for waste management and diversion;
- work with federal, provincial and territorial partners through the Canadian Council of Ministers of Environment Strategy on the implementation of the Zero Plastic Waste Strategy. Saskatchewan is the co-lead on the following two actions:
  - facilitate consistent EPR programs for plastics; and
  - develop a roadmap to address priority single-use and disposable plastics most commonly released into the environment.
- conduct waste audits at major facilities every five years to obtain a better understanding of waste generation across government. Baseline data for each of these facilities will be established and inform targets for reduction;
- new
- pilot a comprehensive waste diversion program at the Ministry of Environment's main building in Regina, including organic collection and disposal, with the goal of expanding throughout government;
- collaborate with neighbouring jurisdictions to identify opportunities for waste reduction and diversion where economies of scale are necessary to succeed;

- continue to work with Indigenous Services Canada on the First Nations Waste Management Initiative to support programs for diverting waste from northern and remote First Nations communities that face barriers due to geography;
- review government procurement policies and determine potential options to reduce waste in products regularly used for day-to-day government activities over the 2020-21 fiscal year;
- decommission all provincial park-based landfills by 2021, with the exception of one location where an alternate solution is being explored. The removal of solid waste from provincial parks has been contracted out to service providers in partnership with regional landfills; and
- establish a pilot initiative for recycling in provincial parks in 2020-21. The results of the pilot will inform the extension of a recycling initiative in additional parks going forward.





### Monitoring and reporting

The Ministry of Environment will lead on the commitments identified in this strategy, in partnership with other ministries and agencies across government. The ministry will publicly release an annual progress report on each of the six goals and the commitments they contain.

Performance measures to determine the progress of this strategy include:

- amount of waste generated in kilograms per capita;
- percentage of population served by a regional landfill model;
- number of landfills closed and decommissioned;
- percentage of population aware of provincial waste reduction and recycling programs;
- amount of new investment to reduce, manage and divert solid waste from landfills;
- number of landfill operators with landfill operator certification; and
- percentage of population with access to recycling programs.





### Next steps

With the finalization of this Solid Waste Management Strategy, including the identification of goals and commitments, the province will now move towards action and application.

Implementation priorities over the coming years are outlined in the timeline document. Many of these priorities will involve additional engagement with key client groups to better articulate the approach and commitments outlined in this strategy. The process could include engagement with:

- Urban and rural municipalities;
- First Nations communities;
- Waste management companies;
- Recycling companies;
- Product stewards;
- Manufacturers;
- Private landfill operators;
- Regional landfills;
- Academia; and
- Members of the general public.

The strategy will be reviewed in its entirety every five years to help ensure it remains on track. This will allow new commitments and priorities to be identified as the province expands its understanding of waste management opportunities, and in relation to the *Saskatchewan Growth Plan*.

### TIMELINE

The following timeline includes solid waste management strategy initiatives with specified initiation or completion dates. For a complete listing of ongoing commitments and other initiatives, please see the full list of strategy goals.



2020

20/21

Review The Municipal Refuse Management Regulations and its enforcement in 2019 to remove administrative red tape from the regulations and compliance (this review will occur at least every 10 years; within five years, initiate a thorough regulatory review of The Municipal Refuse Management Regulations and associated programs).

Finalize a composting guidance document and update all landfill and waste management guidance documents to ensure the availability of compliance requirements and expectations by April 2020.

Review all stewardship programs for effectiveness and efficiency to identify opportunities for improvement, including the potential creation of new stewardship programs. The first priority will be the **program for household paper and packaging**, with a review commencing in 2020-21.



2021



Engage with stakeholders, including municipalities, restaurants, wholesale food distributors and the public, to reduce food waste to help meet waste reduction targets; outcomes of the engagement

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will be reported by summer
2021.

Share findings of a ministry review and assessment of barriers to municipal participation in regional solutions and identify options to reduce them by 2021.

Review government procurement policies and determine potential options to reduce waste in products regularly used for day-to-day government activities over the 2020-21 fiscal year.



2022



Decommission all provincial park-based landfills by 2021,

with the exception of one location where an alternate solution is being explored; establish a pilot initiative for recycling in provincial parks in 2020-21.

Engage with stakeholders, including municipalities, private landfills, recycling organizations and private sector businesses to develop a diversion program for non-residential waste by spring 2022.

Engage all key clients in exploring the potential benefits of a landfill levy, and **publicly report on engagement activities** in spring 2022.







Waste reduction targets of 30 per cent by 2030 and 50 per cent by 2040.

Implement a
Saskatchewan-specific
Landfill Operator
Certification Program
requiring all landfill
operators to be certified by
2025.

Recommend development of Saskatchewan Environmental Code chapters for transfer stations and composting facilities for implementation in 2022-23.