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Manitoba Waste Diversion and Recycling Framework Review

FINAL REPORT

March 31, 2021

MANITOBA CONSERVATION AND CLIMATE

April 28, 2021

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Attention: Honourable Sarah Guillemard
Minister of Conservation and Climate

Manitoba Waste Diversion and Recycling Framework Review – Final Report

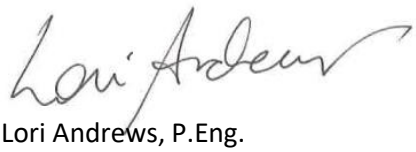
Please find attached the final report for the Manitoba Waste Diversion and Recycling Framework review project. This report examines the current state of waste diversion and recycling programs in Manitoba, and identifies gaps in the current programs. A jurisdictional best practices scan describes alternative delivery approaches which may address the gaps identified. The report also describes what was heard during the two phases of stakeholder engagement, and provides recommendations on next steps, as well as policy tools and levers to consider.

If you have any questions or comments, please feel free to contact Jeannie Bertrand via email at jbertrand@dillon.ca.

Sincerely,

DILLON CONSULTING LIMITED

Jeannie Bertrand, P. Geol.
Associate, Project Manager



Lori Andrews, P.Eng.
Technical Project Lead

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Acronyms, Abbreviations, Definitions

The definitions, acronyms and abbreviations used throughout this report are listed alphabetically below.

AMM	*The **Association of Manitoba Municipalities** is an organization representing all of Manitoba's incorporated municipalities, including the City of Winnipeg.*
AMO	*The **Association of Municipalities of Ontario** is an organization representing all of Ontario's municipalities.*
B.C.	***The Province of British Columbia***
BBPP	*The **Blue Box Program Plan** was developed by Stewardship Ontario in conjunction with Waste Diversion Ontario for the waste diversion program for blue box materials in Ontario.*
CBA	***Canadian Battery Association** is the stewardship organization for lead-acid batteries in Manitoba.*
CBCRA	***Canadian Beverage Container Recycling Association** is the stewardship organization for the stewardship program Recycle Everywhere in Manitoba.*
CCME	*The **Canadian Council of Ministers of the Environment** is an inter-governmental organization in Canada with members from the federal, provincial and territorial governments.*
CR&D	***Construction, renovation and demolition** waste is generated by residential and ICI construction renovation and demolition activities. It includes materials such as wood, drywall, certain metals, cardboard, doors, windows, wiring, etc. It excludes materials from land clearing on areas not previously developed, as well as materials that include asphalt, concrete, bricks and clean sand or gravel.*
CIF	*The **Continuous Improvement Fund** provides funding to support municipal Blue Box recycling projects in Ontario.*
Circular Economy	*A **circular economy** is an alternative to a traditional linear economy (make, use, dispose) in which resources are kept in use for as long as possible, extract and retain the maximum value from resources and products whilst in use, then recover and regenerate products and materials at the end of each product service life.*
Composting	***Composting** is an aerobic biological treatment process used for management of biodegradable residential waste, such as leaf and yard waste or food wastes, and for industrial, commercial and institutional (ICI) and agricultural wastes including manures, food processing wastes and biodegradable industrial process by-products.*

CWTA	***Canadian Wireless Telecommunications Association*** *is the stewardship organization for the stewardship program Recycle My Cell.*
Designated Material	*A* ***designated material*** *within the meaning of The Waste Reduction and Prevention (WRAP) Act regulations.*
Diversion	***Diversion*** *represents the quantity of materials diverted from disposal facilities and represents the sum of all materials collected for reuse or recycling at a recycling, composting or other facility.*
ECCC	***Environment and Climate Change Canada*** *is the department of the Government of Canada responsible for coordinating environmental policies and programs.*
EEE	***Electrical and electronic equipment***
EEQ	***Éco Entreprises Québec*** *is the stewardship organization for containers, packaging and printed paper in Québec.*
EFW	***Energy-from-waste*** *is the process of generating energy in the form of electricity and/or eat from primary treatment of waste or the processing of waste into a fuel source. See also waste-to-energy.*
EngageMB	*The public platform for Manitoba government's engagement and consultation with Manitobans, https://engagemb.ca/*
EPR	***Extended Producer Responsibility*** *is a policy approach in which a producer's responsibility, physical and/or financial, for a product is extended to the post-consumer stage of a product's life cycle. EPR shifts responsibility upstream in the product life cycle to the producer (i.e. brand owners, first importers or manufacturers) and away from municipalities and general taxpayers.*
EPRA	***Electronic Products Recycling Association*** *is the stewardship organization for the End-of-Life Electronics Stewardship Program.*
EOL	***End-of-life*** *referring to end of usage life of a product by its user.*
EQA	*The* ***Environment Quality Act*** *enables EPR programs in Québec.*
EU	***European Union***
FCM	*The* ***Federation of Canadian Municipalities*** *is an organization representing over 2,000 Canadian municipalities.*
FNWMI	*The* ***First Nations Waste Management Initiative*** *is federal funding to modernize and improve First Nations Solid Waste Infrastructure provided through Indigenous Services Canada.*
GHG	***Greenhouse gas***

Green Manitoba	***Green Manitoba*** *was a Special Operating Agency (SOA) that operated from April 1, 2006 to April 12, 2017 for the Manitoba government.*
HHW	***Household Hazardous Waste*** *includes all household materials designated as hazardous, due to their nature or quantity, and requiring special handling techniques as specified by legislation or regulation.*
HPSA	***Health Products Stewardship Association*** *is the stewardship organization for the Medications Return Program.*
HRAI	***Heating, Refrigeration and Air Conditioning Institute of Canada*** *is the stewardship organization for the Thermostat Recovery Program in Manitoba.*
Incentive	*Payment or financial benefit received for undertaking waste diversion activities of various waste streams that would have otherwise been disposed of at a landfill site or other disposal facility.*
Incineration	***Incineration****, in the context of waste, refers to the burning of waste.*
ICI/IC&I	***Industrial, commercial and institutional*** *waste is the waste generated by all non-residential sources in a municipality, and is excluded from the residential waste stream, also IC&I.*
IPR	***Individual producer responsibility*** *is a regulatory model that places full end-of-life product responsibility on the producers, importers and brand owners of a product.*
ISC	*The Department of* ***Indigenous Services Canada*** *is responsible for policies relating to Indigenous peoples in Canada.*
ISWRMP	*Refers to Metro Vancouver's* ***Integrated Solid Waste Resource Management Plan*** *for waste reduction.*
ITT/AV	***Information technology, telecommunications and audio visual equipment***
KPI	***Key performance indicator***
LAB	***Lead-acid battery***
LFHW	*The* ***Love Food Hate Waste*** *is a campaign aimed at reducing avoidable food waste.*
LYW	***Leaf and yard waste***
Manitoba	*The Government of Manitoba, as represented by the Ministry of Conservation and Climate (MCC).*
MARR	*The* ***Manitoba Association of Regional Recyclers*** *is an organization of individuals responsible for recycling and waste management in municipalities as well as industry partners involved in these processes.*

MARRC	***Manitoba Association for Resource Recovery Corporation*** *is the stewardship organization for the Used Oil and Antifreeze Program in Manitoba.*
MCSP	***Manitoba Composts Support Payment*** *for organic materials.*
MER	***Mother Earth Recycling*** *is an Indigenous Social Enterprise in Winnipeg, Manitoba focusing on recycling initiatives such as mattresses and electronics.*
MHSW	***Municipal hazardous or special waste***
MIPC	***Municipal and Industry Program Committee*** *for Blue Box PPP in Ontario.*
MMRP	***Manitoba Medications Return Program*** *overseen by HPSA in Manitoba.*
MMSM	***Multi-Material Stewardship Manitoba*** *is the stewardship organization for the PPP program in Manitoba.*
MOE	***Ministry of the Environment***
MRF	***Material Recovery Facility****; a recycling sorting plant.*
MSW	***Municipal Solid Waste****; municipal solid non-hazardous waste generated by residential, ICI and CR&D sources*
MV	***Metro Vancouver***
NESL	***Nova Scotia Environment and Labour***
NACC	***Northern Association of Community Councils*** *in Manitoba*
NGO	***Non-Government Organization***
Non-Residential Waste	*This includes municipal solid non-hazardous waste generated by ICI sources as well as waste generated by construction and demolition activities.*
NZWC	***National Zero Waste Council***
OCC	***Old corrugated cardboard***
ODS	***Ozone depleting substance***
P&E	***Promotion and education***
PCA	***Product Care Association*** *is the stewardship organization for the Household Hazardous Waste Stewardship Program.*
PPP	***Printed Paper and Packaging;*** *material managed by* ***MMSM*** *in Manitoba.*
PRO	***Producer Responsibility Organizations.*** *See also stewardship program.*
PSI	***Product Stewardship Institution***

Recyclable Material	*Any material that has reached the end of its useful life in the form or purpose for which it was initially made and that can be recycled into a material that has value as a feedstock in another production process.*
Recycling	***Recycling** is the process whereby a material is diverted from the waste stream and remanufactured into a new product or is used as a raw material substitute.*
Residential Waste	***Residential waste** is solid waste from residential sources, which include all households. This includes waste that is picked up by the municipality and waste from residential sources that is taken by the generator to depots, transfer stations and disposal facilities.*
RMC	***Recycle My Cell** national stewardship program for cell phones and devices.*
ROC	***Rapid Organic Converter** is technology which converts carbon-based materials to energy.*
RPRA	***Resource Productivity and Recovery Authority***
RRCEA	***Resource Recovery and Circular Economy Act***
SO	***Stewardship Ontario***
Stewardship Organization	*An entity designated by a producer or producers to act on their behalf to administer an extended producer responsibility or product stewardship program. In Canada, a **stewardship organization** may be managed under a **producer responsibility organization (PRO)**.*
SSO	***Source Separated Organics**, i.e. typically kitchen food waste.*
SUPs/SUIs	***Single-use Plastics / Single-use Items;** products designed for single use such as bags, straws, cups, take out containers and cutlery.*
SWRM	***Solid Waste Resource Management***
Transfer Station	*A facility at which waste transported by vehicles involved in collection is transferred to other vehicles that will transport the waste to a disposal or recycling facility.*
TSM	***Tire Stewardship Manitoba** is the stewardship organization for the Tire Stewardship Program in Manitoba.*
Waste	***Waste** is a material that is unwanted by its producer. The unwanted material may be by-products of a production process or products that have been consumed from the perspective of the current holder or have lost their original inherent value from the consumer's perspective.*
Waste Disposal Ground	*A facility at which waste is landfilled for final disposal and is a Class 1, Class 2 or Class 3 waste disposal ground (landfill) as determined by regulation under The Environment Act.*

Waste for Disposal	*All materials not wanted by their generator and which are discarded for disposal at a waste disposal ground (excludes materials destined for recycling and composting). This does not include any material used as landfill cover or contaminated soils processed for later reuse or landfill cover.*
WDO	***Waste Diversion Ontario***
WDTA	***Waste Diversion Transition Act***
WEEE	***Waste electrical and electronic equipment***
WMIS	*Statistics Canada's bi-annual* ***Waste Management Information Survey***
WMR	***Winnipeg Metro Region***
WRAP Act	*The* ***Waste Reduction and Prevention Act*** *enables the minister of Sustainable Development to designate materials with the potential to become waste and develop regulatory requirements that support the reduction and prevention of waste in the province.*
WRARS	***Waste Reduction and Recycling Support*** *program under the WRAP Act.*
WTE	***Waste-to-energy*** *is the process of generating energy in the form of electricity and/or eat from primary treatment of waste or the processing of waste into a fuel source. See also energy-from-waste.*

Executive Summary

Introductions and Objectives

Over the last few decades, the Government of Manitoba has made specific efforts to improve waste management practices within the province. Provincial legislation has continued to evolve in an effort to establish more progressive, diversion-based waste management programs. This project aims to review the current waste diversion and recycling framework in Manitoba to identify its strengths and gaps and recommend options to modernize and improve the current framework.

The nine project overall objectives were:

1. Gather ideas on how to enhance current waste diversion and recycling programming to include new products, sectors and processing technologies; increase program accessibility across the province; and identify other enhancements for exploration.
2. Explore options and make recommendations for increasing accountability and efficiency of the stewardship programs including improvement to financial and non-financial performance indicators.
3. Identify what aspects of stewardship programs and initiatives are effective and make recommendations on what should change.
4. Provide insights on how Manitoba can work with the private sector and municipalities to build the conditions for growth of local circular economies.
5. Recommendations on how to leverage the departmental allocation of WRARS funds to drive behavior changes that reduce waste and increase waste diversion and recycling.
6. Ensure recommendations identify the current and emerging opportunities and barriers facing waste diversion and recycling in Manitoba.
7. Provide insights on how to position Manitoba to meet ambitious waste diversion and recovery targets being set nationally and internationally (including the Ocean Plastics Charter and the Canadian Council of Ministers of the Environment [CCME] aspirational waste reduction goal / Canada-wide Strategy on Zero Plastic Waste).
8. Provide insights on how to position Manitoba to meet greenhouse gas (GHG) emissions reduction targets established by the Manitoba government.
9. Recommendations on how the Manitoba government and its partners can work together to achieve waste reduction targets and promote synergy amongst the various players.

The framework review project had four phases:

- Current State Analysis;
- Policy Landscape and Best Practices Jurisdictional Scan;
- Stakeholder Consultation and Engagement; and
- Recommendations and Reporting.

Project Methodology and Approach

Current State Analysis Approach

The Current State Analysis review was comprised of three main tasks:

1. A regulatory review of Manitoba's Waste Reduction and Prevention Act (WRAP);
2. An evaluation of Manitoba's 12 stewardship programs; and
3. An evaluation of Manitoba's Waste Reduction and Recycling Support (WRARS) landfill levy and funding allocation.

The Current State Analysis reviewed the current waste reduction and recycling legislation and programming to understand the gaps and challenges associated with the current provincial system by learning from consultation with municipalities, industry providers, Producer Responsibility Organizations (PROs), service providers and the public. The consulted stakeholder list can be found in **Appendix A.**

Insights gathered from engaging with stakeholders and the public informed the Current State Analysis and also informed final recommendations.

Policy Landscape and Best Practices Jurisdictional Scan Approach

This second phase of the review researched topics and jurisdictions relevant to Manitoba's Current State to identify opportunities to address identified waste diversion and recycling challenges and proposed suggestions and approaches from other successful waste diversion and recycling jurisdictions.

Topics for best practices to include were identified by the Province of Manitoba in the Request for Proposal (RFP), and the additional topic of "waste hierarchy" was also added. A list of two to three recommended jurisdictions for each best practice, along with the rationale for selecting the jurisdiction, was presented to the Province for review and approval. Topics for the policy landscape scan and a brief overview of each was also presented and approved by the Province. The final topics selected are presented in **Section 6.0** Policy Landscape Scan and **Section 7.0** Best Practices Jurisdictional Scan. Insights gathered from the scans also informed final recommendations for Manitoba.

Stakeholder Consultation and Engagement Methodology

The consultation and engagement methodology and approach to the framework review was comprised of two parts:

- **Part 1** – Preliminary Consultation and Surveys; and
- **Part 2** – Stakeholder Workshops.

Preliminary consultation was conducted during the Current State Analysis phase of the review. In anticipation of the series of stakeholder workshops (Part 2) designed to take a deeper consultation into

potential options and topics, stakeholder consultation included a first phase of surveys, emailed questionnaires and interviews (Part 1). The 12 steward program organisations were interviewed by team leads. Other stakeholders were invited to complete emailed questionnaires or were interviewed directly by team leads. A public survey hosted on EngageMB and a separate municipal survey was emailed to municipal stakeholders.

Three virtual engagement workshops were conducted online using the Zoom and Jamboard interactive platforms. The first workshop was focused on steward program stakeholders. The second workshop was focused on municipalities, community groups, service providers and NGOs. The third and final workshop brought all stakeholders together to share perspectives with each other on the area for exploration topics. Staff from Manitoba also were present as observers. Each workshop was 90 minutes.

Recommendations and Reporting Approach

The final phase of the review presents the findings from the first three phases: Current State Analysis, Policy Landscape and Best Practices Scan, and Stakeholder Consultation and Engagement. A draft final report was presented for Manitoba's review, followed by a final report. The review's recommendations are presented throughout this report and summarized in **Section 9.0**.

Current State Analysis and Consultation Results

The Current State Analysis reviewed the following:

1. A regulatory review of Manitoba's Waste Reduction and Prevention Act (WRAP);
2. A review of Manitoba's 12 stewardship programs; and
3. A review of Manitoba's Waste Reduction and Recycling Support (WRARS) landfill levy and funding allocation.

Review of Manitoba's Waste Reduction and Prevention Act (WRAP)

The WRAP Act (The "Act") was passed in 1990 and it seeks to "to reduce and prevent the production and disposal of waste in the province consistent with the principles of sustainable development."[1] The Act states that its purpose is to *encourage* consumers, manufacturers, distributors, retailers, governments, government agencies and others to develop and adopt practices and programs to reduce and prevent waste.[2]

The Act also speaks to stewardship for industry and governments with respect to waste management under the banner of "sustainable development".[3] It wants Manitobans to acknowledge responsibility for both the environment and the economy.[4] It further states that decisions with respect to waste management should have due regard for both environmental and human health impacts as well as economic impacts.[5] Arguably,

[1] *Ibid* at s. 1(1).
[2] *Ibid* at s. 1 (1)(a)
[3] *Ibid* at s. 1(2)(a).
[4] *Ibid* at s. 1 (2)(b).
[5] *Ibid* at s. 1(2)(e).

these provisions also dilute the force of the requirements of the Act. The purpose section of a legislation, such as Section 1 of the WRAP Act, is very important, as it is typically used by courts as an interpretation tool to understand the meaning of the rest of the provisions of an act.

The non-binding nature of the obligations under the Act is made more apparent by the powers granted to the Minister of Conservation and Climate[6] (the "Minister"), which are to *consult with* and *encourage* manufacturers, distributors, retailers, consumers and governments, among others, to implement programs and practices to reduce and prevent waste.[7] At most, the Act allows the Minister to "do any acts the minister considers necessary to carry out the purpose of this Act."[8]

The Act requires WRAP levies, including any additional WRAP levies required by the regulation, to be collected and remitted[9] or paid[10] by manufacturers, distributors or retailers of the materials designated by the Act in accordance with the regulations. Fines and imprisonment can be imposed for contraventions of the Act's provisions.[11]

The WRAP Act regulates a number of "designated materials", which are determined by regulations implemented under the Act.[12] The Act itself does not implement a waste hierarchy.
The Act provides a very broad definition for the word "recycle" which includes "to do anything, including reuse or recover, that results in providing a use for a thing that otherwise would be disposed of or dealt with as waste, but does not include the disposal of waste in land, the use of a thermal destruction process or any other activity prescribed by regulation."[13]

The WRAP Act leaves several things to be determined by regulations, such as what materials are recyclable and which are waste, among others. Despite regulating different types of materials, the regulations have common elements such as set out the materials obligated under the regulation, among others. As such, a guideline accompanies each regulation setting out more specific requirements for stewardship programs. The WRAP review sections of this report go into greater detail regarding the elements of the regulations and guidelines under the Act.

A preliminary review of the WRAP Act (the "Act") reveals that a number of actions can be taken to strengthen the obligations of industry subject to the extended producer responsibility (EPR) system set up by the Act and its regulations. However, given the diluted obligations set out at the purpose section of the Act, it is very likely that a wholesale revision of the Act, including perhaps through its repeal and the enactment of new legislation and regulations, may be required to strengthen Manitoba's EPR system.

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[6] Government of Manitoba, "WRAP Act", *Sustainable Development: Waste Wise*. Retrieved from: https://www.gov.mb.ca/sd/wastewise/wastereduction/act.html.
[7] *WRAP Act, supra* at s. 3.
[8] *Ibid* at s. 3(g).
[9] *Ibid* at s. 12.
[10] *Ibid* at s. 13.
[11] *Ibid* at s. 20.
[12] *Ibid* at s. 2.
[13] *Ibid* at s. 2.

Although a jurisdictional scan may reveal that certain steps can be taken to strengthen certain obligations of the Act without the requirement of substantive revisions or new enactments, it is important that gaps in material collection and management targets, accessibility standards, among other things, be addressed to ensure the Act's effectiveness and to facilitate the enforcement of its provisions.

The following are some of the steps that can be taken to strengthen the Manitoba's EPR system through the legislation that governs it:

- **Mandatory Purpose Section:** The Act should replace the permissive and voluntary language at the purpose section of the Act (e.g., "encourage… practices and programs for the reduction and prevention of waste") to more mandatory language (e.g., "hold persons accountable for preventing and reducing waste").
- **The Waste Hierarchy**: The Act, and/or its regulations, should implement a clear waste hierarchy that sets out priorities for the handling of specific waste in accordance with its environmental impacts.
- **Competition Law Protections:** The current Act, or its regulations, do not provide protection under the federal *Competition Act*. This protection is important and should be included in the WRAP Act. In the context of EPR programs, this protection ensures that ministerial approval of program plans does not result in the inadvertent protection of anti-competitive behaviour that follows the implementation of program plans as approved. Additionally, it ensures that there is a level playing field among stewards and competing stewardship programs. This goes beyond allowing more than one producer responsibility organization (PRO) to operate in the province. Allowing more than one PRO to operate does not, in and of itself, do away with competition concerns. One, among many PROs, could act in an anti-competitive way with respect to its competitors; and, because their actions are approved by the Minister, they might justify their conduct as sanctioned by government.

  Competition law is concerned with how companies, or market actors, operate once they are in the market to ensure that there's equal access to competitors, such that new companies can enter the market at any time and have the opportunity to expand within the areas currently serviced by existing PROs.
- **Specific Collection and Management Targets**: The regulations under the Act should set out specific collection and management targets for each material and subcategories of material obligated under the Act. Performance targets should be set for subcategories of materials (e.g., rigid plastic, film plastic, or PET, HDPE, etc.). This provides clarity and certainty to producers' obligations with respect to each material, ensuring that penalties or fines can be imposed if targets are not met. Additionally, a level playing field is created as poorly performing materials are not allowed to piggyback on the success of better performing materials. Moreover, a level playing field is created among stewardship programs by ensuring that different programs are not subject to different collection and management obligations.

- **Concrete Performance Measurement Approaches:** Further to levelling the playing field among stewardship programs, the Act, and/or its regulations, should set out specific and uniform performance measurement approaches for the collection and management of materials obligated under the regulations. This would increase the transparency and accuracy of program or producer[14] evaluations, reduce municipal costs, and facilitate the enforcement of non-performing or poorly performing programs and/or producers.
- **The Minister's Office and Institutional Capacity:** There is legitimate concern with respect to the oversight and evaluation of stewardship programs by ministries given the limited institutional capacity of ministries (funding, staff, technology, etc.) to oversee the performance of the players within an EPR system. Some jurisdictions, such as Ontario, have chosen to create a body, independent of government and funded by the EPR system, to act as a clearinghouse of information from producers, and to evaluate producer performance. Such bodies have also been observed to assist in the identification of free riders, a growing issue particularly with the rise of online sales.[15]
- **Harmonization with Other Provincial Programs:** Rather than requiring stewardship programs to demonstrate harmonization with programs in other provinces, when plans are submitted for approval to the Minister harmonized requirements for stewardship programs should be provided in either the Act or its regulations. This facilitates a level playing field among programs and assists in enforcement of program requirements.
- **Administrative Monetary Penalties vs. Fines/Imprisonment:** The Act currently provides for fines or imprisonment to be imposed for contraventions of the Act. A court case must be brought in order to penalize contraventions of the Act. However, administrative monetary penalties (AMPs) provisions in the Act, or its regulations, may allow penalties to be imposed without the necessity of bringing court cases. AMPs have been found to be a quick, clear and tangible way of addressing contraventions of regulatory schemes. They can be imposed by an administrative body for non-compliance with a regulatory scheme rather than by a court.[16] They are primarily intended to maintain compliance or to regulate conduct;[17] at the same time, the Act could provide for the imposition of criminal sanctions such as fines or imprisonment to regulate the same conduct in egregious cases.[18]

Evaluation of Manitoba's 12 Stewardship Programs

There are currently 12 stewardship programs for numerous materials in Manitoba partially funded by PROs. They are:

1. Batteries (Call2Recycle);
2. Lead Acid Batteries (Canadian Battery Association);
3. Beverage Containers (Canadian Beverage Container Recycling Association);

[14] This depends on the type of EPR implemented, whether that is collective producer responsibility or individual producer responsibility.
[15] Organization for Economic Cooperation and Development, "Extended Producer Responsibility and the Impact of Online Sales" (2018). Retrieved from: https://www.oecd.org/environment/waste/policy-highlights-extended-producer-responsibility-and-the-impact-of-online-sales.pdf .
[16] *Guindon v. R*, 2015 SCC 41 at para. 67.
[17] *Ibid* at para. 45.
[18] *Ibid* at para. 68.

4. Cell Phones (Canadian Wireless Telecommunications Association);
5. Pesticides Containers, Agricultural (CleanFarms Inc.);
6. Electrical and Electronic Waste (Electronic Products Recycling Association);
7. Medical – Expired and unused medications (Health Products Stewardship Association);
8. Thermostats containing mercury (Heating, Refrigeration and Air Conditioning Institute of Canada);
9. Used oil, filters, and antifreeze (Manitoba Association for Resource Recovery Corporation);
10. Printed Paper and Packaging Recyclables (Multi Material Stewardship Manitoba);
11. Paint, CFL lights, etc. (Household Hazardous Waste – Product Care Association); and
12. Tires (Tire Stewardship Manitoba).

A Current State Analysis summary matrix is provided for each of the 12 programs. Each program summary table includes an analysis, based on available data and consultations, of the following topics:

- **Reporting** – Mechanisms for report KPIs including performance indicators for:
  - Financial; and
  - Non-Financial:
    - Public Awareness;
    - Participation;
    - Recovery Rate;
    - Percent Processed; and
    - Contamination.
- **Funding** – Program-Specific:
  - Municipal Funding Levels; and
  - Funding Formulas.
- **Community Perspectives** – Municipalities and Northern Affairs Community Council's (NACCs) perspectives (via consultation) on:
  - Current Industry-Funded Stewardship Programming; and
  - Its ability to divert waste going to landfill in their communities.
- **Stakeholder Collaboration** – Barriers and opportunities for enhanced coordination and collaboration between the:
  - Government;
  - Stewardship Organizations;
  - Municipalities; and
  - Other Key Waste Diversion and Recycling Stakeholders.
- **Expansion** – How to expand the current waste diversion and recycling programming to include:
  - New Products;
  - Sectors;
  - Processing Technologies; and
  - Other Enhancements.

Review of Manitoba's Waste Reduction and Recycling Support (WRARS) Program

Part 1 – Landfill Levy Review

The WRARS levy is $10.00 per tonne of material disposed at Class 1, 2 and 3 landfills in Manitoba. While Class 1 landfills have scales to weigh disposed waste, landfill owners of Class 2 or 3 landfills can either:

- Estimate waste tonnage using a volume to weight calculation; or
- Use a per capita waste factor of 660 kg (0.66 tonnes) per year.

Private landfills are subject to the $10.00 per tonne landfill levy for waste collected from other generators or municipalities/NACC. Until this year, the levy revenue was deposited to the WRARS account:

- 80% was disbursed to municipalities based on the recycling tonnages reported to Multi-Material Stewardship Manitoba (MMSM) and a funding formula; and
- The remaining 20% was used for various research and program funding needs.

To be eligible for the rebate the community/municipality/NACC has to submit a landfill levy to be in compliance of the WRAP Act. To receive the Recycling Rebate, they have to be registered for the Recycling Rebate, but also pay the landfill levy first. The Recycling Rebate is based on recycling tonnages that are also reported to MMSM as designated materials in the Packaging and Printed Paper Regulation of the WRAP Act.

While the levy has merit and has been successful in other jurisdictions, the relatively modest size of the landfill levy was probably not sufficient to change behaviour. Stakeholders interviewed for this project felt that the tonnes of packaging and printed paper (PPP) recycled during the years from 2011 to 2019 were likely more related to the availability of additional local recycling opportunities and diversion program awareness, rather than as a result of disposal deterrence due to the landfill levy itself. Where the cost of disposal to a business is $150.00 per container, and recycling costs $350.00 per container, a landfill levy of $10.00 per tonne will not make up the difference in cost sufficiently to cause the business to recycle, unless they want to do so for other reasons (reputation, corporate responsibility, etc.). For this reason, recycling tonnes is attributed largely to the residential sector efforts, rather than the Industrial, Commercial & Institutional (ICI) sector. Data from Statistics Canada Waste Management Information Survey (WMIS) was analysed to determine the extent to which overall waste disposal from all sectors (residential and non-residential including construction and demolition waste) has changed in Manitoba since 2000, before the WRARS landfill levy was introduced. The disposed waste varied between 764 to 798 kg per capita disposed from 2000 to 2010. This is often the case with disposed waste which is influenced by the economy and other factors. The amount disposed was highest in 2012 at about 814 kg per capita, and has dropped quite dramatically since that time to a low of 712 kg per capita in 2018.

The European Commission released a research report in April 2012 which explored the use of economic instruments to reduce waste disposed and achieve desired environmental performance. The report *"Use*

of Economic Instruments and Waste Management Performances" was prepared by BioIntelligence Service S.A.S based out of Paris.

The study reported that nineteen EU member states had landfill taxes in place for the disposal of non-hazardous municipal waste. The landfill taxes vary widely in amount, ranging from a low of €3.00 per tonne ($4.00 per tonne) in Bulgaria to over €107.00 per tonne ($145.00 per tonne) in the Netherlands. The study found that in most cases (but not all) there was a correlation between high costs to landfill (tipping fees and landfill taxes combined) and high waste diversion rates. The researchers noted that EU Member States with total landfill charges of lower than €40.00 per tonne ($54.00 per tonne) generally landfilled more than 60% of their waste (i.e. had waste diversion rates of 40% or lower). The researchers further noted that EU Member States were much more likely to achieve a 50% waste diversion from landfill rate or higher where landfill charges approached €100.00 per tonne ($136.00 per tonne). While data for countries such as the UK and Austria show that landfill tonnages decrease significantly when landfill taxes increased; and, data for Ireland and France show a 25% reduction in landfill waste during times when the landfill levies remained relatively constant.

Part 2 – WRARS Funding Formula Review

The objective of the funding formula review was to identify options to better leverage departmental allocation of funds to drive behavior changes that could reduce waste and increase waste diversion and recycling in Manitoba. Based on historical data provided by Manitoba, the allocation of program funds from 2011 to 2020 were the following types of project funding:

- 37% of funding has gone towards HHW recovery
- 32% towards organics projects
- 12% towards research and development
- 10% towards other
- 1% to 4% towards the remaining categories

Since 2017, the Manitoba government has managed the programs and the most recent projects have been awarded funding for waste diversion and recycling opportunities. For this reason, we recommend that landfill operations not be funded through any future program, rather the program funding should focus on direct diversion activities with measurable results and impacts and shared learning outcomes.

Throughout the program years, there has been increased recycling activities overall due to the program funding. The province sees a decreasing reported tonnage by municipalities (by weight) possibly due to a dramatic reduction in newsprint and other printed paper in the recycling program, and lighter material unit weights or "light weighting". It should be noted that the tonnes on which the funding has been allocated until 2019 have decreased quite dramatically in the last few years.

The following suggestions could be considered when modernizing the future program to address program funding allocation and types of programs it would financially support.

The 80/20 split from landfill levy revenues currently is allocated as municipal rebate (80%) and WRARS program funding (20%). While municipalities feel they should receive 100% of the revenue, this would not allocate any funds to developing new diversion programs or studies, especially for programs that typically do not cater to EPR frameworks such as organics and CR&D waste streams. Should the funding continue to be provided to municipalities, there should be more restrictions. The funding should not be used for landfill related activities, and should be approved only for use in diversion related activities.

- Consult further with municipalities, AMM (Association of Municipalities of Manitoba), MARR (Manitoba Association of Regional Recyclers) on their needs, gaps and challenges with respect to funding. Initial municipal feedback suggested that 100% of the levy revenue should go directly back to municipalities. This relates to their general challenges with lack of funding to pay for waste diversion programs. Any future funding provided to municipalities should be earmarked for diversion related activities only.
- The question remains on what portion should go towards the municipal rebate for diversion and what portion should go towards project funding. One option is to maintain the current 80/20 split (or even move it to 90/10 depending on what research program needs are identified) with additional monitoring and program data gathering.
- Municipal rebates currently (80%) are not required to fund future waste diversion and recycling activities. A suggested future requirement is to publicly earmark the rebates towards supporting waste diversion and recycling activities to improve diversion performance and maintain transparency and public trust in recycling programs. Using the funding to support disposal activities should not be permitted.
- Programs should support diversion from disposal activities and report on funded project outcomes; e.g., tonnes diverted, impact of program, GHG, and lessons learned. A final report should be submitted to Manitoba, and all project funding applications should include a plan to share lessons learned with the broad municipal waste diversion community in Manitoba.
- Funding and project final reports should be shared publicly (support program transparency) as a growing resource library for diversion programs in Manitoba.
- A long-term future program plan (strategy) would set out priority areas, targets and goals over the next two, five and ten years.
- Consider renewing the current program, including renaming the program (new phase or version) and updating the program guideline, objective and expectations. Present this renewal, or new phase, in virtual webinars to all stakeholders.
- Initial municipal consultation suggests that the rebates do not cover municipal diversion costs. In addition, the municipal efforts to implement stewardship EPR type programs in their community remains largely a municipal financial, resource, infrastructure and P&E burden rather than entirely the responsibility of the PROS, even long after these stewardship programs have matured and been established in the province, with some established in the mid-1990s.

- Many municipal landfills are reaching their capacity. Municipalities are looking for other diversion programs like organics composting to divert waste and extend landfill life. A rise in renewed interest in waste to energy (WTE) or energy from waste (EFW) alternatives is reported; both WTE and EFW are low on the waste hierarchy and are low value retaining processes (VRPs) in a circular economy. By designating future program funds towards reduction or diversion activities only, projects under WTE or EFW would not be eligible for funding.

The following two types of program priorities are suggested in allocating funds:

- Materials specific program funding (household hazardous waste, organics, construction waste); and
- Operational support funding for various aspects of developing waste diversion programs in the province such as resources, collaboration and operations.

Policy Landscape Scan and Best Practices Jurisdictional Scan

Policy Landscape

The Policy Landscape Scan summarised high level policy influencing drivers and their context to Manitoba. The Policy Landscape Scan provided an overview of the following eight topics that are impacting solid waste management policy and frameworks in Canada and internationally at this time:

1. Plastic Waste;
2. CCME EPR (Canadian Council of Ministers for the Environment, Extended Producer Responsibility): Harmonization and Phase 2 Materials;
3. COVID-19;
4. Waste to Energy vs Landfilling;
5. Municipal Regional Considerations;
6. Landfill Bans;
7. GHG/Climate Change; and
8. Circular Economy.

The following table provides a summary of the policy landscape and the key issues facing Manitoba with respect to waste diversion and recycling today and the near future.

Table ES-1: Policy Landscape

Policy Landscape Topics	Overview Components
Plastic Waste	Includes relevant national and regional targets, initiatives, pacts and agreements, such as the CCME National Zero Plastic Waste Strategy and Ocean Plastics Charter; Federal government's proposed approach to plastic products, such as the recent proposed national ban on six single-use plastic (SUP) items; "big picture" issues when updating legislation. Plastics are addressed through a number of Federal long term Plastics Strategy commitments and industry initiatives such as the recent Canada Plastics Pact. Specifically: • Federal Plastics Waste Initiative; • CCME – Zero Plastic Waste Strategy (Manitoba is on the working group, chair for two years, and has contributed to discussion); and • Industry's new Canada Plastics Pact. These may impact Manitoba moving forward, stays flexible and considers options to ban plastic bags. Recommendations to ban compostable plastic cutlery, etc. It comments on Federal regulatory mechanism for bans and material management. Local options for Manitoba: • Materials; • Processing options for plastics; • Single-use items (SUIs) and bans (jurisdictional review); • Options to stay nimble to align with Federal government as required; and • How Manitoba can move forward and take action while waiting for Federal initiatives.
CCME EPR: Harmonization and Phase 2 Materials	Manitoba has committed to CCME Extended Producer Responsibility (EPR) Phase 1 and 2 materials. Phase 1 has largely been accomplished (packaging and printed paper (PPP), mercury containing thermostats, electronics and electrical equipment, automotive (oil, lead-acid batteries (LABs) and a list of other materials). Phase 2 includes construction, demolition, furniture, textiles carpet and appliances including ozone depleting substances (ODS). CCME has a disposal target of 490 kg per capita per year by 2030; still to tackle organics, construction and demolition waste and bulky wastes such as textiles, furniture, mattresses and carpets (all in CCME EPR Phase 2 list) to help reach the target. EPR Harmonization CCME: British Columbia (B.C.), Quebec and Ontario transition to 100% EPR funding for PPP programs.

Policy Landscape Topics	Overview Components
COVID-19	COVID-19 impact on the recycling industry: • The increase of residential waste generated and the decrease in commercial waste generation, and its impact on waste audit data analysis in the near future. • Provides insight/considerations into how diversion and generation numbers are impacted by COVID-19. • Long term behavioural changes related to waste generation (old corrugated cardboard (OCC) and municipal waste). • Producer Responsibility Organization (PRO) program implications (e.g. program revenue increases due to higher sales during COVID-19 and the impact to program annual surplus [e.g. battery programs experience]). • Impacts on reporting for the next few years due to COVID-19 consumer behaviour and lifestyle changes.
Waste to Energy vs. Landfill	Increased interest in Waste to Energy (WtE), specifically in some prairie provinces and smaller municipalities, led by an interest in decreasing landfill capacity and the "incentive" of revenue generation potential by new technology providers (gasification, pyrolysis, incineration and energy from waste).
Municipal Regional Consideration	Regional considerations (infrastructure, transportation, etc.) such as the geographical spread of rural communities throughout Manitoba and the lack of accessibility and infrastructure in remote, Indigenous and winter road communities; consider Regional or District approach. Stewardship programs and end market issues volatility of end markets for blue box recycled materials and the lack of economy of scale and accessibility of programs for distant rural communities for their materials to reach processors and end markets.
Landfill Bans	Emerging trend of landfill bans as policy/regulatory approach to divert material from landfill. Diversion programs need to be in place before a ban is implemented.
GHG/Climate Change	GHG and climate change will be a growing focus in the future – diversion of organics is the most important aspect of waste management waste streams to contribute to GHG reductions.
Circular Economy Framework	International growth of interest and implementation of Circular Economy roadmaps and interventions to support resource value retention by applying higher waste hierarchy efforts.

Best Practices Jurisdictional Scan

The best practices jurisdictional scan outlines best practices identified, and lessons learned, for the following eight topics:

Policy Frameworks – Full 100% EPR for PPP

- British Columbia, Ontario and Quebec – most recently modernized frameworks.
- All 100% funded by industry, but slightly different.

Stewardship Program Accountability

- Ensuring compliance and improving accountability of stewardship programs.
- Financial and non-financial KPIs.

Stakeholder Collaboration

- Ontario Municipal and Industry Program Committee.
- National Zero Waste Council, Metro Vancouver.
- Product Stewardship Councils, USA.

Enhanced Program Implementation

- Consistency of program implementation (program accessibility).

Municipal Supports

- Continuous Improvement Fund, Ontario.
- Municipal Hazardous Special Waste program, Ontario.
- Circular Economy supports.

Enhanced Program Participation

- P&E using mobile apps and digital media.
- Blue in the Loo campaign.
- Love Food Hate Waste campaign.

Landfill Levies

- Increasing landfill levies shows an increase in waste diversion and reduction in waste landfilled.

Waste Hierarchy

- Waste reduction and diversion policy objective.
- Focus on reduction, reuse and recycling.

Engagement and Consultation

Stakeholder Consultation and Engagement related to the Manitoba Waste Diversion and Recycling Framework review was comprised of two parts:

- **Part 1** – Preliminary Consultation and Surveys; and
- **Part 2** – Stakeholder Workshops.

The goal was to engage with program users and targeted stakeholders to gain an understanding of the current challenges and gaps within the current system, to introduce best practices and proposed concepts to stakeholders for targeted feedback, and to allow the stakeholder groups to engage with each other.

Part 1: Preliminary Consultation and Surveys

In order to achieve engagement objectives, seek input from key stakeholders and the general public, and run a thorough engagement process, several techniques were utilized. A succession of interviews were conducted throughout February and March 2021 with stakeholder representatives from the twelve PROs, municipalities (and representative organizations), Indigenous and northern communities (and affiliated organizations), industry, NGOs, and community groups. Several stakeholders were sent questionnaires developed specifically for them and written responses were exchanged through emails. Concurrently, two surveys were conducted. First, a public survey was developed and posted on EngageMB platform from January 21, 2021 until February 10, 2021. Second, a detailed municipal survey was sent to 27 municipalities, selected to represent Manitoba's diverse communities. The review also considered the results from the recent 2020 Omnibus public survey that included several waste and recycling questions.

In general, we heard positive feedback from Stewardship Program Organizations regarding the current legislation and its allowance for industry to take the lead role. There was acknowledgement of good collaboration between PROs currently, highlighted by the 'Winter Road' initiative and other backhaul efforts. MARR was deemed a supportive forum to share information and networking ideas. There was general support for national harmonization of materials that should be covered by stewardship programs, and of landfill bans as a means to divert those same materials to EPR programs. Notable challenges included provincial staffing fluctuations (getting 'up to speed') and 'free riders' not paying into programs. There was recognition that support from the province would be welcomed in this regard. As GHG reporting is not required currently by legislation, concerns were expressed that a reduction in emissions requirement may compete with an increased accessibility target. Agreement was conveyed regarding the need to focus on plastics, in particular single-use items.

Public Survey Key Takeaways:

- Recycling Information:
  - Is confusing;

- Lack of awareness; and
- Not confident in their knowledge.

- Discouraged By:
  - Lack of local options for recycling;
  - Inconvenience; and
  - Unsure it gets recycled.
- Support for Diversion of:
  - Organics, Plastics, Styrofoam, and Glass.
- Composting:
  - 50% compost and 50% do not:
    - Lack of education on how to compost;
    - Nuisances (including smells and pests); and
    - Limitations due to living arrangements.
- Recycling Program Availability:
  - 41% very satisfied or satisfied; and
  - 34% either dissatisfied or very dissatisfied.
- 71% of Participants Recycle.

Municipal Survey and Interviews Key Takeaways:

- PRO Programs:
  - 100% EPR – complicated for municipalities; need producer accountability and service standards;
  - Lack of consultation on 100% EPR for PPP;
  - Collection by PROs not frequent enough;
  - PPP – not receiving 80% of their eligible expenses;
  - Lack of dialogue between municipalities and PROs – need a forum/council; and
  - Most stewardship programs would not function without municipal support.
- Funding and Program Costs:
  - Recycling collection, transportation, staffing cost burden/barrier, too much financial responsibility on Municipalities, inadequate funding; and
  - WRARS funding 80/20 – felt some rebate amount is being held back; transparency issues.
- Other Comments:
  - Missing diversion opportunities for organics, CR&D;
  - Composting needs to be operationally and financially attainable for municipalities;
  - Illegal dumping concerns;
  - Municipal feedback not reflected in government outcomes; and
  - Do not support landfill bans – onus on municipalities to enforce bans.

Producer Responsibility Organizations (PRO) Interviews Key Takeaways:

- Successes:
  - Legislation is well written; broad, non-specific; allows industry to design plans;

- Support landfill bans;
- Good collaboration between PROs;
- Manitoba is a leader and one of the best regulatory regimes;
- Overall meeting or working towards program plan targets (accessibility, recovery);
- Work with and support municipalities as partners in support of collection, depots, P&E;
- MARR: supportive forum, network; and
- GHG reporting not currently a requirement.

- Challenges:
  - Need Gov't support with free riders;
  - MB staffing changes are a challenge;
  - Support National harmonization;
  - Performance: multiple metrics, not a single metric; and
  - Plastics: Single-Use Plastics (SUP) focus.

Private Sector, Non-Government and Industry Organizations Interviews Key Takeaways:

- Challenges:
  - Lack of program transparency;
  - Lack of recycling access in the north;
  - Pay levy/fees – do not receive same funding and services;
  - Northern shipping cost is a burden;
  - Unrealistic expectation from the PROs;
  - PROs focus on recycling; not reduction; and
  - Unclear – PROs role vs community roles.
- Stakeholder Suggestions:
  - Northern consultant point person – very useful;
  - Idea for one umbrella organization to represent all Pro programs for coordination;
  - Would like to see a technical steering committee;
  - Strategy needs a strong circular economy approach;
  - Regional servicing contracts (processors);
  - Need locally and culturally appropriate education materials; and
  - 100% EPR for MMSM.

Federal Government, Indigenous Organizations, Initiatives and Communities Interviews Key Takeaways:

- Challenges:
  - Paying the enviro fees on some designated materials, but are not provided service access;
  - Limited by capacity and funding for waste management;
  - Challenging to register for PRO programs and meet the requirements to participate;
  - Materials already being stockpiled – no good clarity on what to do next; and
  - Backhaul program is effective, but only serves a limited number of remote communities.

- Stakeholder Suggestions:
  - Develop a northern regional strategy;
  - Support for organics diversion in the north;
  - Align provincial goals and programs with funding available through the First Nations Solid Waste Management Initiative; and
  - Support for addition of mattresses and large appliances as designated materials.

Part 2: Engagement Workshops

The **Stakeholder Webinar Summary** included:

- A summary of the virtual session stakeholder groupings and why selected;
- Attendees of virtual sessions;
- Brief description of how the current state analysis and its consultations were used to create the themes and questions for the stakeholder virtual workshop sessions;
- Topics presented for facilitated discussion at sessions;
- The three sessions' findings and key outcomes summary; and
- Summary of the sessions' presentations and data.

Workshop Areas for Exploration

The following "areas for exploration" were developed from the gap analysis and provided for discussion during the stakeholder engagement workshops. These topics were chosen as areas for discussion because they were anticipated to highlight key differences in approach, level of satisfaction, risks and barriers perceived by different stakeholder groups. These are not all specifically recommended for action by the Province, but are intended as discussion topics to broadly represent some of the recommendations presented as part of this study and potential outcomes resulting from future consultation. The topics chosen for discussion included:

Landfill Bans: for specific material(s) for which alternative diversion programs are active in Manitoba and have viable end markets.

100% EPR: extended producer responsibility (full EPR), in particular for PPP as managed by MMSM in partnership with CBCRA. As an EPR province, this the next stage for modernization of Manitoba's framework and to shift full responsibility back to the producers and reduce financial and resource burdens currently carried by Manitoba's municipalities, communities and the tax base.

Expanded Materials List: in particular for existing stewardship programs, as well as the creation of new EPR-type programs for white goods, mattresses and box springs.

Introduction of Organics and CR&D Diversion Programs: introduction of the concept of expanding diversion programs, incentives and opportunities for organics (kitchen waste, leaf and yard waste, brush, wood) and CR&D materials. These materials typically do not fit stewardship-type frameworks.

Increase to Landfill Levy: proposal to increase landfill levies ($ per tonne) on disposed waste (all landfilled garbage in the province) to encourage diversion alternatives to landfilling.

Accessibility through Regional Collaboration: option to expand diversion and stewardship/EPR program access to more Manitobans, especially in outlying communities (northern, remote and Indigenous communities).

Enhanced Targets: expand targets for more performance based metrics and KPIs to increase diversion from landfill. The questions included preferred target types, approach to target setting and enforcement levers.

The stakeholder feedback on each of these topics for discussion was presented in a separate document as an **Engagement Memo**. The goal was not to gather exhaustive feedback, but to present a snapshot of the opportunities and barriers perceived by the stakeholder groups on each of these concepts, allowing the Government of Manitoba to better understand the current issues and viewpoints.

Gap Analysis

The following gap analysis, or needs analysis identified the key areas for focus and improvements in modernizing the Manitoba framework for waste diversion and recycling. The gaps are presented under the nine objectives of the framework review. From this gaps analysis, the key recommendations and considerations were identified.

Program Enhancement	• New products, sectors, accessibility, technologies
Program Accountability	• Efficiency, enforcement, improving non-financial and financial KPIs
Program Effectiveness	• Disposal rate, recovery and diversion targets, awareness and education, landfill levy
Circular Economy	• Lacking; need awareness, support and initiatives
WRARS Funding Allocations	• Lack of transparency; important for non-obligated HHW diversion; necessary for organics diversion programs

Recommendations

Findings from the Current State Analysis and consultation were used to inform the focus of the Jurisdictional Scan. The scans focused on the jurisdictions and topics relevant to the gaps identified in Manitoba's waste diversion and recycling framework to identify opportunities to mitigate identified waste diversion and recycling challenges and needs, and ideas for approaches and lessons learned from other successful jurisdictions. Following the jurisdictional scan, the three virtual interactive engagement workshop sessions with stakeholders occurred in late March 2021. Outcomes and feedback were compiled and summarized. Based on the Current State Analysis and consultation, Policy Landscape and Best Practices Jurisdictional Scan and virtual engagement workshops, the final considerations and recommendations are presented below.

Recommendations for Next Steps

Based on the information reviewed in this study, it is recommended that before that Province can implement any specific changes to the diversion programs or legislation, that a comprehensive Waste Diversion and Recycling Strategy (WDARS) be developed to guide future decision making. A detailed strategy is recommended to reflect direction provided by the MOE (MOE mandate letter, October 2020, **Appendix E**), as well as to gather from future engagement, the guiding principles for the Province.

- The intent is for the Province to establish a strategic direction based on Guiding Principles, and to identify specific goals.
- Develop the Strategy and Act to reflect the mandate provided to WDR by the Premier of Manitoba.
- The strategy and Act are to be developed on a fundamental foundation of Circular Economy, or similar, framework (zero waste, resource recovery, waste hierarchy), to guide future decision making and a clear provincial direction.
- Note that the WRAP Act revisions and the strategy can be developed simultaneously, with the goal to ensure that the WRAP Act aligns with the strategy and is not a barrier to fulfillment of the strategy's actions and recommendations.
- It is anticipated that the development of a Strategy will require stakeholder and public engagement to establish the guiding principles set out at the start of the strategy development. Once the guiding principles are established, proposed strategic tasks will be developed (current state, gap analysis, options).
- Practical targets should be based in data collected and lessons learned from other jurisdictions, as well as alignment with National Targets.
- Leverage British Columbia and Ontario's substantial past experience within the municipal associations to negotiate and review PRO programs and implications (legal and otherwise), and that they may be able to support Manitoba in negotiations and shared lessons learned.
- Next steps for a gap analysis will be specific to the guiding principles. Anticipated gaps include provincial waste generation data and waste characterization audits representative of the various regions of the province. Baseline data is needed to assess and track which particular materials

continue to be disposed in Manitoba landfills, and what their sources are, such as residential, ICI or CR&D. This information is a starting point, and sets the baseline for a developing a provincial strategy. It is used to understand the current state and bridge the gap to where the province would like to go, by establishing goals and targets to the various generators and materials and measuring, monitoring, reporting and communication of the province's progress.

Short Term Areas of Focus

- Consultation on 100% EPR for PPP, through collaboration with a technical advisory committee.
- Review funding allocation for new WRARS, to clearly establish where funding will be allocated. Focus on re-allocating funds to not-for-profit organizations who support waste reduction and recycling efforts, as per the Provincial Mandate letter.
- Develop a detailed internal staffing and resources allocation plan, to ensure that staff and expertise are available to support the activities laid out in the long term action plan.
- Consultation and strategy on eliminating the use of Plastic Bags as per the Provincial Mandate Letter
- Introduction of enhanced reporting requirements and Provincial data collection to support the measurement and impact assessment of waste reduction strategies on GHG emissions.
- Undertake baseline data collection through waste characterization studies, to provide insight and data into waste material going to landfill. This data will provide insight into areas for improvement in current PRO programs, as well as confirm additional material stream to be managed through EPR programs in the future.

Recommended Actions, Policy Tools, and Levers

Once a provincial waste diversion and recycling strategy is in place, then the specific tools and levers to support the strategy's goals can be implemented. The following are recommended options which reflect the gaps identified throughout the project. The province should align these recommendations with the guiding principles developed in the future strategy. These recommendations reflect changes that would enhance the current programming, and could be leveraged to deliver future programming and achieve targets. The Best Practices Jurisdictional Scan (**Section 7.0**) provides insight into how many of these items have been implemented elsewhere. The specific approaches undertaken by Manitoba to achieve identified outcomes will require tailoring, and consultation to ultimately develop a 'Made in Manitoba' solution. The jurisdictions reviewed should be looked to for lessons learned, and in fact representatives of those jurisdictions should be interviewed by Manitoba staff, so that Manitoba can benefit from the investment already made and the lessons learned in many of these areas.

The recommendations were developed based on:

- The project's nine objectives;
- Current state program evaluation and stakeholder consultation feedback;
- Current policy landscape drivers and national context;
- Jurisdictional scan of best practices and lessons learned; and
- Virtual engagement sessions' feedback with key stakeholders.

Recommendations have been aligned with project objectives, and each take into consideration:

- WRAP Act and Regulations;
- Stewardship Programs;
- WRARS – Landfill levy and diversion funding; and
- Overlap of the above.

Recommendations were developed with consideration to the following high level impacts to Manitoba:

- Benefits to waste diversion and recycling (environmental, financial, social);
- Tools and mechanisms required to implement the recommendation; and
- Anticipated challenges with the implementation of the recommendation or barriers to overcome, and how to mitigate them.

The following recommendations are policy tools and mechanisms to address the gaps identified above.

Program Enhancement	•Add new Stewardship Materials •Expand Diversion programs to service the ICI Sector •Expand Diversion programs to service the CR&D Sector
Program Accountability	•Increase Program Accountability through Ipdated KPIs and Targets •Increase Enforcement Measures •Introduce Enhanced Data Reporting Requirements
Program Effectiveness	•Implement 100% EPR for PPP •Update Material Recovery Targets •Increase Accessibility to Waste Diversion •Landfill Levy Updates
Support for Circular Economy	•Add the Waste Hierarchy to the WRAP Act •Introduce Circular Economy Policy Levers
WRARS Funding Allocations	•Re-Design the Funding Allocation System
Other Considerations	•Introduce Organics Diversion Programs to Reduce Waste to Landfill and GHG Emissions •Consult on Landfill Bans as a Tool to Incentivise Waste Diversion •Align Provincial Targets with National Targets •Coordinate with AB and SK who are currently starting consultation on 100% EPR for PPP •Look to lessons learned from work already completed by ON, BC, and QC

Regulatory Review of Manitoba's WRAP Act

The proposed recommendations to update or re-write and modernize the Manitoba WRAP Act are:

- Add a mandatory purpose section;
- Add the waste hierarchy as a foundational framework;
- Enhance Competition Law protections;
- Add specific collection and management targets;

- Require concrete performance measurement approaches;
- Harmonization with other provincial programs; and
- Add Administrative monetary penalties vs fine/imprisonment.

Recommendations on Manitoba's WRARS Landfill Levy and Funding Allocation

Funding allocation suggestions to modernize Manitoba's WRARS landfill levy and the project funding include:

- Align funding allocation with strategic goals;
- Development of a new funding model for supporting municipal waste diversion;
- Material specific program funding (HHW, organics, CR&D materials); and
- Operational support funding for developing waste diversion programs (i.e. for resources, collaboration, operations).

Conclusions

In conclusion, the province of Manitoba has the opportunity to modernize its provincial framework for waste diversion and recycling. Modernization of the frame work may begin with **re-writing the WRAP Act or, updating the Act** by adding more regulation and schedules in order to add more material and create nimbleness. In addition, a **provincial policy action plan and implementation timeline** will need to be developed in **consultation with all stakeholders**. A **Circular Economy and waste hierarchy** could be used as the base for establishing **guiding principles** of the provincial action plan or strategy.
The next steps will involve development of **discussion papers** for consultation on where the province should go**. Defining potential options and actions items with specific goals and timelines** would follow. In addition, **feasibility studies and research on specific policy tools** may need to be developed to better inform Manitoba throughout this process and **policy and strategy development**.

1.0 Introduction and Objectives

Over the last few decades, the Government of Manitoba has made specific efforts to improve waste management practices within the province. Provincial legislation has continued to evolve in an effort to establish more progressive, diversion-based waste management programs. This project aims to review the current waste diversion and recycling framework in Manitoba to identify its strengths and gaps and recommend options to modernize and improve the current framework.

The nine project overall objectives were:

1. Gather ideas on how to enhance current waste diversion and recycling programming to include new products, sectors and processing technologies; increase program accessibility across the province; and identify other enhancements for exploration.
2. Explore options and make recommendations for increasing accountability and efficiency of the stewardship programs including improvement to financial and non-financial performance indicators.
3. Identify what aspects of stewardship programs and initiatives are effective and make recommendations on what should change.
4. Provide insights on how Manitoba can work with the private sector and municipalities to build the conditions for growth of local circular economies.
5. Recommendations on how to leverage the departmental allocation of WRARS funds to drive behavior changes that reduce waste and increase waste diversion and recycling.
6. Ensure recommendations identify the current and emerging opportunities and barriers facing waste diversion and recycling in Manitoba.
7. Provide insights on how to position Manitoba to meet ambitious waste diversion and recovery targets being set nationally and internationally (including the Ocean Plastics Charter and the Canadian Council of Ministers of the Environment [CCME] aspirational waste reduction goal / Canada-wide Strategy on Zero Plastic Waste).
8. Provide insights on how to position Manitoba to meet greenhouse gas (GHG) emissions reduction targets established by the Manitoba government.
9. Recommendations on how the Manitoba government and its partners can work together to achieve waste reduction targets and promote synergy amongst the various players.

The framework review project had four phases:

1. Current State Analysis;
2. Policy Landscape and Best Practices Jurisdictional Scan;
3. Stakeholder Consultation and Engagement; and
4. Recommendations and Reporting.

2.0 Project Methodology and Approach

The following is a high-level summary of the methodology and approach to the review of Manitoba's waste diversion and recycling framework completed in four phases over four months from December 2020 to March 2021.

2.1 Current State Analysis Approach

The Current State Analysis review was comprised of three main tasks:

1. A regulatory review of Manitoba's Waste Reduction and Prevention Act (WRAP);
2. An evaluation of Manitoba's 12 stewardship programs; and
3. An evaluation of Manitoba's Waste Reduction and Recycling Support (WRARS) landfill levy and funding allocation.

The Current State Analysis reviewed the current waste reduction and recycling legislation and programming to understand the gaps and challenges associated with the current provincial system by learning from consultation with municipalities, industry providers, Producer Responsibility Organizations (PROs), service providers and the public. The stakeholder list can be found in **Appendix A.**

The approach to the Current State Analysis included:

- Analysis of the WRAP Act with commentary on considerations on modernizing the Act with reflection on other jurisdictions Acts;
- Analysis and summary of each stewardship program based on Manitoba information provided, annual reports, past studies, historical data and online content;
- A review of the WRARS landfill levy and its effectiveness of diverting waste based on historical tonnes data in Manitoba;
- A review of the WRARS program funding based on historical funded programs categories and commentary on funding allocation suggestions going forward; and
- Feedback compiled from the consultation with key stakeholders: program users (general public), program service providers/operators, and other key players (municipalities, northern and Indigenous communities and organizations, PROs, waste industry, non-government organizations (NGOs) and community groups).

Insights gathered from engaging with stakeholders and the public informed the Current State Analysis and also informed final recommendations.

2.2 Policy Landscape and Best Practices Jurisdictional Scan Approach

This second phase of the review researched topics and jurisdictions relevant to Manitoba's Current State to identify opportunities to address identified waste diversion and recycling challenges and proposed suggestions and approaches from other successful waste diversion and recycling jurisdictions.

Topics for best practices to include were identified by the Province of Manitoba in the Request for Proposal (RFP), and the additional topic of "waste hierarchy" was also added. A list of two to three recommended jurisdictions for each best practice, along with the rationale for selecting the jurisdiction, was presented to the Province for review and approval. Topics for the policy landscape scan and a brief overview of each was also presented and approved by the Province. The final topics selected are presented in **Section 6.0** Policy Landscape Scan and **Section 7.0** Best Practices Jurisdictional Scan. Insights gathered from the scans informed final recommendations for Manitoba.

2.3 Stakeholder Consultation and Engagement Methodology

The following is a high-level summary of the consultation and engagement methodology and approach to the framework review, comprised of two parts:

- **Part 1** – Preliminary Consultation and Surveys; and
- **Part 2** – Stakeholder Workshops.

2.3.1 Part 1 – Preliminary Consultation and Surveys

Consultation was sought from Manitoba's general public, the product steward organizations, municipalities, industry, remote, northern and Indigenous communities and non-government organizations (NGOs).

2.3.1.1 Current State Consultation

Preliminary consultation was conducted during the Current State Analysis phase of the review. In anticipation of the series of stakeholder workshops (Part 2) designed to take a deeper consultation into potential options and topics, stakeholder consultation included a first phase of surveys, emailed questionnaires and interviews (Part 1). Key stakeholders were informed of the project, its timelines and objectives. Input was gathered through the lens of the stakeholders, identified gaps and opportunities presented by the current programming. The 12 steward program organisations were interviewed by team leads. Industry groups, remote, northern and Indigenous communities, and NGO stakeholders were invited to complete emailed questionnaires or were interviewed directly by team leads.

2.3.1.2 Public Survey

As part of the review team of consultants and lead by Dillon Consulting Limited, Landmark Planning & Design surveyed the Manitoba public about their experience and views on recycling, composting and

waste diversion in Manitoba. The survey was open for three weeks (from January 21, 2021 to February 10, 2021) on EngageMB, the Manitoba government's public engagement platform. A public survey report was produced; see **Appendix B**. Key findings are summarized in **Section 4.5**.

2.3.1.3 Municipal Survey

The municipal survey was sent to a representative sample of 27 municipalities, 12 of which responded. The survey was anonymous, so we are not able to identify specifically who responded, but have confirmed that there was a spread of geographic representation among the responses. The key findings received were compiled in a municipal survey results report, see **Appendix C**. Key finders are summarized in **Section 4.4**.

2.3.2 Part 2 – Stakeholder Workshops

In March 2021, three virtual engagement workshops were conducted online using the Zoom and Jamboard interactive platforms. The first workshop was focused on steward program stakeholders. The second workshop was focused on municipalities, community groups, service providers and NGOs. The third and final workshop brought all stakeholders together to share perspectives with each other on the area for exploration topics. Staff from Manitoba also were present as observers. Each workshop was 90 minutes.

The first 30 minutes of the workshop presented a high-level summary of "what we heard" in the preliminary consultations. Participants were then invited to share reactions and comments to the four to six topic areas for exploration presented using the Jamboard interactive platform or by provided as comments in the Q&A function. All feedback was documented and summarized in **Appendix D**.

2.4 Recommendations and Reporting Approach

The final phase of the review presents the findings from the first three phases: Current State Analysis, Policy Landscape and Best Practices Scan, and Stakeholder Consultation and Engagement. A draft final report was presented for Manitoba's review, followed by a final report. The recommendations are presented throughout this report and summarized in **Section 9.0**.

3.0 Results – Current State Analysis

The following sections present the results and findings from the Current State Analysis. They are presented in the following order:

1. A regulatory review of Manitoba's Waste Reduction and Prevention Act (WRAP);
2. A review of Manitoba's 12 stewardship programs; and
3. A review of Manitoba's Waste Reduction and Recycling Support (WRARS) landfill levy and funding allocation.

3.1 Review of Manitoba's Waste Reduction and Prevention Act

The following section provides an overview of the Manitoba *The Waste Reduction and Prevention Act*[19] (the "**WRAP Act**" or the "**Act**") and associated regulations and guidelines. There are other acts and regulations that also impact waste management in Manitoba, namely *The Environment Act* and associated regulations, but a review of those acts and regulations is out of scope. This section is intended to provide legal information only. Nothing in this section shall be construed as legal advice.

3.1.1 The Waste Reduction and Prevention Act

The WRAP Act (The "Act") was passed in 1990 and it seeks to "to reduce and prevent the production and disposal of waste in the province consistent with the principles of sustainable development."[20] The Act states that its purpose is to *encourage* consumers, manufacturers, distributors, retailers, governments, government agencies and others to develop and adopt practices and programs to reduce and prevent waste.[21]

The Act also speaks to stewardship for industry and governments with respect to waste management under the banner of "sustainable development".[22] It wants Manitobans to acknowledge responsibility for both the environment and the economy.[23] It further states that decisions with respect to waste management should have due regard for both environmental and human health impacts as well as economic impacts.[24] Arguably, these provisions also dilute the force of the requirements of the Act. The purpose section of a legislation, such as section 1 of the WRAP Act, is very important, as it is typically used by courts as an interpretation tool to understand the meaning of the rest of the provisions of an act. So, if an act has soft, or what appears to be, contradictory language (e.g., having due regard for both the environment and economic impacts), this runs the risk of rendering the rest of the provisions of the act not very enforceable if they end up before a court of law. For example, if a decision

[19] C.C.S.M. c. W40 ["*WRAP Act*].
[20] *Ibid* at s. 1(1).
[21] *Ibid* at s. 1 (1)(a)
[22] *Ibid* at s. 1(2)(a).
[23] *Ibid* at s. 1 (2)(b).
[24] *Ibid* at s. 1(2)(e).

made by a PRO, pursuant to its obligations under the WRAP Act, is environmentally harmful, it can be justified as being for a certain economic impact (e.g., companies not wanting to increase costs of their products because they might lose profits).

The non-binding nature of the obligations under the Act is made more apparent by the powers granted to the Minister of Conservation and Climate[25] (the "Minister"), which are to *consult with* and *encourage* manufacturers, distributors, retailers, consumers and governments, among others, to implement programs and practices to reduce and prevent waste.[26] At most, the Act allows the Minister to "do any acts the minister considers necessary to carry out the purpose of this Act."[27]

The Act requires WRAP levies, including any additional WRAP levies required by the regulation, to be collected and remitted[28] or paid[29] by manufacturers, distributors or retailers of the materials designated by the Act in accordance with the regulations.

Fines and imprisonment can be imposed for contraventions of the Act's provisions.[30] Convictions for contraventions of the Act can be imposed on officers, directors or agents of corporations as well.[31] Provisions that might be enforceable by fines or imprisonment likely include those related to the payment of levies, subscriptions to stewardship programs, the carrying out of activities of stewardship programs in line with plans approved by the Minister, or the obstruction of environmental officers charged with investigating offences under the Act while carrying out their investigations.

3.1.1.1 The Waste Hierarchy

The WRAP Act regulates a number of "designated materials", which are determined by regulations implemented under the Act.[32] The Act itself does not implement a waste hierarchy.

The Act provides a very broad definition for the word "recycle" which includes "to do anything, including reuse or recover, that results in providing a use for a thing that otherwise would be disposed of or dealt with as waste, but does not include the disposal of waste in land, the use of a thermal destruction process or any other activity prescribed by regulation."[33] It also defines "waste reduction and prevention" to include recycling.[34] Such a broad definition of the word recycle goes against the enforcement of a waste hierarchy approach to the management of the materials regulated by the Act.

[25] Government of Manitoba, "WRAP Act", *Sustainable Development: Waste Wise*. Retrieved from: https://www.gov.mb.ca/sd/wastewise/wastereduction/act.html.
[26] *WRAP Act, supra* at s. 3.
[27] *Ibid* at s. 3(g).
[28] *Ibid* at s. 12.
[29] *Ibid* at s. 13.
[30] *Ibid* at s. 20.
[31] *Ibid* at s. 21.
[32] *Ibid* at s. 2.
[33] *Ibid* at s. 2.
[34] *Ibid* at s. 2.

On the other hand, the guidelines issued with respect to materials obligated under the Act indicate that for most materials (with the exception of plastic bags), Manitoba promotes the 4Rs hierarchy of reduce, reuse, recycle and recover. With respect to single-use plastic bags, discussed further below, the 3Rs hierarchy of reduce, reuse and recycle applies. The use of the word "promotes" in relation to the 4Rs hierarchy in the guidelines again fails to bind stewards to a waste hierarchy approach in the management of obligated materials.

3.1.2 Regulations and Guidelines Summary

The WRAP Act leaves several things to be determined by regulations, among others:

- The materials that are subject to the Act;
- The types of retailers who are obligated under the Act;
- The meaning of waste, keeping in mind the meaning of "waste" in *The Environment Act;*
- Two types of WRAP levies to be imposed for waste reduction and prevention: (1) a "WRAP levy" and (2) an "additional WRAP levy";
- Any formulas applicable to setting the amount of WRARS (Waste Reduction and Recycling Support) levies[35] as well as exemptions[36];
- The establishment of a WRAP fund that collects industry remittances from the materials, whose funds are to be used to establish and administer waste reduction/prevention programs, associated P&E, research and development[37]; and
- Indicating which activities constitute recycling[38] and which materials constitute waste[39].

Despite regulating different types of materials, the regulations all have the following elements:

- They set out the materials obligated under the regulation;
- They designate suppliers or business users of obligated materials as stewards of the materials;
- They set out the requirements for a stewardship plan for the materials;
- They set out optional provisions for stewardship plans;
- They indicate that plans are to be submitted for approval to the Minister;
- They indicate the manner in which plans can be amended, renewed, as well as refused, suspended or cancelled;
- They provide for annual reports containing audited financial statements to be provided to the Minister regarding the stewardship program; and
- They indicate that the Minister may establish guidelines setting out the requirements for stewardship programs and their operations, waste reduction and prevention targets, the management of materials, program performance evaluation criteria, among other things.

[35] *Ibid* at s. 14.1(2).
[36] *Ibid* at s. 22(j.1).
[37] *Ibid* at s. 14.
[38] *Ibid* at s. 22(1)(b).
[39] *Ibid* at s. 22(1)(b.1).

As such, a guideline accompanies each regulation setting out more specific requirements for stewardship programs. These guidelines are frequently similar and contain the following information:

- They generally indicate that Manitoba promotes a waste hierarchy approach to the management of the materials at issue (4Rs in general; 3Rs for single-use plastic bags);
- They set out further requirements for stewardship program plans, including demonstrating how the costs of plans will be borne by stewards and users of the program and not taxpayers as well as how the program will be harmonized with those of other provinces;
- Some guidelines (namely, Used Oil, Hazardous Materials and Electrical and Electronic Equipment guidelines) indicate certain accessibility targets while others do not;
- With the exception of recovery targets for beverage containers, there are no targets with respect to the collection and management of other materials;[40]
- They generally provide for consultations to be held with affected stakeholders and the public prior to plans' submission for approval to the Minister; and
- They indicate that stewards may recommend certain performance measures related to their program and that the Minister may specify the performance measures to be used by the program when approving plans.

The following sections go into greater detail regarding the elements of the regulations and guidelines under the Act.

3.1.2.1 Used Oil Regulation

The Used Oil, Oil Filters and Containers Stewardship Regulation (the "Used Oil Regulation") is the oldest regulation under the Act, implemented in 1997. It designates suppliers or business users of oil, oil filters, or containers obtained outside of Manitoba as stewards.[41] Retailers are also obligated to make available to consumers point of sale information regarding used oil stewardship programs.

The Used Oil Regulation sets out requirements for a plan for used oil products and material stewardship programs.[42] It also sets out optional provisions for stewardship program plans (notably, for "activities related to pollution prevention and waste reduction").[43] These plans are then required to be submitted for approval to the Minister.[44] It also provides for the approval of amendments to plans, renewals, refusals, or suspensions or cancellations of approvals. It requires annual reports containing audited financial statements,[45] but provides for the protection of any sensitive business information provided in these reports.[46]

[40] Single-use plastic bags also have a reduction target, but that target applied within five years of the Plastic Bags Guideline coming into force (November 2008).
[41] Regulation 86/97 at s. 3.
[42] *Ibid* at s. 4(2).
[43] *Ibid* at s. 4(3).
[44] *Ibid* at s. 5(1).
[45] *Ibid* at s. 14.
[46] *Ibid* at s. 15(1).

The Guideline for the Approval of a Used Oil Products and Materials Stewardship Program (The "Used Oil Guideline") indicates that initiatives should recognize and promote the 4Rs hierarchy of source reduce, reuse, recycle and recovery in support of general resource conservation. It also states that any charge attributed to the management of used oil, filters and containers must be dedicated to addressing the environmental issues associated with the products that generated the funds and that there should be no cross-subsidization.

The Used Oil Guideline also provides for the establishment and operation of depots to collect materials. It sets standards of accessibility for depots (50 km in rural Manitoba; 15 km drive within Winnipeg; other standards for remote and northern areas). It also provides for the exploration of alternatives to permanent depots (e.g., travelling collection events).

3.1.2.2 Tire Regulation

The Tire Stewardship Regulation (the "Tire Regulation") under the WRAP Act regulates tire stewardship programs and designates tires as an obligated material under the Act. It designates suppliers of tires in Manitoba or business users of tires obtained outside of Manitoba as stewards.[47] These stewards are obligated to operate or subscribe to a tire stewardship program.[48] Retailers also have to make available to consumers point of sale information under a tire stewardship program.[49]

The Tire Regulation lists provisions required in tired stewardship plans,[50] and it also lists optional provisions that can be included in stewardship plans (including "provision for activities related to pollution prevention and waste reduction"[51]). Tire stewardship plans have to be submitted for approval to the Minister[52] and the Tire Regulation also provides for the refusal, renewal, amendment or cancellation plans. The Tire Regulation requires annual reports containing audited financial statements,[53] but provides for the protection of any sensitive business information provided in these reports.[54] It also requires retailers to comply with WRAP levy requirements when supplying a new tire for consumption in Manitoba.[55]

The Guideline for Tire Stewardship (the "Tire Guideline") sets additional requirements for the tire stewardship program and its operation. From stewardship programs plans, it requires a description of activities to deal with scrap tires or process materials in inventory at processors facilities or other collection sites. It also requires program plans to demonstrate how the cost of managing obligated tire materials will be borne by stewards and users of the product and not taxpayers, how the operator of the program will provide convenient and province-wide public access to the collection system, how the

[47] Regulation 222/2006 at s. 1(1).
[48] *Ibid* at ss. 3(1) and 3(2).
[49] *Ibid* at s. 3(3).
[50] *Ibid* at s. 4(2)
[51] *Ibid* at s. 4(3)(c).
[52] *Ibid* at s. 5(1).
[53] *Ibid* at s.16(1).
[54] *Ibid* at s. 17(1).
[55] *Ibid* at s. 21.

program will be harmonized with those of other provinces, how the program will ensure a level playing field among stewards responsible for a designated waste stream, or measure, monitor and report on performance, among other things.

The Tire Guideline requires that there be consultations with affected stakeholders and the public prior to submitting plans for approval to the Minister. It also states that the program plan has to "adequately provide" for the collection and management of scrap tires and tubes, and "reasonable and free consumer access to collection facilities and recycling services," but it does not set specific accessibility targets. It also indicates that "the Minister will confirm minimum performance targets for scrap tires and tubes that are ambitious, yet achievable," but does not set actual targets.

The Tire Guideline indicates that stewards may recommend appropriate program performance measures in the plan, and the Minister may specify one or more performance measures or targets in approving plans. Performance measures that can be used are sales and recovery data, municipal waste composition studies, the amount of scrap tires and tubes collected by service providers, etc. It indicates that, for scrap tires and tubes, Manitoba promotes the principles of pollution prevention and the 4Rs of reduce, reuse, recycle and recover, and defines these approaches for tire materials - including the provision of a figure setting out an "Economic Development and Acceptable Use Framework" for the management of these materials.

3.1.2.3 Packaging and Printed Paper Regulation

The Packaging and Printed Paper Stewardship Regulation (the "PPP Regulation") regulates beverage containers, other than milk containers, and it defines packaging as "any package or container, or any part of a package or container, that is comprised of glass, metal, paper or plastic, or any combination of any of those materials and includes, but is not limited to, service packaging." It excludes containers captured by the Used Oil Regulation.

The PPP Regulation defines "service packaging" as "packaging that is filled or applied at the point of sale to enable or facilitate the delivery of goods by a retail seller or a food service industry or other service industry outlet." [56] The Plastic Bag Guideline (see below) defines single-use plastic bags as service packaging.

The PPP Regulation defines printed paper as "paper that is not packaging, but is printed with text or graphics as a medium for communicating information, and includes telephone directories." The definition excludes bound reference books, bound literary books and bound textbooks. It designates suppliers or business users of PPP obtained outside of Manitoba as stewards.[57]

[56] Regulation 195/2008 at s. 1(4).
[57] *Ibid* at s. 1(1).

The PPP Regulation sets out the requirements for a plan for a PPP stewardship program[58] and optional elements for a PPP stewardship program plan, including activities related to pollution prevention and waste reduction.[59] It also provides for the submission of plans for approval to the Minister,[60] as well as for the refusal or renewal, amendment, suspension or cancellation of plans. The PPP Regulation also requires annual reports to be submitted on the program with audited financial statements[61] and provides for the protection of sensitive business information in the reports.[62]

The Packaging and Printed Paper Stewardship Guideline (the "PPP Guideline") sets additional requirements for PPP stewardship programs. The PPP Guideline indicates that program operators have to fund 80% of the cost of managing PPP materials through municipal residential diversion programs. It also indicates that program plans must propose a funding formula for service providers that reflects the range of program conditions across the province and promotes recycling program effectiveness and efficiency.

The PPP Guideline requires program plans to demonstrate how their stewards or users of PPP will bear the costs of the collection and management of PPP instead of taxpayers, how they will manage the materials, the methodology by which they'll set fees for the program, how they'll provide for province-wide accessibility, how the program will be harmonized with those of other provinces, and how they will measure, monitor and report on the performance of their programs, among other things. The PPP Guideline also allows program plans to determine how they'll conform to regulatory requirements to ensure a level playing field among stewards.

The PPP Guideline requires that there be consultations with affected stakeholders and the public for stewardship plans prior to their submission for approval and that input should be solicited from government, service delivery agencies, relevant external agencies and the public during the development or amendment of any plans.

The PPP Guideline indicates that plans only have to "adequately provide for the collection and management" of PPP and does not set specific accessibility expectations. It also indicates that the plan shall provide for "reasonable and free consumer access to collection facilities and recycling services".

The PPP Guideline sets a minimum performance target of 75% for beverage containers. Otherwise, it leaves it up to the Minister to confirm targets in consultation with the program operator and other stakeholders that are "ambitious, yet achievable". Stewards may recommend program performance measures, including sales and recovery data, municipal waste composition studies, etc., but the PPP

[58] *Ibid* at s. 4(2).
[59] *Ibid* at s. 4(3).
[60] *Ibid* at s. 5(1).
[61] *Ibid* at s. 16(1).
[62] *Ibid* at s. 17(1).

Guideline does not mandate any particular method of measuring program performance. The Minister can specify performance measures or targets when approving plans.

The PPP Guidelines also indicates that for PPP materials, Manitoba promotes the principles of pollution prevention and the 4Rs hierarchy of reduce, reuse, recycle and recover.

The Guideline for Plastic Bags defines single-use plastic bags as service packaging and designates them as a material for the purposes of the Act and the PPP Regulation. It requires both retailers and stewards to work with the Manitoba Government to address issues associated with plastic bags, and to develop in-store recycling opportunities for these bags. Stewards will promote alternatives to plastic bags, and increase recovery and recycling of unwanted bags, and will only supply single-use plastic bags that meet the standards for being recyclable and biodegradable. It does not indicate what these standards are.

The Guideline for Plastic Bags sets a 50% reduction target in the use of plastic bags within five years of the Guideline's coming into force (November 2008) through the use of 3Rs (reduce, reuse, recycle) strategies. Reduction measures to be proposed in plans include setting minimum thickness guidelines, increasing promotion and availability of reusable bags, increasing the amount of recycled content in bags, and evaluating the use of bio-degradable bags and the need to increase their availability.

3.1.2.4 Household Hazardous Material Regulation

The Household Hazardous Material and Prescribed Material Stewardship Regulation (the "HH Regulation") regulates devices, equipment, material, products or substances, and their containers, that fall in these categories: waste household hazardous materials; pesticides; pharmaceutical products; natural health products; automotive antifreeze; paint products; fluorescent lighting tubes and compact fluorescent lights; lead-acid automotive batteries; rechargeable batteries; or other batteries ("HH material").[63] The HH Regulation contains a schedule that further specifies the HH products within these categories that are or are not obligated under the WRAP Act.

The HH Regulation designates suppliers or business users of HH material obtained outside of Manitoba as stewards of the materials.[64] It excludes containers obligated under other regulations, including the Used Oil Regulation.[65] It requires plans for HH material stewardship programs to be submitted to the Minister for approval[66] and provides for other voluntary elements that can be included in a stewardship program plan.[67] The HH Regulation also provides for the refusal or renewal, amendment, suspension or cancellation of approvals. It also requires an annual report containing audited financial statements,[68] but provides for the protection of sensitive business information contained in the annual report.[69]

[63] Regulation 16/2010 at s. 2.
[64] *Ibid* at s. 1(1).
[65] *Ibid* at s. 1(3).
[66] *Ibid* at s. 4(2).
[67] *Ibid* at s. 4(3).
[68] *Ibid* at s. 16(1).
[69] *Ibid* at s. 17(1).

The Household Hazardous Material and Prescribed Material Stewardship Guideline (the "HH Guideline") sets additional requirements to the HH Regulation. The HH Guideline indicates that stewards have a choice to propose that fees integrated into the price of products be shown separately from the price of products to consumers at the point-of-sale.

The HH Guideline requires program plans to demonstrate how stewards or users of the HH materials will bear the costs of managing HH products instead of taxpayers, how they will manage the materials, the methodology by which they'll set fees for the program, how they'll provide for province-wide accessibility, how they'll ensure harmonization with the programs of other provinces, and how they will measure, monitor and report on the performance of their programs, among other things. The HH Guideline also allows program plans to determine how they'll conform to regulatory requirements to ensure a level playing field among stewards.

The HH Guideline requires that there be consultations with affected stakeholders and the public for plans submitted for approval and that input should be solicited from government, service delivery agencies, relevant external agencies and the public during the development or amendment of any plans.

The HH Guideline sets collection accessibility expectations of 50 km radius between facilities in rural areas, or 15 minutes traveling distance from any point in urban areas but permits other standards for remote and northern areas.

The HH Guideline does not set targets and indicates that "the minister will confirm minimum performance targets for designated material." It allows stewards to recommend program performance measures, including sales and recovery data, municipal waste composition studies, etc., but does not mandate any particular method of measuring program performance. The HH Guidelines also indicates that for HH materials, Manitoba promotes the principles of pollution prevention and the 4Rs hierarchy of reduce, reuse, recycle and recover, and defines what this means in the context of HH materials.

3.1.2.5 Electrical and Electronic Equipment (EEE) Regulation

The Electrical and Electronic Equipment Stewardship Regulation (the "EEE Regulation") under the WRAP Act designates as obligated a number of products including televisions, desktop computers, laptops and other portable computers; monitors; printers; microwave ovens; cellular telephones, etc.[70] As with the other regulations, the EEE Regulation designates suppliers or business users of EEE materials obtained outside of Manitoba as stewards.[71]

The EEE Regulation requires that plans for EEE stewardship programs be submitted for approval to the Minister,[72] and sets out optional aspects to EEE stewardship plans, including provisions for activities

[70] Regulation 17/2010 at s. 2.
[71] *Ibid* at s. 1(1).
[72] *Ibid* at s. 4(2).

related to pollution prevention and waste reduction.[73] The regulation also provides for the refusal or renewal, amendment, suspension or cancellation of approvals. It also contains provisions requiring an annual report containing audited financial statements,[74] but provides for the protection of sensitive business information contained in the annual report.[75]

The Electrical and Electronic Equipment Stewardship Guideline (the "EEE Guideline") provides additional requirements to the regulation. It indicates that stewards have a choice to propose that fees integrated into the price of products be shown separately from the price of products at the point-of-sale.

The EEE Guideline requires program plans to demonstrate how stewards and users of EEE products will bear the costs of the program instead of taxpayers, how they will manage the materials, the methodology by which they'll set fees for the program, how they'll provide for province-wide accessibility, how they will harmonize the program with those of other provinces, and how they will measure, monitor and report on the performance of their programs, among other things. It also allows program plans to determine how they'll conform to regulatory requirements to ensure a level playing field among stewards.

The EEE Guideline requires that there be consultations with affected stakeholders for plans submitted for approval and that input should be solicited from government, service delivery agencies, relevant external agencies and the public during the development or amendment of any plans.

The EEE Guideline sets collection accessibility expectations of 50 km radius between facilities in rural areas, or 15 minutes traveling distance from any point in urban areas but permits other standards for remote and northern areas.

The EEE Guideline does not set targets and indicates that "the minister will confirm minimum performance targets for designated material." It allows stewards to recommend program performance measures, including sales and recovery data, municipal waste composition studies, etc., but does not mandate any particular method of measuring program performance. It also indicates that for EEE, Manitoba promotes the principles of pollution prevention and the 4Rs hierarchy of reduce, reuse, recycle and recover. It defines what this means in the context of EEE products.

3.1.3 Preliminary Recommendations for the Wrap Act and Regulations

A preliminary review of the WRAP Act (the "Act") reveals that a number of actions can be taken to strengthen the obligations of industry subject to the extended producer responsibility (EPR) system set up by the Act and its regulations. However, given the diluted obligations set out at the purpose section of the Act, it is very likely that a wholesale revision of the Act, including perhaps through its repeal and

[73] *Ibid* at s. 4(3).
[74] *Ibid* at s. 16(1).
[75] *Ibid* at s. 17(1).

the enactment of new legislation and regulations, may be required to strengthen Manitoba's EPR system.

Although a jurisdictional scan may reveal that certain steps can be taken to strengthen certain obligations of the Act without the requirement of substantive revisions or new enactments, it is important that gaps in material collection and management targets, accessibility standards, among other things, be addressed to ensure the Act's effectiveness and to facilitate the enforcement of its provisions.

The following are some of the steps that can be taken to strengthen the Manitoba's EPR system through the legislation that governs it:

- **Mandatory Purpose Section:** The Act should replace the permissive and voluntary language at the purpose section of the Act (e.g., "encourage… practices and programs for the reduction and prevention of waste") to more mandatory language (e.g., "hold persons accountable for preventing and reducing waste").
- **The Waste Hierarchy**: The Act, and/or its regulations, should implement a clear waste hierarchy that sets out priorities for the handling of specific waste in accordance with its environmental impacts.
- **Competition Law Protections:** The current Act, or its regulations, do not provide protection under the federal *Competition Act*. This protection is important and should be included in the WRAP Act. In the context of EPR programs, this protection ensures that ministerial approval of program plans does not result in the inadvertent protection of anti-competitive behaviour that follows the implementation of program plans as approved. Additionally, it ensures that there is a level playing field among stewards and competing stewardship programs. This goes beyond allowing more than one producer responsibility organization (PRO) to operate in the province. Allowing more than one PRO to operate does not, in and of itself, do away with competition concerns. One, among many PROs, could act in an anti-competitive way with respect to its competitors; and, because their actions are approved by the Minister, they might justify their conduct as sanctioned by government.

  One potential risk is that one company that has been operating in the market as a PRO ahead of competitors, could create a monopoly by accumulating a lot of market power without a counterpart. For example, by coming to market first, a PRO could directly contract with waste management companies for collection and treatment instead of municipalities and professional waste generators, who are usually responsible for waste management services. That PRO can create a province-wide collection network and concentrate demand for waste management operations within that PRO's structure, giving that PRO enough negotiating power to disrupt the economic and competition balance in the waste management sector. Having already brokered key relationships within the existing market, this dominant PRO might make it challenging for new PROs to enter or expand within the market or even occupy positions or regions formerly served by the existing, dominant PRO. New PROs may, for example, be unable to get contracts for key points of collection as those may already be taken up by the current PRO and interfering with those contractual relations is typically illegal under Canadian common law.

Thus, competition law is concerned with more than simply allowing more than one company to operate in a market. It is also quite concerned with how companies, or market actors, operate once they are in the market to ensure that there's equal access to competitors, such that new companies can enter the market at any time and have the opportunity to expand within the areas currently serviced by existing PROs. This creates cost efficiencies in the delivery of the services for a certain EPR program and avoids the suboptimal functioning of that EPR program because there is little or no motivation for a PRO to improve its services given its dominance in the market. Having several different PROs providing collection and treatment services creates flexibility in how producers can choose to meet their targets, and diversifies demand for waste management services.

- **Specific Collection and Management Targets**: The regulations under the Act should set out specific collection and management targets for each material and subcategories of material obligated under the Act. Performance targets should be set for subcategories of materials (e.g., rigid plastic, film plastic, or PET, HDPE, etc.). This provides clarity and certainty to producers' obligations with respect to each material, ensuring that penalties or fines can be imposed if targets are not met. Additionally, a level playing field is created as poorly performing materials are not allowed to piggyback on the success of better performing materials. Moreover, a level playing field is created among stewardship programs by ensuring that different programs are not subject to different collection and management obligations.
- **Concrete Performance Measurement Approaches:** Further to levelling the playing field among stewardship programs, the Act, and/or its regulations, should set out specific and uniform performance measurement approaches for the collection and management of materials obligated under the regulations. This would increase the transparency and accuracy of program or producer[76] evaluations, reduce municipal costs, and facilitate the enforcement of non-performing or poorly performing programs and/or producers.
- **The Minister's Office and Institutional Capacity:** There is legitimate concern with respect to the oversight and evaluation of stewardship programs by ministries given the limited institutional capacity of ministries (funding, staff, technology, etc.) to oversee the performance of the players within an EPR system. Some jurisdictions, such as Ontario, have chosen to create a body, independent of government and funded by the EPR system, to act as a clearinghouse of information from producers, and to evaluate producer performance. Such bodies have also been observed to assist in the identification of free riders, a growing issue particularly with the rise of online sales.[77]
- **Harmonization with Other Provincial Programs:** Rather than requiring stewardship programs to demonstrate harmonization with programs in other provinces, when plans are submitted for approval to the Minister harmonized requirements for stewardship programs should be provided in either the Act or its regulations. This facilitates a level playing field among programs and assists in enforcement of program requirements.

[76] This depends on the type of EPR implemented, whether that is collective producer responsibility or individual producer responsibility.
[77] Organization for Economic Cooperation and Development, "Extended Producer Responsibility and the Impact of Online Sales" (2018). Retrieved from: https://www.oecd.org/environment/waste/policy-highlights-extended-producer-responsibility-and-the-impact-of-online-sales.pdf .

- **Administrative Monetary Penalties vs. Fines/Imprisonment:** The Act currently provides for fines or imprisonment to be imposed for contraventions of the Act. A court case must be brought in order to penalize contraventions of the Act. However, administrative monetary penalties (AMPs) provisions in the Act, or its regulations, may allow penalties to be imposed without the necessity of bringing court cases. AMPs have been found to be a quick, clear and tangible way of addressing contraventions of regulatory schemes. They can be imposed by an administrative body for non-compliance with a regulatory scheme rather than by a court.[78] They are primarily intended to maintain compliance or to regulate conduct;[79] at the same time, the Act could provide for the imposition of criminal sanctions such as fines or imprisonment to regulate the same conduct in egregious cases.[80]

Note that these recommendations are not final and remain subject to a review of legislative approaches by other jurisdictions with EPR programs to ensure the effectiveness of their waste reduction and prevention schemes.

3.2 Evaluation of Manitoba's 12 Stewardship Programs

There are currently 12 stewardship programs for numerous materials in Manitoba partially funded by PROs. They are:

1. Batteries (Call2Recycle);
2. Lead Acid Batteries (Canadian Battery Association);
3. Beverage Containers (Canadian Beverage Container Recycling Association);
4. Cell Phones (Canadian Wireless Telecommunications Association);
5. Pesticides Containers, Agricultural (CleanFarms Inc.);
6. Electrical and Electronic Waste (Electronic Products Recycling Association);
7. Medical – Expired and unused medications (Health Products Stewardship Association);
8. Thermostats containing mercury (Heating, Refrigeration and Air Conditioning Institute of Canada);
9. Used oil, filters, and antifreeze (Manitoba Association for Resource Recovery Corporation);
10. Printed Paper and Packaging Recyclables (Multi Material Stewardship Manitoba);
11. Paint, CFL lights, etc. (Household Hazardous Waste – Product Care Association); and
12. Tires (Tire Stewardship Manitoba).

A Current State Analysis summary matrix is provided for each of the 12 programs. Each program summary table includes an analysis, based on available data and consultations, of the following topics:

[78] *Guindon v. R*, 2015 SCC 41 at para. 67.
[79] *Ibid* at para. 45.
[80] *Ibid* at para. 68.

- **Reporting** – Mechanisms for report KPIs including performance indicators for:
  - Financial; and
  - Non-Financial:
    - Public Awareness;
    - Participation;
    - Recovery Rate;
    - Percent Processed; and
    - Contamination.

- **Funding** – Program-Specific:
  - Municipal Funding Levels; and
  - Funding Formulas.
- **Community Perspectives** – Municipalities and Northern Affairs Community Council's (NACCs) perspectives (via consultation) on:
  - Current Industry-Funded Stewardship Programming; and
  - Its ability to divert waste going to landfill in their communities.
- **Stakeholder Collaboration** – Barriers and opportunities for enhanced coordination and collaboration between the:
  - Government;
  - Stewardship Organizations;
  - Municipalities; and
  - Other Key Waste Diversion and Recycling Stakeholders.
- **Expansion** – How to expand the current waste diversion and recycling programming to include:
  - New Products;
  - Sectors;
  - Processing Technologies; and
  - Other Enhancements.

Table 1: PRO Review – Call2Recycle

Call2Recycle	
PROGRAM OVERVIEW	
Program Name	Battery Stewardship Program
PRO(s) and Key Steward Members	• PRO: Call2Recycle. • Key Steward Members: There are 166 stewards which include consumer battery manufacturers, distributors and retailers.
History, Regulatory Instrument, Program Summary Highlights, Targets	The Call2Recycle program started in 1997. In 2011, the program was approved by the Manitoba Government as the agent for battery stewardship in the province. The program collects dry-cell batteries weighing less than 5 kg from governments, businesses and consumers. The program moved to visible fees in 2016 (for primary non-rechargeable batteries) and to rechargeable batteries in 2018. The program responds to requirements of the Household Hazardous Material and Prescribed Material Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Exploring new and innovative ways to increase the recovery rate of household batteries and achieve a 30% recovery rate by 2023. In addition, pursue a higher recovery of 50% or more by 2030.
Designated Materials Collected	The WRAP Act defines batteries broadly as: Section 2 defines the designated materials and the last three categories relate to batteries. Batteries of all chemistries and sizes are included as a designated material; however, the Manitoba government does not enforce beyond the lead and small single use and rechargeable batteries. Stakeholder interviews indicated that they should enforce their regulation fully for: (h) Lead-acid automotive batteries category; (i) Rechargeable batteries category; and (j) Other batteries category. The Call2Recycle program collects dry-cell single use and rechargeable batteries weighing less than 5 kg from governments, businesses and consumers. Includes batteries sold stand-alone and also batteries from e-scooters; e-bikes, e-boards, as well as batteries in e-toys, power tools, construction tools, flashlights, spotlights etc.

Call2Recycle	
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• The program funding mechanism is a "fee per unit sold" model referred to as Environmental Handling Fees (EHFs) – moved to visible fee in 2016 on primary (non-rechargeable) batteries first, then secondary (rechargeable) in 2018. • No fees are charged to consumers at the point of collection of spent batteries. • Fees are re-calculated annually in April for Board approval in September and include allowance for reserve fund. When reserve builds up, fees are lowered.
Reporting Mechanisms and KPIs (Financial)	• Financial statements for Call2Recycle Canada are included in the Annual Report. A Schedule of Operations for Manitoba is included at the end of the Financial Statements. • Steward fees for Manitoba were $1.26 million in 2019. • Expenses (including material management and processing; public education and awareness) were $883,000.00 approximately. • No specific financial KPIs in the Annual Report.

Reporting Mechanisms and KPIs (Non-Financial)	• Public Awareness:
	  ○ Consumer awareness of the program is reported as 77% (target is 79%).
	• Participation:
	  ○ 90% of the Manitoba population has a drop-off location within 15 km of their home in 2019 (vs 91% target).
	  ○ In 2019, 44% of Manitobans recycled batteries (vs 48% target).
	• Recovery Rate:
	  ○ 119,926 kg of batteries were collected by Call2Recycle in Manitoba in 2019, translating to a recovery rate of 19%.
	  ○ In 2018, 101,815 kg of batteries were collected, translating to a recovery rate of 22%.
	• Percent Processed:
	  ○ All batteries collected are recycled, resulting in zero units going to the landfill.
	• Contamination:
	  ○ Not reported.
	• GHG:
	  ○ Not reported.

Collection System(s)	Waste is collected at collection facilities across Manitoba using either the bulk program (250 kg minimum per shipment) or the box program (30 kg maximum per shipment). Call2Recycle covers the cost of shipping for both programs. Any retailer, business, institution or government entity which meets the collection site requirements can participate as a drop-off location. There are approximately 686 facilities throughout Manitoba (252 public sites and 434 private sites; 99 business services locations; 453 government; 13 manufacturing; 120 retail and one other).

Call2Recycle	
Processing Technology(ies)	Batteries are sent to recyclers who break them down to various metals which are then sent to smelters or other markets, such as co-product aggregate. Recoveries by chemistry are reported in the Annual Report.
Compliance and Enforcement related Challenges or Shortcomings	The Manitoba government is helpful on enforcement – letters are sent to new producers.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	Collection and processing system is working well.
Ability for program to add new materials or programs	Program could add new materials depending on battery chemistry, weight and sector.
What could change or improve?	• Method to calculate recovery rate needs to be addressed by the government. Sales data for 2020 was very high due to COVID-19 which will skew recovery calculations for 2021. The lifespan for batteries needs to be considered in recovery calculations. • On-going improvements to consumer awareness is part of the plan. • Need to educate public on how to safely store batteries during lock-down.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/materials for diversion and adapt to market conditions	Call2Recycle is designed to focus on consumer batteries less than 5 kg in weight. Collected batteries are sent to traditional battery recyclers and markets, and adapt as market conditions change.
Increasing Program Accessibility across the Province	Call2Recycle co-operate with other Manitoba PROs on Backhaul opportunity to bring designated materials back from NACC, remote and First Nation communities.
Potential for New Sectors	All sectors are already included in the battery section of the regulation, but not fully enforced. Business and ICI already in program – no new sectors to add.
Potential New Processing Technologies	Battery processing technologies are constantly evolving. Any new technologies will be evaluated and used if economically viable and effective.
Collaboration Enhancements (with other stakeholders)	Already collaborating with all PROs on Backhaul and Winter Roads.

Call2Recycle	
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	Free riders should always be identified by government and regulations enforced. No consistency in what programs report to the government – same metrics should be used by all programs in terms of where materials are processed. Should have common set of items reported – use same metrics for electronics and batteries.
OTHER	
Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	Landfill bans would be helpful. In the absence of landfill bans there are no consequences to not recycling designated batteries.
Circular Economy (where applicable)	Battery recycling is already part of circular economy.
Additional Considerations and Analysis	Call2Recycle runs industry programs in some provinces and voluntary programs in other provinces. One of the current challenges is safely storing and transporting end of life batteries. As the province looks at plastic bans – need to understand the importance of plastic in ensuring battery safety.

Table 2: PRO Review – Canadian Battery Association (CBA)

Canadian Battery Association (CBA)	
PROGRAM OVERVIEW	
Program Name	Stewardship Program for Lead-Acid Batteries
PRO(s) and Key Steward Members	• PRO: Canadian Battery Association (CBA). • Key Steward Members: There are currently 20 registered stewards for Manitoba.
History, Regulatory Instrument, Program Summary Highlights, Targets	The CBA has operated a Stewardship Program in Canada since 2011. In 2015, the CBA and Interstate Battery Systems merged their stewardship programs into a comprehensive lead acid battery (LAB) Stewardship Program for Canada. As of January 1, 2016, the CBA's members account for more than 95% of the LAB's sold in Manitoba. The remaining 5% of LABs are sold in Manitoba as a LAB within a new product (e.g. boat, motorcycle etc.) or the LAB that is imported directly from the USA or Asia by commercial operations into Manitoba without a Stewardship Program. The program responds to requirements of the Household Hazardous Material and Prescribed Material Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Maintaining a recovery rate of 90% or higher for LABs collected throughout the term of the program plan.
Designated Materials Collected	The WRAP Act defines batteries broadly as: Section 2 defines the designated materials and the last three categories relate to batteries. Batteries of all chemistries and sizes are included as a designated material; however, the Manitoba government does not enforce beyond the lead and small single use and rechargeable batteries. Stakeholder interviews indicated that they should enforce their regulation fully for: (h) Lead-acid automotive batteries category; (i) Rechargeable batteries category; and (j) Other batteries category. LABs which include the following battery categories: • Starting, Lighting and Ignition (includes automotive LABs); • Motive (i.e. forklift, golf cart); and • Stationary (i.e. large power supply and emergency backup).

Canadian Battery Association (CBA)	
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• The development, implementation and administration of the CBA Stewardship Program for LABs is financed by the Stewards of lead-acid batteries through an annual membership fee. • The membership fee is set by the CBA members at its AGM and the fees are adjusted each year to pay for the Stewardship Program in Manitoba. • At current commodity prices, consumers will not be charged an eco-fee at the retail level. The demand for recycled lead provides sufficient value/incentive to collect, transport and recycle LABs in urban and rural communities.
Reporting Mechanisms and KPIs (Financial)	• Since there is no environmental handling fee (EHF) there is no requirement to report costs or fees. The Program is 100% funded by industry and they don't charge EHFs. • One of the required KPIs is to monitor prices for auto batteries in small communities. The value of LABs is reported as $5.00 in Thompson, Manitoba.

Reporting Mechanisms and KPIs (Non-Financial)	• Public Awareness:
	  ○ A 2018 consumer awareness study (carried out in British Columbia (B.C.) by Insight West) showed 79% of participants were aware of the program (80% in 2016 and 73% in 2013).
	• Participation:
	  ○ The performance target for urban communities is a return collection facility within 30 minutes of a consumer and the return-to-retail system accomplishes this goal in urban communities.
	  ○ The performance target for rural communities is a return collection facility within 45 minutes of the consumer. The majority of the coverage of rural communities is through the Battery Bucks program operated by Federated CO-OP.
	  ○ Collection of LABs in remote communities has been piloted in St. Theresa Point.
	  ○ Future permanent programs for remote communities have not yet been established.
	  ○ Participation in the Program is measured in B.C. (61%) but not in Manitoba.
	• Recovery Rate:
	  ○ Sales and recovery in 2019 were 5.44 kg/cap/year.
	  ○ 2019: 7,433,158 kg recycled, 7,446,326 kg sold, 99.8% recovery rate. Target recovery rate is greater than 90%.
	  ○ The 2018 report divided the product up by SLI, motive and stationary.
	  • Sold (SLI: 8,544,340 kg, motive: 2,567,750 kg and stationary: 182,604 kg).

Canadian Battery Association (CBA)	
	• Recycled (SLI: 11,123,524 kg, motive: 1,862,561 kg and stationary: 3,266 kg). • Recovery Rate (SLI: 130.2%, motive: 73% and stationary: 2%). • Percent Processed: ○ 2019: 7,433,158 kg recycled. • Contamination: ○ Not reported. • GHG: ○ Not reported. • Others: ○ There are several accessibility goals based on community population. Overall accessibility is 96.7% in Manitoba.
Collection System(s)	• The Program is based on a reverse-distribution network where the distributors of LABs in Manitoba will deliver new LABs to the retail and commercial location and pick up the used LABs at the same time. In addition, there are a variety of private non-ferrous recyclers throughout Manitoba that will collect LABs from consumers and commercial operations. • In 2019, there was an increase of five Return Collection Facilities (RCFs) in Manitoba, bringing the total to 94. • Consumer accessibility was 96.7%. • There were 88 RCFs in 2018.
Processing Technology(ies)	All collected LABS are transported to battery breakers and lead smelters where the batteries are broken down: • Plastic battery casings are recycled into new battery casings. • Sulphuric acid is used in fertilizer production, battery manufacturing or galvanizing plants. • Lead is recycled back to new LABS. • Plastic cell separators are not recyclable and are used for energy recovery in the smelting process.
Compliance and Enforcement related Challenges or Shortcomings	• 100% compliance to international requirements. • Continue to monitor and work with Transport Canada and Environment and Climate Change Canada to develop education and training programs for Transportation of Dangerous Goods and Hazardous Wastes. • Not a level playing field due to lack of enforcement. 15% of revenue lost due to non-compliant distributors.

Canadian Battery Association (CBA)	
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	The program is very effective as it recovers virtually 100% of LABs sold into the Manitoba market.
Ability for program to add new materials or programs	Section 2 of the regulation defines designated materials and includes lead-acid automotive batteries, rechargeable batteries and other batteries. Batteries of all chemistries and sizes are included as a designated material; however, the Manitoba government does not enforce beyond the lead and small single-use and rechargeable batteries.
What could change or improve?	• There is conflict with the hazardous waste program and rules. A collection site must be registered as a hazardous waste disposal facility which is difficulty for small communities due to the significant burden of getting the approval. • The government needs to address free ridership issue through additional enforcement. Producers in Manitoba are not in compliance and revenues are incomplete.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/Materials for Diversion and Adapt to Market Conditions	• CBA would like all batteries subject to the regulation to be addressed. • Consideration for designating end of life batteries from electric vehicles.
Increasing Program Accessibility across the Province	The program continues to work at adding new collection sites to increase accessibility and working to continue providing service to remote, NACC and First Nations communities.
Potential for New Sectors	All sectors are already covered in the regulation.
Potential New Processing Technologies	Processing technologies used are already state of the art (lead smelters).
Collaboration Enhancements (with Other Stakeholders)	Currently collaborating with other PROs on the Backhaul project to continue to work at recovering materials from remote, NACC and First Nation communities.

Canadian Battery Association (CBA)	
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	Nothing to note. The lead market is mature with a clear supply chain and reverse supply chain.
OTHER	
Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	Nothing to note. LABS are unique because the high value of lead ($2,000.00 per tonne) ensures that it is recovered and recycled.
Circular Economy (where applicable)	Recycling of LABs is already 100% circular.
Additional Considerations and Analysis	• Main enhancement is to cover all batteries listed in the regulation. • Landfill bans on designated materials would help.

Table 3: PRO Review – Canadian Beverage Container Recycling Association (CBCRA)

Canadian Beverage Container Recycling Association (CBCRA)	
PROGRAM OVERVIEW	
Program Name	Recycle Everywhere
PRO(s) and Key Steward Members	The Canadian Beverage Container Recycling Association (CBCRA) is a not-for-profit industry led organization. Its membership includes beverage brand owners and distributors.
History, Regulatory Instrument, Program Summary Highlights, Targets	CBCRA was founded in 2010 with the sole purpose of increasing the recovery of non-alcohol, non-dairy sealed beverage containers in Manitoba. In its 2019 annual report, CBCRA reported a 68% recovery rate equating to 27,714 tonnes of CO_2 diverted (the equivalent of removing 6,159 passenger cars from the road each year). There is no timeline to meet the target; it was set by CBCRA with the initial goal of achieving the target by 2016. The program responds to requirements of the Packaging and Printed Paper Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Achieve a recovery rate of 75% for beverage containers over the term of the program plan. • Work with municipalities to develop a plan to cover the cost of collecting and processing beverage containers for Recycle Everywhere bins placed in public spaces and share this plan with the provincial government by 2020.
Designated Materials Collected	Non-alcoholic, non-dairy sealed beverage containers in Manitoba – i.e. containers made from: aluminum, PET, HDPE, other plastics, polycups, glass, metal, aseptics, gable tops, drink pouches and bag-in-a-boxes.
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• The program is funded by Container Recovery Fees (CRFs) which is paid by consumers with no refund, as it is not a deposit. • The CRF changed from a flat fee rate to a variable rate on February 1, 2019. This variable rate depends on the container material type and size to reflect each container type's cost.

Canadian Beverage Container Recycling Association (CBCRA)	

Reporting Mechanisms and KPIs (Financial)	• In its 2019 annual report, CBCRA reported $8,881,268.00 in CRFs (and about $28,000 in interest income) as its total revenues.
	• Total program expenses in 2019 (not including about $296,000.00 in administrative and service expenses) were $7,878,940.00. These expenses included:
	  ○ Awareness campaign – $2,690,504.00.
	  ○ MMSM services – $1,205,478.00.
	  ○ Program management services – $1,149,266.00.
	  ○ Industrial, commercial and institutional program – $959,152.00.
	  ○ Municipal public spaces program – $757, 984.00.
	  ○ Events recycling program – $392,476.00.
	  ○ Government buildings program – $281,721.00.
	  ○ Waste audit – $247,016.00.
	  ○ RE101 schools – $187,170.00.
	  ○ Post-secondary program – $8,173.00.

Reporting Mechanisms and KPIs (Non-Financial)	• Public Awareness:
	  ○ CBCRA's "Recycle Everywhere" program reports an 89% consumer recall rate.
	• Participation:
	  ○ Report website and social media engagement.
	  ○ Conduct a variety of education and outreach events across the province.
	• Recovery Rate:
	  ○ In its 2019 annual report, CBCRA reported a 68% recovery rate of containers targeted for recovery by the program. In 2018, the recovery rate was 69%.
	  ○ The recovery rate is determined by dividing the number of beverage containers recovered by the number of beverage containers sold in Manitoba.
	  ○ Recommend to report year over year change/trend graph for the past three to five program years to show trends in growth or decline.
	• Percent Processed:
	  ○ The total number of beverage containers sold in 2019 was 470 million and was 471 million in 2018. Based on the recovery rates, in 2019, 319 million beverage containers were recovered and 325 million were recovered in 2018.
	  ○ The number of beverage containers recovered is not reported.
	• Contamination:
	  ○ Contamination and its direct and indirect impacts is a key factor in why the beverage container recovery rate remains below 70%. Nonetheless, PET beverage containers were recycled at a 77% rate in Manitoba in 2019, which is consistent with the Canadian average deposit-return programs in the smaller provinces.

Canadian Beverage Container Recycling Association (CBCRA)	
	○ Contamination rates are not reported. • GHG: ○ Reports the amount of equivalent CO_2 saved based on the amount of beverage containers recycled. • Others: ○ CBCRA conducted two sets of MRF audits in 2019, one in the winter and a second in the spring in the eight largest recycling facilities to measure how many beverage containers end up in the recycling system. They also did ten waste audits and two visual audits in 2019 to measure the number of beverage containers in recycling and waste bins. ○ CBCRA also conducts regular litter audits. The 2019 annual report indicates that litter audits were done at 245 pre-selected locations across five major cities in Manitoba. The 2019 results show a decrease in all five Manitoba cities. In each instance, beverage container litter in city streets decreased since baseline audits began, with no other CBCRA litter abatement programs implemented other than the addition of Recycle Everywhere bins.
Collection System(s)	• As of the end of 2019, 68,341 public space recycling bins are located across the province since the program's inception in 2010. • The program does not pay its collection agents to deliver collected materials. Funding is provided mainly for bins, material processing/marketing and a broad set of province-wide public education and outreach activities.
Processing Technology(ies)	Collected materials are processed (for a fee) through an agreement with the Multi-Material Stewardship Manitoba (MMSM) program processing network.
Compliance and Enforcement related Challenges or Shortcomings	The target is set in the PPP guideline and in the Minister's approval letter..

Canadian Beverage Container Recycling Association (CBCRA)	
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	• There is no other PRO of this type in Canada so there are no organizations to compare CBCRA against. It is professionally managed and continues to improve is performance against its 75% recycling target. • CBCRA's program is also an effective litter diversion program which is a clear benefit to the province as a whole and to local municipalities. • The average reported PET beverage container recovery by deposit-return programs in Canada in 2019 was 79%; this was 6% higher from the previous year. The most developed Canadian deposit programs are recovering over 85% of PET beverage containers sold. • Ontario has deposit-return systems for beer and alcohol containers only. The 2019 rate for all PET containers (i.e. not just PET beverage containers) collected curbside in Ontario was 54.6%**.** Under the new Blue Box program plan, the target recovery rate for all rigid plastic containers in Ontario by 2023 is 55% and 60% by 2030.
Ability for program to add new materials or programs	• In the interview with CBCRA senior staff, they indicated some interest (and on-going discussions) with interested parties in helping to address other litter items such as newspaper and hot and cold take out cups. (*Note – takeout cups are the most common contaminant found in CBCRA's regular litter studies*).
What could change or improve?	• CBCRA currently does not pay any collection costs for servicing their bins (i.e. only bin costs, promotion and processing costs). In order to meet their 75% target, CBCRA might give consideration to either covering collection costs provided (for free) by current Recycle Everywhere program collectors (e.g. municipalities) or contract collection services to a province-wide third party service provider. • CBCRA has been focused on reducing contamination in their bins (through public education and bin signage) and developing incentive programs to encourage both grassroots community actions and targeted employee litter clean ups (both of these ideas have been restricted in the past year due to COVID-19).
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/materials for diversion and adapt to market conditions	• Take-out cups such as hot and cold drink cups. • Other take-out containers. • Possibility of also adding newspaper (i.e. assuming newspaper industry support and capital funding for improved processing capacity). Contamination of newspaper may be an issue. Fiber stream is kept separate where possible in B.C. Streetscape Bins.

Canadian Beverage Container Recycling Association (CBCRA)	
Increasing Program Accessibility across the Province	• As of 2019, there have been over 68,000 collection containers distributed across the province since 2010. CBCRA does not report the accessibility number across the province in its annual report. • CBCRA indicated in the interview they will continue to increase container distribution and public education to improve overall program performance.
Potential for New Sectors	• Further expansion within the industrial, commercial and institutional (ICI) sector. Currently a huge barrier to this is that the cost of recycling is much higher than the cost of disposal. • For the past few years, CBCRA has worked with Arctic Beverages, a beverage distributor in northern Manitoba, to backhaul beverage containers from the north. No current formal agreement is in place.
Potential New Processing Technologies	• CBCRA does not process collected materials directly – materials are processed through the MMSM network of material processors. • In both interviews with CBCRA and MMSM, it was noted that Green for Life (GFL) (Winnipeg's MRF operator) has very advanced artificial intelligence and optical sorting technologies that could be an asset in future material processing needs, however they are still unable to sort black plastics.

Collaboration Enhancements (with Other Stakeholders)	• CBCRA works closely with MMSM (a portion of the CRF is paid to MMSM to cover the costs of beverage container collection and processing from the residential stream), with local businesses (to place the recycling bins), parks, schools (to support school based programs), municipalities and various shipping and end market partners.
	• There are no apparent barriers to further collaboration. CBCRA's work especially in schools is exemplary.
	• Two active partnerships in 2019 include:
	  ○ Caring for our Environment-Manitoba: a volunteer group that seeks to promote environmental sustainability issues in the Filipino community; and
	  ○ A pilot project with the Manitoba Interfaith Council to provide welcome packages to new families in Winnipeg to understand proper recycling.
	• In 2019, 92% of Manitoba schools (786) were involved in the Recycle Everywhere Program. 98% of Manitoba's student population have access to beverage container recycling at schools.
	• There may be opportunities for CBCRA and the other PROs to collaborate more actively to help serve NACC, remote and indigenous communities. Currently CBCRA's materials flow along with MMSM's material for the Backhaul Project.

Canadian Beverage Container Recycling Association (CBCRA)	
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	• A key to CBCRA's success to date has been its emphasis on active public education and outreach. The key to its future success will be to continue to innovate and work with its partners to improve performance (and eventually achieve its 75% recovery target).
OTHER	

Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	• Opportunities:
	  ○ Expansion within the ICI sector; and
	  ○ Including more program materials such as take-out cups and containers.
	• Barriers/Challenges:
	  ○ On-going contamination challenges.

Additional Considerations and Analysis	• This "made-in-Manitoba" beverage container recycling program is unique in three main ways:
	  ○ It works very closely with the packaging and printed paper program PRO to add a dedicated, away from home container recovery program to increase overall material diversion.
	  ○ It works closely with local schools, businesses, municipalities and not for profit organizations to "cover the province" with opportunities to recycle beverage containers away from home.
	
	It has a well-funded, multi-faceted education and outreach program to promote the circular economy benefits of increased recycling.

Table 4: PRO Review – Canadian Wireless Telecommunications Association (CWTA)

Canadian Wireless Telecommunications Association (CWTA)	
PROGRAM OVERVIEW	
Program Name	Recycle My Cell (RMC)
PRO(s) and Key Steward Members	• PRO: Canadian Wireless Telecommunications Association (CWTA). • Key Steward Members: Bell MTS, Bell and Rogers.
History, Regulatory Instrument, Program Summary Highlights, Targets	RMC is a Canadian recycling program for mobile devices and accessories. RMC has been a stewardship program in Manitoba since 2009, operated by CWTA's Recycling Committee. The program received formal regulatory approval in Manitoba on September 25, 2013. The most recent Manitoba program plan was approved on July 1, 2018. In 2019, 88,796 devices (units) were distributed into Manitoba. They reported that 14,300 devices were received by the RMC program for recycling. This equals a recovery rate of 16% (collected units divided by distributed units) in Manitoba. RMC does not have a target recovery nor diversion rate in their current program plan. The RMC approved Manitoba program plan requires the PRO to: • Maintain the number of drop-off locations while working towards a 1% annual increase; • Report the number of devices (unit count) recovered by the program, and of those units recovered what is the split between devices reused and recycled; and • Report on public awareness levels through a national cell phone recycling study. The program responds to requirements of the Electrical and Electronic Equipment Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Increase program public awareness to 60% of the Manitoba population including awareness about the mail-back option for used cellular devices.
Designated Materials Collected	Cellular and paging devices (cellular phones, smartphones, superphones, phablets, wireless PDAs, removal external air cards and pagers) and accessories (headsets, chargers and rechargeable cell phone batteries).

Canadian Wireless Telecommunications Association (CWTA)	
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• The program is funded by its Manitoba stewards: Bell MTS, Bell and Rogers as members of the CWTA. No fees are collected from the public to fund the program. • Some phones are recovered at recycling depots managed by municipalities. RMC will provide a mail-back sticker to the municipality to send a shipment of collected devices to the RMC contracted and certified processor at no mailing cost to the municipality. • To date, no municipal feedback was received on the cost for their depots in managing this particular material. However, a general comment regarding PRO programs in Manitoba is the resource burden on the municipalities to operate the programs with no financial support from the PROs. • Program funding formula information is not shared in reporting to Manitoba or publicly as RMC works with their stewards to manage funding internally among its member stewards. • As a regulator, this review suggests a requirement for the funding formula methodology in the next approved program plan. • No information provided for fees stewards pay into the program. • CWTA funds itself through its member's fees and has a budget line for the RMC program annually in its national budget. The budget is not based on a count of or Percent of what they sell or distributed Note that sales data not available according to the PRO's annual report. • No commentary on whether the stewards are satisfied with the current funding formula.
Reporting Mechanisms and KPIs (Financial)	• No cost to the consumer to participate in the program. • Funded by the following major industry stewards: Bell MTS, Bell and Rogers. • Program does not report the program's financial information to Manitoba. Financial components are internal to its industry members. • Cost for running the program is not currently reported in the program's annual reports to Manitoba. • PRO does not reporting overall financial info to the regulator, nor KPIs such as portion of percent spent on public awareness, cost per unit of kg to recycle, R&D, administrative management, nor trends nor year over year growth etc.

Canadian Wireless Telecommunications Association (CWTA)	

Reporting Mechanisms and KPIs (Non-Financial)	• Public Awareness:
	  ○ Program conducts various consumer, stakeholder, media and industry member engagement activities.
	  ○ CWTA conducts a public Annual National Cell Phone Recycling Study via a survey to gauge public behaviours, attitudes and public awareness of the program. The national survey includes 300 Manitobans of which 28% were aware of the Manitoba RMC program.
	  ○ No indication of the portion of the public that are aware of or use the "mail-back" program. No information reported on promotion of this option targeted towards NACC and remote communities who would use this alternative to drop-off to retail.
	  ○ Reports the number of database searches for mobile phone recycling locations in Manitoba (Public Education and Awareness Indicator No. 3 in the Program Plan) but does not indicate annual growth or decline.
	• Participation:
	  ○ Reported through survey results: When receiving a new device, 55% of consumers will choose to reuse or recycle their old device. This includes 15% returning or trading-in to the carrier, 8% choosing to recycle the device and 6% returning to a retailer. Less than 1% dispose of their old device in the garbage.
	  ○ Does not report whether participation rate was sufficient or whether they will focus on particular growth in future.
	  ○ Does not report where they will focus on moving forward, plan or strategy.
	  ○ Does not report on participation rate through the mail-back program.
	  ○ Does not report on distance or travel time to drop off sites (travel in km or time). Does not report on meeting the accessibility target of 1% increase in drop-off locations (Accessibility and Public Participation (Collection Network) Indicator in the Plan).
	• Recovery Rate:
	  ○ Numbers for units collected (14,300 units) and distributed (88,796 units) in Manitoba, but not sold. Reports state that the number of sold units' information is difficult to determine.
	  ○ Report does not calculate a diversion rate. Numbers indicate a rate of 16% (recycled vs distributed to retail) but not explicitly reported (i.e. rate had to be calculated for this review).
	  ○ Recommend to report year over year change/trend graph for the past three to five program years to show trends in growth or decline.
	  ○ Reporting includes per capita collection (collection indicator No. 2 in the Program Plan).

Canadian Wireless Telecommunications Association (CWTA)

	○ Feedback from PRO is that recovery rates are not viable for a program like RMC. Carriers will not report on actual sales as it is commercially sensitive information. Using the number of products distributed into the province is the closest metric, however, it is still flawed as the product is not necessarily sold or stays in the province. ○ Another challenge is the lifespan of the product; volume sold does not correlate to volume recovered. Consumers also have a tendency to hold onto (store in a drawer) their devices when they buy a new one. • Percent Processed: ○ 14,300 units were collected with an estimated 1,836 units (13%) sent for recycling and 12,464 units (87%) sent for refreshment and reuse. ○ There are issues with reusing a refurbished device including factors such as not meeting specific criteria or not being technologically supported in a given market. For these reasons, devices are recycled. ○ No indication of the processing supply chain and where recycled phones end up. PRO feedback states that phones are processed at their certified processor. • Contamination: ○ Does not report on contamination. ○ Currently receive very little contamination. This was achieved since moving away from branded RMS collection boxes. • GHG: ○ No reporting of greenhouse gas impacts. ○ Has not been something explored yet but there has been discussion internally if this information is currently being captured and how that would translate. • Trends: ○ PRO does not include trends in annual reports as they perceive that governments are only concerned with the specific performance that occurred that year and within their jurisdiction.
Collection System(s)	There are 112 drop-off locations across Manitoba, of which 22 are RMC branded locations and 90 are return-to-retail locations. RMC also offers a mail-back option through the Bell Canada program, utilizing Canada Post at no cost to the consumer. Consumers can request everything they need to mail back their individual device. The program is intended for rural and remote areas. No comment on how much this is publicised or used. It is on their website. Municipalities also utilizing the mail-back program to return their collected devices to RMC. Boxes used must fall within Canada Post shipping requirements

Canadian Wireless Telecommunications Association (CWTA)	
	(22 kg). For larger volumes, CWTA will connect the municipality with a processor and the processor will make arrangements to pick it up.
Processing Technology(ies)	Devices are either refurbished for reuse or recycled and broken down into scrap materials and precious metals high value). RMC certified processors have multiple certifications including ISO, R2 and/or verification under Electronic Products Recycling Association's (EPRA) Recycling Vendor Qualification Program (RVQP). For efficiency, all material collected is shipped to a central processor facility, Green Tech, in Ontario.
Compliance and Enforcement related Challenges or Shortcomings	Being a national program for a high value material, it is challenging to get support from its stewards to share program financial data. Due to the high value of the used device, consumers tend to hold on to and store the device, repair or resell it or donate to charities. The life cycle of the device has several usage lives before it is finally recycled for its raw materials. Difficult to track all these options and report on the flow of devices. Do not see many in the landfill.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	Large return to retail effort. Can return the device to a cell phone store.
Ability for program to add new materials or programs	Falls under the electronics type materials. Would have to update Manitoba regulation to add material not already designated.
What could change or improve?	More awareness of the program. The Manitoba survey said only 26% of the public were aware of the program. Regulator would benefit with more KPS and reporting data and cost of the program.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/materials for diversion and adapt to market conditions	None at this time.

Canadian Wireless Telecommunications Association (CWTA)	
Increasing Program Accessibility across the Province	• Currently offer a mail-in program which allows for accessibility across the Province. However, it's unclear how much this program is used. • Focusing on expanding to more non-retail locations. Currently, there is a heavy focus on retail locations which include the bulk of volume received.
Potential for New Sectors	• Program is provided for the public i.e. consumers. • For large corporations or institutions, collection would be tendered by a private collection or service provider.
Potential New Processing Technologies	• RMC's processors are continually looking to improve their systems to make it as efficient as possible. • Accountability and public spotlight of electronics recycling is important to the PRO. Ensures their processors are certified.
Collaboration Enhancements (with Other Stakeholders)	• Municipalities typically do not play a role in the RMC program except if collection service is provided at their eco-depots. • To understand the quantity of mobile devices in municipal landfills, a Municipal waste characterization audit typically does not have a category for mobile devices. Typically, mobile devices would be characterized in a disposal waste audit under other electronic waste. • Potential to understand the quantity of mobile phones recovered at municipal depots and call centre call to ask how to handle it. • RMC currently collaborates with other PROs to service NACC and remote communities to backhaul various program materials. • The Recycle Manitoba website was a collaborative initiative with the other PROs to have a one-stop place to educate the public where to drop-off materials.
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	• Material flow analysis to determine life cycle of phones and the paths they take. • Public awareness. • Goals and diversion targets need to be added to monitor the program.

Canadian Wireless Telecommunications Association (CWTA)	
OTHER	
Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	• Opportunities to enhance circular economy with product design repairability and portion of reuse. • Barriers/Challenges: monitoring flow of devices and end life. Lack of national KPI harmonization.
Circular Economy (where applicable)	• Currently no mention in the annual report of CE initiatives in addition to the existing EPR program. • The consumer purchases a device and can trade it back in with a carrier. The carrier then reuses and repurposes the device. • Industry view of repairability, extended lifespan, and sustainable design of these products: in terms of repairability of a device, it can cause reputational harm to a manufacturer if a device is repaired improperly and put back into the market. • Manufacturers do have built-in programs for repair such as Apple Care and extended warranty programs.
Additional Considerations and Analysis	Work towards a national harmonized program with common KPIs, targets and reporting. Retain the value of the used devices with P&E campaign to reuse old devices instead of storage for years resulting in loss of value. Repairability of phones is not currently built into product designs which would support a more circular economy.

Table 5: PRO Review – CleanFarms

CleanFarms	
PROGRAM OVERVIEW	
Program Name	Empty Pesticide and Fertilizer Container Program (EPCP).
PRO(s) and Key Steward Members	• PRO: CleanFarms Inc. • Key Steward Members: Manufacturers, distributors and relaters of crop protection products, fertilizer, seed, livestock/equine medications and bale wrap, sheeting and grain bags.
History, Regulatory Instrument, Program Summary Highlights, Targets	• CleanFarms is a national not-for-profit organization that delivers industry-funded, end-of-life stewardship programs in the agricultural sector across Canada. In 2011, the Empty Pesticide Container Program (EPCP) was approved as a stand-alone program. • Two updated plans have been submitted since that time; the most recently approved plan extends to 2023. • CleanFarms currently operates five permanent programs and several pilot projects to divert and recycle (or properly dispose of) agriculture waste across Canada. • In the fall of 2020, they announced the launch of "Building a Zero Plastic Waste Strategy for Agriculture". • CleanFarms works with member companies, municipalities and other collection agents, contract haulers, recyclers and converters to recycle targeted materials. Some non-recyclable waste that is collected is also sent to a waste-to-energy facility in Manitoba. • On November 30, 2020, CleanFarms submitted (in accordance with the requirements set out in the Packaging and Printed Paper Regulation 195/2008) it's Manitoba Ag Plastics Plan (MAPP). CleanFarms has asked for approval of the plan by March 31, 2021. The program responds to requirements of the Packaging and Printed Paper Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Achieve a recovery rate of 75% or higher for empty pesticide and fertilizer containers by the end of the program plan term.
Designated Materials Collected	Pesticide and fertilizer containers (23 L and smaller in volume); non-deposit bulk containers; empty seed, pesticide and fertilizer bags; unwanted and old pesticides; and unwanted and old livestock/equine medications. Pending ministerial approval of the MAPP, CleanFarms will also collect grain bags and twine.

CleanFarms	
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• Municipalities do not receive any financial incentive from CleanFarms. • During the pilot phase of agriculture film and twine, the collection sites did not receive a financial incentive from CleanFarms. Once the program transitions to a regulated program, municipalities will receive a financial incentive.
Reporting Mechanisms and KPIs (Financial)	• CleanFarms is a private, not-for-profit corporation that is not mandated to report financial KPIs as the program is privately funded by industry. • CleanFarms does not report the Environmental Handling Fee (EHF) paid by producers for pesticide and fertilizer containers. • In the new CleanFarms program, materials will be brought to authorized collection sites where no user fees will be charged. • Stewards and first sellers of designated materials into Manitoba will be charged EHFs of $250.00 per tonne for grain bags and $330.00 per tonne for baler twine. • The total Year 1 program cost for Phase 1 (if approved) is $137,000.00 (i.e. net of recycling revenues). The plan estimates a recovery rate of 70% for grain bags and 20% for baler twine. Total (new) tonnes collected (i.e. in addition to the established program for small pesticide and fertilizer containers) is 250 tonnes in the first year.

Reporting Mechanisms and KPIs (Non-financial)	• Public Awareness:
	  ○ Not currently reported. Has been proposed for consideration in the MAPP.
	• Participation:
	  ○ Participation/accessibility is not reported.
	• Recovery Rate:
	  ○ A recovery rate (volume of material sold compared to volume collected) is reported nationally (65%) but not at a provincial level.
	• Percent Processed:
	  ○ Collection numbers in 2019 were, 519,419 pesticide and fertilizer containers (9% of the national total), 51,107 kg unwanted and old pesticides (21% of the national total), and 1,404 kg unwanted and old livestock/equine medications (24% of the national total).
	  ○ Rate of increase from the previous year is reported for each material.
	  ○ In 2018, 34 tonnes of waste film plastic and twine for recycling was collection through the pilot.
	• Contamination:
	  ○ Not currently reported. Has been proposed for consideration in the MAPP.

CleanFarms	

	• GHG:
	  ○ Not reported.
	• Others:
	  ○ Kg/cap or $/kg is not reported.
	  ○ KPIs proposed for consideration in the MAPP include program efficiency, number of collection points, exit surveys to assess user satisfaction, collection surveys to assess site experience, and volumes collected by site or region.

Collection System(s)	• Pesticide and fertilizer containers (under 23 L) are collected at municipal collection sites.
	• Agricultural film and twine are collected primarily at municipal collection sites.
	  ○ In 2018, for the Manitoba pilots for grain bags, bale and silage wrap and twine recovered, 37 collection sites were established to accept the pilot materials (a mix of municipal and supply dealers/large volume generators).
	  ○ Two or three times per year, CleanFarms arranges for the collection of designated materials from the sites. These same sites are expected to be used if the new program is approved. Special collection events might also be needed to serve remote areas.

Processing Technology(ies)	Collected plastics are sent to a plastic recycler who washes them, produces plastic flake that is used to make drainage pipe and is sold back to farms.
Compliance and Enforcement related Challenges or Shortcomings	CleanFarms has been providing ag container recycling services on a voluntary basis for years. Since 2013, CleanFarms has been working with Manitoba under government-funded pilot program for grain bags, bale and sileage wrap and twine. Once the new plan is approved the obligation for Phase 1 new materials becomes a regulatory obligation. CleanFarms does not anticipate any significant issues with free riders as the major ag industry players are all members of CleanFarms.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	Overall, the program is considered very effective. What was once an effective pilot program is being expanded to include newly obligated materials. The MAPP plan also lays out a plan to potentially add more new materials in the future once the quantities and markets for recovered materials present a viable business case.
Ability for Program to Add New Materials or Programs	As per the recently submitted plan, new materials will be added as quantities and markets (i.e. including materials from other provinces) grow and develop.

CleanFarms	
What could change or improve?	No improvements suggested or needed at this time
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/Materials for Diversion and Adapt to Market Conditions	Due to limited recycling markets and low volumes, CleanFarms is proposing to begin with grain bags and baler twine as Phase 1 materials (starting April 1, 2021), then adding silage film and bale wrap in Phase 2 as markets develop (and as other western provinces add these materials so that there are more cost effective volumes to consolidate and process).
Increasing Program Accessibility across the Province	CleanFarms relies on municipal and return-to-retail collection sites located in agriculture-rich parts of the province.
Potential for New Sectors	No additional sectors planned. CleanFarms is focused on agricultural sector only.
Potential New Processing Technologies	CleanFarms is actively exploring future opportunities to incorporate recycled content into both plastic agricultural containers and agricultural film. Toxic trace materials in containers are a barrier that needs to be addressed for "bottle to bottle" recycling. Dirt and grit contamination (e.g. from horticultural ground films) is an issue that needs to be addressed to promote recycled content in agricultural film use. CleanFarms is tracking the development and results of "bottle to bottle" recycling programs in Brazil and a new film to film program in Ireland.
Collaboration Enhancements (with Other Stakeholders)	CleanFarms already has strong reputation for collaboration among various partners including private sector ag retailers and municipal governments.
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	None identified – CleanFarms has just come through an extensive public consultation process over the past two years to provide stakeholder input to new regulations for ag plastics. Adding Phase 2 materials (at some point in the future) will be the next step in the program's continuing evolution.
OTHER	

Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	• Opportunities
	  ○ Opportunities are already being pursued through program expansion to include grain bags, baler twine, silage film and bale wrap.
	• Barriers/Challenges
	  ○ No significant barriers noted.

CleanFarms	
Circular Economy (where applicable)	Plastic agricultural containers are collected, washed and processed into recycled plastic that is used to make drain pipe sold back to farmers.
Additional Considerations and Analysis	On November 30, 2020, CleanFarms submitted (in accordance with the requirements set out in the Packaging and Printed Paper Regulation 195/2008) it's Manitoba Ag Plastics Plan (MAPP). CleanFarms has asked for approval of the plan by March 31, 2021.

Table 6: PRO Review – Electronic Products Recycling Association (EPRA)

Electronic Products Recycling Association (EPRA)	
PROGRAM OVERVIEW	
Program Name	End-of-Life Electronics (EOLE) Stewardship Program
PRO(s) and Key Steward Members	• PRO: Electronic Products Recycling Association (EPRA). • Key Steward Members: There are 570 stewards which include manufacturers, distributors and retailers of electronics.
History, Regulatory Instrument, Program Summary Highlights, Targets	The EOLE Stewardship Program is a Canadian free recycling program for electrical and electronic waste. The program has been a stewardship program in Manitoba since 2012. The program accepts desktop computers, mice, keyboards, cables, monitors, computer notebooks, notebooks, laptops, and tablets, desktop printers and scanners, televisions, personal portable audio/video systems, vehicle audio/video systems, cell phones (also accepted by Recycle My Cell) and non-cellular telephones and microwave ovens. There are 95 drop-off locations across Manitoba with 94% of Manitoba residents within 50 km (rural) or 15 minutes (urban) of a drop-off location. There is a 77% public awareness in the province. In 2019, 3,050 metric tonnes of end-of-life electronics were recycled. The program responds to requirements of the Electrical and Electronic Equipment Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Extend program coverage to include 95% of the Manitoba population. • Enhance public communication and provide point-of-sale information on e-waste recycling to retailers of electronic products.

Electronic Products Recycling Association (EPRA)	
Designated Materials Collected	Desktop computers, mice, keyboards, cables, monitors, computer notebooks, notebooks, laptops, and tablets, desktop printers and scanners, televisions, personal portable audio/video systems, vehicle audio/video systems, cell phones (collected separately by Recycle My Cell) and non-cellular telephones and microwave ovens.
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• Funded through environmental handling fees (EHFs), set by product category that is levied on new product sales. • As of 2019, there are 570 stewards which include manufacturers, distributors and retailers of electronics. There were 564 in 2018. • It is free for consumers to drop-off products. • Consumers pay the EHF at point of sale.

Reporting Mechanisms and KPIs (Financial)	• Program cost is $1,158.00/tonne.
	• Revenue:
	  ○ EHF: $3.1 million.
	  ○ Interest: $182,000.00.
	• Expenses:
	  ○ Processing: $1.5 million.
	  ○ Collection: $600,000.00.
	  ○ Transportation: $275,000.00.
	  ○ QA/QC: $25,000.00.
	  ○ Consumer Awareness: $500,000.00.
	  ○ Administration: $600,000.00.
	• Contingency Reserve: $3.2 million.

Electronic Products Recycling Association (EPRA)	

Reporting Mechanisms and KPIs (Non-Financial)	• Public Awareness:
	  ○ In 2019, there was a 77% public awareness in the province (76% in 2018).
	• Participation:
	  ○ Since the program collects durables, not consumables, and electronics have different lifespans, it is hard to measure actual participation.
	• Recovery Rate:
	  ○ Not specified.
	• Percent Processed:
	  ○ In 2019, 3,050 metric tonnes of end-of-life electronics were recycled (3,024 in 2018).
	• Contamination
	  ○ Not reported.
	• GHG
	  ○ Not reported.

Collection System(s)	As of 2019, there are 95 drop-off locations across Manitoba with 94% of Manitoba residents within 50 km (rural) or 15 minutes (urban) of a drop-off location. Accessibility was 92% in 2018 with 86 drop-off locations.
Processing Technology(ies)	All collected electronics are processed at facilities which meet EPRA national Electronics Recycling Standard (ERS) which was designed by the electronics industry to ensure that EOLE are managed in a safe and environmentally sound manner. The Recycler Qualification Office (RQO) audits the recyclers against the ERS requirements by third party certification by the internationally recognized standards as a first step in the verification. EPRA requires that all recyclers actively process material and maintain appropriate environmental, health, safety and security controls for properly handling all materials.

Electronic Products Recycling Association (EPRA)	
Compliance and Enforcement related Challenges or Shortcomings	• The processing system is completely mechanized and machines don't know the difference between designated and non-designated products. All non-designated products dropped off are processed, but they are not being paid for so this adds costs to the system. • Free riders – non-obligated (e.g. toasters, hair dryers, curling irons, etc.) and non-registered products being dropped off are a constant concern. • Do audits – know percent of non-designated products that they receive in each municipal load. • Many non-designated electronics are dropped off at EPRA sites. • Solution is to designate all small appliances to avoid consumer confusion and to collect fees from stewards/producers whose products are being managed by EPRA but where fees are not collected as the products are not designated.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	• National EPRA program directors consider Manitoba the best program because the government sets the framework but allows industry to run the program. If framework is non-prescriptive, industry will find the best way to achieve goals and targets. • MARR (Manitoba Association of Regional Recyclers) is a great forum for networking and sharing best practice. This receives government support and is a good expenditure of government money.
Ability for program to add new materials or programs	• Program can easily add materials such as all small appliances as the same collection sites and processors could be used. • Designating white goods (appliances) should be considered.
What could change or improve?	• Landfill bans would help to increase diversion. • Adding small appliances so all products received by the program are paid for and eliminate free riders. • More stability in Ministry staff which leads to a long learning curve for the Ministry staff to be familiar with the EPR programs.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/materials for diversion and adapt to market conditions	Small appliances could be added to the program, as well as outdoor equipment or anything with a plug or a battery (similar to B.C.). However, the industry may want to self-form.
Increasing Program Accessibility across the Province	EPRA continues to add collection locations and is involved with other PROs on the Northern Backhaul effort.
Potential for New Sectors	All sectors already covered in regulation.

Electronic Products Recycling Association (EPRA)	
Potential New Processing Technologies	Electronics processing is already best practice and state of the art.
Collaboration Enhancements (with Other Stakeholders)	EPRA already collaborates with other PROs on the Backhaul/Winter Road initiative to bring product back from NACC, remote and First Nation communities.
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	Landfill bans on designated products and durable items would improve diversion. EPRA was not ready eight years ago, but the infrastructure is now available and a landfill ban can be accommodated with sufficient options for dropping off electronics.
OTHER	
Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	Adding small appliances to the program would address the free ridership issue.
Circular Economy (where applicable)	Electronics recycling is already circular economy.
Additional Considerations and Analysis	Program works well. PRO would like to see a landfill ban on designated products. Manitoba should regulate more electronic materials (small appliances; possibly outdoor tools like B.C.). These are already being dropped off and processing is similar to electronics. Adjusting landfill levy will not make a difference to EPRA – fees are paid at point of sale when the product is purchased.

Table 7: PRO Review – Health Products Stewardship Association (HPSA)

Health Products Stewardship Association (HPSA)	
PROGRAM OVERVIEW	
Program Name	Manitoba Medications Return Program (MMRP)
PRO(s) and Key Steward Members	• PRO: Health Products Stewardship Association. • Key Steward Members: There are 5,746 participating pharmacies and 148 member producers across Canada.
History, Regulatory Instrument, Program Summary Highlights, Targets	Since April 2011, The Health Products Stewardship Association (HSPA) has administered the Manitoba Medications Return Program for prescription drugs, over-the-counter medications and natural health products that are sold for use in the province of Manitoba, but limited to consumer/residential waste stream. All prescription drugs in all dosage forms are accepted. The program also accepts natural health products but is limited to household quantities. Materials are accepted at MMRP registered community pharmacies. The following targets were identified in the 2017 to 2021 Program Plan: • The participation rate of eligible community pharmacies licensed by the Manitoba College of Pharmacists was 87% across the province of Manitoba. The target is to reach 90% (300 locations); • Looking for 10% increase in consumer awareness based on 2016 survey results; and • Increase collection to 18,500 kg per year or 0.014 kg per capita (noting that ideally, as a consumable, no consumable should be collected). The program responds to requirements of the Household Hazardous Material and Prescribed Material Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Increase the participate rate among eligible pharmacies in Manitoba to 90%. • Include the collection of household medical sharps in the program by 2020. • Enhance public communication and provide point-of-sale information on sage disposal of unused and expired medication.
Designated Materials Collected	• Prescription drugs in all dosage forms (pills, liquids and topicals); • Over the counter drugs; • Natural health products (limited to household quantities); and • Medical sharps.

Health Products Stewardship Association (HPSA)	
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• 100% funded by the health products industry; manufacturers of pharmaceuticals and medical sharps. • Does not collect recycling fee from the public to fund the program. • No cost to the consumer to participate in the program. • No indication of the cost for the program or breakdown of cost in the annual report, the program plan or the website.
Reporting Mechanisms and KPIs (Financial)	• The cost for running the program is not currently reported in the program's annual reports for Manitoba. • Based on feedback from the PRO, marketing consists of 5 to 10% of budget and processing is the remaining 90 to 95%.

Reporting Mechanisms and KPIs (Non-Financial)	• KPI #1 is Accessibility, followed by Consumer Awareness (#2) and Consumer Usage (#3).
	• Accessibility:
	  ○ The KPI is 90% of pharmacies in the province to be registered – currently 370 participating pharmacies out of the total 413 registered in the pharmaceutical college in Manitoba. This does meet the 90% target.
	• Public Awareness:
	  ○ The results of a 2016 study indicated that 53% of individuals in Manitoba identified that unwanted medication may be disposed of at pharmacies. In the same study, participants were asked directly (true/false/unsure) whether unwanted medication may be returned to pharmacies for disposal, with 66% answered true.
	  ○ HSPA will continue to provide signage to the network of community pharmacies to promote participation. The goal is that residents understand the process to return (i.e. empty dry pills into a transparent bag; the pharmacist needs to visually inspect what is being returned. Any liquid or creams are to be kept in their original container).
	  ○ Other awareness initiatives include a program website, promotion at point of return, earned media and advertising, and direct advertising and communications.
	• Usage/Participation:
	  ○ Consumer usage measured in survey questions like "Have you used HPSA" or "Have you returned medications to a pharmacy".
	  ○ In the 2016 study, 28% of Manitobans say they disposed of medication in the previous six months. Of those, 56% returned them to a pharmacy. Almost all Manitobans who returned medication to a pharmacy found the process convenient. Additionally, 93% were satisfied with the overall experience.

Health Products Stewardship Association (HPSA)	

	• Recovery Rate:
	  ○ In 2019, 18,477.8 kg of material was collected;
	  ○ No recovery rate because the only denominator is sales into the market. Ideally all medications are used in entirety therefore recovery rate is not a meaningful KPI.
	  ○ MMRP is currently in the data gathering phase for the annual report.
	  ○ KPIs and a recovery/collection rate will be given in the future for sharps; however before a rate is determined, the program needs to be mature enough in order to get a strong number through accessibility and usage.
	  ○ This program is not the only program that accepts sharps. Certain manufacturers also provide this service.
	  ○ Sharps recovery could be a KPI in the next two years.
	• Percent Processed:
	  ○ Not reported.
	• Contamination:
	  ○ Not reported.
	• GHGs:
	  ○ Not reported.

Collection System(s)	Material is collected through registered community pharmacies.
Processing Technology(ies)	All pharmaceutical material is incinerated. Biomedical sharps are autoclaved.
Compliance and Enforcement related Challenges or Shortcomings	• Limited non-compliance issues. • Natural health products and online sales are an issue, participation from the online retailers/manufacturer is a hit or miss. • When a manufacturer is found non-compliant/not participating in the program an email is sent initially, followed by an (escalated) official letter to ask for participation as a steward. • Every year between June and September, MMRP conducts a review of new, natural health product producers to determine who should be contacted if found not in compliance.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	• Relatively good coverage and support from the province. • The legislation is not overly prescriptive. • PRO synergy with Winter Roads initiative.

Health Products Stewardship Association (HPSA)	
Ability for program to add new materials or programs	• Accepting medical sharps in Manitoba – a container is provided to the patient if required. The patient brings the full container back to the pharmacy. • Not looking to expand past consumer quantities because the mandate is just for consumers/residential. Commercial contracts are already in place in hospitals and nursing homes to collect (typically same service providers). • Currently, 90% of the network of collection sites are brick and mortar pharmacies; however, they are looking at how to capture online stores and helping to support home care nurses who are supporting patients that cannot access pharmacies. • Objective is to make sure services are provided to those who do not have the same access (in areas outside urban centres). • Medical marijuana is considered a prescription drug and is therefore included.
What could change or improve?	• No identified weaknesses in the EPR regulatory framework. • The date of the annual report could be moved. Preferably closer to the end of June as all the financial audits occurring at the same time. • KPI from the government was 90% of pharmacies. Doesn't specify brick and mortar therefore must also look at online pharmacies. • Target health practitioners, tell patients that are going home, that they can return their medications when they are discharged. Therefore they can reach more patients. • The Manitoba government has been extremely supportive, however consistency of staff is important and would improve communications. • Manitoba sharps draft plan; great level of communication.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/Materials for Diversion and Adapt to Market Conditions	Specified that there is no intention of expanding to accept new materials since the definition of pharmaceutical is already quite large.
Increasing Program Accessibility across the Province	• NACC and Indigenous communities – sometimes the jurisdiction is federal, not provincial. PRO operates in the provincial jurisdiction. Want to ensure they "don't step on anyone's toes" and to make sure there are no gaps; • For FN communities' health clinics, they are serviced by a wholesale pharmacy which has the contract/container with HPSA. • Winter road program seen as positive.

Health Products Stewardship Association (HPSA)	
Potential for New Sectors	• Not looking to expand to commercial quantities because it is not mandated in the regulation. • ICI quantities, seniors home and care facilities are already being serviced – commercial contracts exist. Part of the commercial cost of business. Possibly the same service provider. • If other products added to prescription list, any legal products will be included.
Potential New Processing Technologies	No indication of new processing technologies beyond autoclaving of sharps.
Collaboration Enhancements (with other stakeholders)	• Municipalities can be better serviced by looking at the Ontario Sharps program as an example. In order to transition people bringing sharps to the depots they sign a one year memorandum of understanding with some municipalities to distribute (for free) sharp containers to residents. • Regarding the PROs and the Manitoba government, continued PRO workshop or semi-annual meetings are beneficial.
Other Enhancements to Explore (e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.)	• The current framework is working and HPSA feels that have an excellent relationship with the government. • If the regulation is reopened, there is a certain level of harmonization throughout other jurisdictions that could take place so that there is the same message nationally. • HPSA recommends that Manitoba consider the Ontario and PEI sharps definition instead of the hazardous waste CSA standard. See below from 2017. • After many years, it can be established that the main factor that has contributed to the success of HPSA programs rests with an easy to understand and harmonized definition of the products included in the stewardship programs: "Should the government decide to update its recycling regulation, we would strongly recommend that the definition of medical sharps mirrors the one that is already present in Ontario and Prince Edward Island. We would therefore recommend the following definition for Manitoba: Household Medical sharp means a needle, safety engineered needle, lancet or other similar instrument that is designed to puncture the skin for medical purposes and that is sold or otherwise distributed and, include anything affixed to the medical sharp including a syringe."

Health Products Stewardship Association (HPSA)	
OTHER	
Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	• Opportunities: ○ Need help getting the message out there – communication everywhere to residents. ○ Need to identify where confusion regarding where to bring medical sharps, so that sharps are brought to the pharmacy rather than HHW depots. ○ Synergizing Winter Roads efforts, more meetings with PRO/stakeholder to discuss expansion or additional ways to support. • Barriers/Challenges: ○ There has been a lot of change in government staff. Don't know who you can talk to after the changeover – need consistency of staffing. ○ It is consumer use and consumer awareness that is carrying the initiative. ○ The message can sometimes be counterproductive when given to the patient since the medication is meant to be taken in its entirety, however if they are not finished it should be brought back to the pharmacy. A new marketing strategy is being devised this year.
Circular Economy (where applicable)	At the end of life, materials must be incinerated. No possibility for reuse or re-entering the market.

Table 8: PRO Review – Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)

Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)	
PROGRAM OVERVIEW	
Program Name	Thermostat Recovery Program (TRP)
PRO(s) and Key Steward Members	• PRO: Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) with the support of the Canadian Institute of Plumbing and Heating (CIPH) and thermostat manufacturers. • Key Steward Members: The HRAI is a trade association of manufacturers, wholesalers and contractors representing the Canadian heating, ventilation, air conditioning and refrigeration (HVAC) industry.
History, Regulatory Instrument, Program Summary Highlights, Targets	*In Manitoba residents can recycle mercury containing, as well as, electronic thermostats. All components of the recovered thermostats are recycled, including plastics, metals, glass and mercury associated with the thermostat.* The first pilot program was first started in 2006 by the Clean Air Foundation (now Scout Environmental [SE]). The pilot program collected mercury-containing thermostats. This program became a permanent program in 2007. In early 2009, SE, Heating, Refrigeration and Air Conditioning Institute of Canada, Canadian Institute of Plumbing and Heating and a number of thermostat manufacturers and distributors partnered to use the existing program model and infrastructure as the basis for the Stewardship plan. Since 2011, SE delivered the Switch the 'Stat Program. HRAI took over as PRO in 2016, rebranding and relaunching the program with the new TRP name. Materials are accepted primarily through HVAC contractors or wholesalers (the main collection channel). Secondary channels include drop-off locations and mail-back kits. As the program is collecting largely obsolete mercury containing thermostats (2008 last year manufactured), there is no cost to the consumer at the point of sale or at the time of collection. It was assumed that a total of 1,444 mercury containing thermostats were available for collection annually for the Plan years 2017 to 2021. In 2019 (fiscal) the 470 actually recovered accounted for a recovery rate of 33%. The program responds to requirements of the Household Hazardous Material and Prescribed Material Stewardship Regulation and has no specific targets.
Designated Materials Collected	Mercury-containing thermostats – defined as products that use a mercury switch to sense and control room temperature through communication with heating, ventilation and air conditioning equipment.

Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)	
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• Does not collect recycling fees from the public to fund the program. • No cost to the consumer to participate in the program. • 100% funded by the manufacturers and distributors of thermostats. Five major players in the market completely cover program costs nationally. • No indication of cost for the program or breakdown of cost in the annual report, the program plan or the website. • The budget is made at the start of the year based on units previously collected and the manufacturers are billed every few months.
Reporting Mechanisms and KPIs (Financial)	• The cost for running the program is not currently reported in the program's annual reports to Manitoba. • About $30,000.00 goes towards education and advertising. • No estimate of amount going towards processing.

Reporting Mechanisms and KPIs (Non-Financial)	• Public Awareness:
	  ○ The TRP focuses on the HVAC and plumbing industry rather than the general public, majority of collection is through industry contractors.
	  ○ Industry-focused initiatives to increase participation include the program website, printed brochures, industry communications, and on-site promotion.
	  ○ Approximately 5% of materials are collected from municipal channel (mail-back), therefore there is some level of public participation and awareness needed.
	  ○ Consumer outreach initiatives include municipal eco calendars, consumer facing websites, brochures and outreach events.
	• Participation:
	  ○ The program has strong coverage in the Southern part of the province, however, the majority of participation falls within the Winnipeg Regional District. Northern parts of the province have lower participation rates and are contractor dependent.
	  ○ Target of 123 collection locations for the total population of Manitoba. Currently there are 104 registered participants (90 contractors/ wholesalers and 14 municipal sites) provides 85% coverage. Five new collection points were established in 2019.
	  ○ Looking at municipal associations to increase coverage and participation, though the majority is collected by contractors and wholesalers.
	• Recovery Rate:
	  ○ 470 intact thermostats collected in fiscal year 2019.
	  ○ In 2019, recovered 33% of the plan's year four target of 1,444 intact thermostats.

Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)	
	○ The estimates of thermostats available for recovery rate were inherited from Scout Environmental, could possibly use some revisions. ○ 2008 was the last year a company manufactured mercury containing thermostats. With an estimated 15 to 20 year life expectancy, the last ones will slowly be collected and the recovery rate should reflect this. • Percent Processed ○ 100% of all components of the recovered thermostats are recycled, including plastics, metals, glass and mercury associated with the thermostat. • Contamination ○ Not reported – if they are broken, still processed. • GHG ○ Not reported.
Collection System(s)	Thermostats are collected through three collection systems: 1. Contractors/wholesalers remove and collect thermostats during furnace removal/replacements, and act as recovery point for general public. 2. Send-back kits (collection containers, pre-paid return waybill, instructions/ promotional materials and transportation agreement) for members of the public in remote regions of the province, or who have mobility challenges. 3. Municipal, community collection points where the public can drop-off their old thermostats (same send-back collection containers).
Processing Technology(ies)	All components recycled. Dismantled in Ontario and mercury goes to either Pennsylvania, USA or Chatham, Ontario. Recyclability cannot be improved.
Compliance and Enforcement Related Challenges or Shortcomings	Shortcomings in reaching annual targets for collection of thermostat units (only 32% of target in 2019); however target possible requires iteration. All producers paying for program funding.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	• Supply chain – using HVAC contractors and wholesalers for collecting material. • Manufacturers absorb full costs even without manufacturing new product. • Collaboration of stewards is impressive.
Ability for program to add new materials or programs	No other new materials expected to be added to the program. Mercury containing thermostats are obsolete, incompatible with new technology.

Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)	
What could change or improve?	• No suggested improvements. • May need to consider imminent program termination, as there are only orphaned materials in existence.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/materials for diversion and adapt to market conditions	No other new materials expected to be added to the program.
Increasing Program Accessibility across the Province	• Mail back program has low uptake. HRAI would like to increase participation through the Association of Manitoba Municipalities (AMM) to increase collection points – also perhaps through school divisions. • Partnering with Indigenous Services Canada (ISC) to ensure contractors working within FN communities are using the program. • Winter Road Program was welcomed and is participated in financially although no thermostats have been recovered thus far.
Potential for New Sectors	• Program is available across all sectors. • KPI to ensure school retrofits include collection, also by ISC in FN communities.
Potential New Processing Technologies	No suggested new processing technologies.
Collaboration Enhancements (with Other Stakeholders)	All members of the supply chain are already included in the program delivery.
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	• HRAI would like to link all EPR and other recycling programs on the AMM website. • More surveying of participants to determine what KPIs to target and how to reach.

Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)	
OTHER	

Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	• Opportunities:
	  ○ Collaboration with other PROs led by province – backhaul and winter road as example.
	  ○ AMM providing letter to their member municipalities or a mailing list to facilitate the message to increase collection points.
	• Barriers/Challenges:
	  ○ Municipalities could assist with advertising to increase public awareness.

Circular Economy (where applicable)	Industry has moved away from the production of mercury containing thermostats to ensure no mercury toxicity. No new units are being manufactured. Reuse is not an option.
Additional Considerations and Analysis	Program material obsolescence.

Table 9: PRO Review – Manitoba Association for Resource Recovery Corporation (MARRC)

Manitoba Association for Resource Recovery Corporation (MARRC)	
PROGRAM OVERVIEW	
Program Name	Used Oil and Antifreeze Program
PRO(s) and Key Steward Members	• PRO: Manitoba Association for Resource Recovery Corporation (MARRC). • Key Steward Members: There are currently 205 stewards.
History, Regulatory Instrument, Program Summary Highlights, Targets	MARRC was established in 1997 by the manufacturer and marketers of lubrication products in Manitoba. Initially the program just covered used oil, oil filters and containers. In 2011, MARRC was also approved to operate the Used Antifreeze Stewardship Program. The current plan approval extends to June 30, 2023. The program responds to requirements of the Used Oil, Oil Filters and Containers Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Achieve a recovery rate of 75% for used oil and filters. • Include collection of diesel exhaust fluid containers to the program by 2020.
Designated Materials Collected	Acceptable material is defined as automotive antifreeze, automotive antifreeze containers, used oil, used oil filters and used oil containers.
ANALYSIS of PROGRAM ACCOUNTABILITY	

Program Funding	• MARRC derives revenue from Environmental Handling Charges (EHCs) applied to the sale or consumption of selected lubricating products in Manitoba. They also generate some revenue from Membership fees. Primary expenses are related to the:
	  ○ Establishment and operation of a publicly-accessible network of licensed collection activities for used lubricating products;
	  ○ Payment of Return Incentives to companies licensed by the province and registered with MARRC to collect used lubricating products and transfer them to approved processors and end-users;
	  ○ Payment of Processing Incentives to companies licensed by the province and registered with MARRC to recycle used oil and antifreeze containers; and
	  ○ Development and distribution of public education materials.
	• Stewards are required to remit these levies (pay per litre).

Manitoba Association for Resource Recovery Corporation (MARRC)	

Reporting Mechanisms and KPIs (Financial)	• Key financial statements included in the 2019 Annual Report include:
	  ○ Used Lubricating Products Stewardship Program Expenses: $4 million.
	  ○ Antifreeze Stewardship Program Expenses: $500,000.00.
	  ○ Diesel Exhaust Fluid (DEF) Containers Program: $88,000.00.

Reporting Mechanisms and KPIs (Non-financial)	• Public Awareness:
	  ○ Participates in various tradeshows and exhibitions in Manitoba to enhance program awareness.
	• Recovery Rates in 2019:
	  ○ Oil – 15.7 million litres recovered, 92% recovery rate (against 75% target).
	  ○ Oil Filters – 2.3 million filters, 69% recovery rate (against 75% target).
	  ○ Oil Containers – 297,000 kg, 37% recovery rate. It is also assumed that 20% of containers are re-used.
	  ○ Antifreeze Fluid – 373,000 litres, 21% recovery rate (57% is expected to be lost in service).
	  ○ Antifreeze Containers – 33,700 kg, 37% recovery rate.
	  ○ DEF containers – 17,000 kg, 37% recovery rate.
	  ○ Oil and anti-freeze fluids should be consumed in use therefore recovery is not expected to be 100%.
	• Percent Processed:
	  ○ Oil – 15.7 million litres recovered.
	  ○ Oil Filters – 2.3 million filters.
	  ○ Oil Containers – 297,000 kg.
	  ○ Antifreeze Fluid – 373,000 litres.
	  ○ Antifreeze Containers – 33,700 kg.
	  ○ DEF Containers – 17,000 kg.
	• Contamination:
	  ○ Not reported as contamination is managed by the processor.
	• GHG:
	  ○ Not reported.

Collection System(s)	Material is collected through a network of Registered Collectors and Processors, EcoCentre Depots and Burning Unit installations. For EcoCentres, the rural density is a radius of approximately 50 km spacing between licensed locations. The urban density space facilities approximately 15 minutes travelling distance from any point. Currently have six to seven collectors that are all paid the same return incentive.

Manitoba Association for Resource Recovery Corporation (MARRC)	
Processing Technology(ies)	Collected materials are sent to one of a number of processors who are government-approved receivers of used oil products that recycles them into value-added products. In the north, used oil is burnt in oil burners (about 40 approved). Plastic containers currently go to locations in Québec and B.C. after a fire occurred at the main plastic container processor, XPotential, in Winnipeg in 2011.
Compliance and Enforcement related Challenges or Shortcomings	Collectors are all paid the same collection incentive at five to six cents per litre. A higher rate such as 16 to 17 cents per litre should be considered for the north.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	Program works well.
Ability for program to add new materials or programs	Could add aerosol containers like in Québec.
What could change or improve?	Frequent government staff changeover is a challenge as it takes a long time for a new staff person to get up to speed.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/materials for diversion and adapt to market conditions	• Aerosols containers. • Moving windshield washer fluid and antifreeze containers to Multi-Material Stewardship Manitoba.
Increasing Program Accessibility across the Province	The goal is for the program to be easily accessible. Constantly working on this.
Potential for New Sectors	All sectors are already covered in the regulation.
Potential New Processing Technologies	Currently looking at Innovative waste-to-energy solutions.

Manitoba Association for Resource Recovery Corporation (MARRC)	
Collaboration Enhancements (with Other Stakeholders)	Currently involved with other PROs on the Backhaul/Winter Road project to bring materials back from NACC, remote First Nation communities. Co-operate with Product Care Association at some sites.
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	• Accountability, setting up targets. • Get into the communities and be ready to work.
OTHER	
Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	Looking for a local market for oil, antifreeze and DEF containers as they are currently being shipped to Québec and B.C.
Circular Economy (where applicable)	Collected materials are directed to productive uses.
Additional Considerations and Analysis	Program works will and achieves good results.

Table 10: PRO Review – Multi-Material Stewardship Manitoba (MMSM)

Multi-Material Stewardship Manitoba (MMSM)	
PROGRAM OVERVIEW	
Program Name	Packaging and Printed Paper (PPP) Program.
PRO(s) and Key Steward Members	• PRO: Multi-Material Stewardship Manitoba (MMSM). • There are 769 registered stewards who are businesses that supply, distribute or sell packaged goods or printed paper in the residential marketplace in Manitoba. Steward fees are based on the volume of packaging and printed paper stewards supply to residents.
History, Regulatory Instrument, Program Summary Highlights, Targets	• MMSM's first Program plan (as required under the Packaging and Printed Paper Regulation of 2008) was approved by the Minister in September 2009 for a five year term. The MMSM program launched on April 1, 2010. • In October 2010, MMSM signed a memorandum of understanding (MOU) with Canadian Beverage Container Recycling Association (CBCRA) to transfer the responsibility of the 75% beverage container recovery target from MMSM to CBCRA. • The last PPP Program Plan was submitted by MMSM in March 2017, initially to cover the period 2017-2021, but was extended given an extension by the province to align all term dates of stewardship plans. The next MMSM plan is now due in 2023. The program responds to requirements of the Packaging and Printed Paper Stewardship Regulation. Specific targets set fourth for approval of the program plan include: • Achieve a recovery rate of 70% for PPP over the term of the program plan. • Develop a plan for a 100% industry funded model for collection and recycling of PPP in Manitoba and share this plan with the provincial government by 2021. • Work collaboratively with municipalities and other stakeholders to mutually work out any outstanding issues regarding recycling of PPP. • Develop a plan for resolution of potential disputes between MMSM and its (non-steward) partners such as Manitoba municipalities and share this plan with the provincial government within six months of receiving the program plan approval.
Designated Materials Collected	• Aluminum food and beverage containers, boxboard, cartons, corrugated cardboard, glass food and beverage containers, paper, plastic food and beverage containers, steel food and beverage containers, and telephone directories

Multi-Material Stewardship Manitoba (MMSM)

ANALYSIS of PROGRAM ACCOUNTABILITY

Program Funding

- MMSM pays *up to* 80% of "eligible costs" incurred by municipalities to manage designated PPP materials through efficient and effective municipal residential diversion programs. Payments to municipalities are based on the sum of eligible administration, operating, promotion and education and capital costs less revenue for PPP designated materials. Municipalities are sorted into four municipal Group Population Categories for payment. Within each municipal group, the three year average median cost per tonne is multiplied by 80% to calculate the payment rate per tonne of PPP in accordance with MMSM's payment obligation.
- MMSM works with municipalities and other partners to provide Manitoba residents with reasonable access to collection services for PPP. Individual participating municipalities manage their recycling systems in accordance with the terms of a common services agreement with MMSM.

Reporting Mechanisms and KPIs (Financial)

- MMSM reported a cost to stewards for PPP recycling of $37.6 million in 2019. This was 3.5 % higher than steward costs in 2018.
- MMSM is one of four operating member organizations under the national producer-led stewardship organization called the Canadian Stewardship Services Alliance (CSSA). Producer funding across the four member companies ranges from: 50% in Ontario (going to 100% in 2023-26); 75% in Saskatchewan; 100% in B.C.; and 80% in Manitoba. The table below compares some key performance indicators among the four PPP programs from CSSA's 2020 AGM.

	B.C.	Saskatchewan	Ontario	Manitoba
2019 Gross/ (Net) tonnes collected	207,411T (185,692) 205,778 (2018)	41,945T net only 42,352 (2018)	729,906T 1,274,3120 (780,555) (2018)	68,232T net only 75,900 (2018)
Recovery Rate (2018 in brackets)	78.2% (78.1%)	77.4% (70.1%)	57.3% (60.2%)	80.3% (77.2%)
Recovery Target	75%	n/a	60%	70%
Recovered kg per cap (2018 in brackets)	40.5kg (40.2kg)	46.5kg (49.7kg)	55.3kg (59.7kg)	56.5kg (62.9kg)
% access to PPP program (2018 in brackets)	98.6 %(98.3)	84.4% (83.8)	94% (94)	95% (94)

Multi-Material Stewardship Manitoba (MMSM)

P&E per cap (2018 in brackets)	$0.57 (.58)	$0.06 (0.02)	$0.62 (.61)	$0.74 (.76)
% residents using service (2018 in brackets)	97% (95)	n/a	n/a	93% (93)
Net cost (2018 in brackets)	$101mil ($88) +14%	$10.6 mil ($6) +75.8%	$336 mil ($299) 12.4%	$37.6 mil ($36.3) 3.5%
Net Cost per tonne (2018 in brackets)	$545 ($482) +13%	$253 ($143) 77.5%	$461 ($383) 20.2%	$552 ($479) 15%
Cost per capita (2018 in brackets)	$22 (19) 14%	$12 ($7) 66%	$25 ($23) 11.3%	$31 ($30) 3.4%
2020 est. producer cost	$131 mil	$9.6 mil	$138.4 mil	$24 mil
2021 est. producer cost	$134 mil (2.5%)	$13.4 mil (39%)	$148.6 mil (7.4%)	$26.3 mil (9.4%)

- Comparison of MMSM to the other three CSSA managed PPP programs:
  - Manitoba has the highest per capita recovery for PPP; Ontario is the second highest. Beverage containers are included in this recovery as Canadian Beverage Container Recycling Association (CBCRA) material are processed through the MMSM system.
  - Manitoba shows the largest decline in net PPP tonnes collected from 2018 to 2019.
  - Manitoba has the second highest reported access to recycling PPP; B.C. is the highest.
  - Manitoba has highest P&E expenditures per capita for PPP.
  - Manitoba has the lowest net cost increase for recycling PPP from 2018 to 2019.
  - Manitoba has the highest net cost/tonne for PPP recycling; B.C. is a close second.
  - Manitoba has the highest PPP cost per capita but lowest increase in costs from 2018 to 2019 3.4%; Ontario is second.

Reporting Mechanisms and KPIs (Non-Financial)

- Public Awareness:
  - 45% of residents are aware of MMSM.
- Participation:
  - 95% of Manitoba residents have access to a residential recycling program, with 93% of residents participating in the programs.

Multi-Material Stewardship Manitoba (MMSM)	

	• Recovery Rate:
	  ○ In 2018 the program recovery rate was 85.7% and in 2017 it was 84.4%.
	  ○ Recovery rate is calculated by dividing the material managed by MMSM's municipal partners by the material supplied by MMSM stewards.
	• Percent Processed:
	  ○ Total printed paper recovered was 25,731 tonnes in 2018 and 27,156 tonnes in 2017.
	  ○ Total packaging recovered was 50,169 tonnes in 2018 and 77,676 tonnes in 2017.
	• Contamination
	  ○ Contamination rates are not reported in annual reports but is tracked through curbside and bunker audits at a municipal level. The "per tonne" rate paid to municipalities allows for 5% residuals (contamination).
	• GHG
	  ○ GHG is not something currently tracked as the Province has not required this to be a KPI.

Collection System(s)	• Materials are collected through each municipality's recycling program. Recovered materials are transported to recycling facilities where they are sorted and sold to end users.
Processing Technology(ies)	• Material Recovery Facilities (MRFs) are on contract to MMSM to provide processing and material marketing services for collected materials. The MRF in Winnipeg in particular is considered "state of the art" and able to process a wider range of materials than previously. It is still unable to distinguish black plastics.
Compliance and Enforcement related Challenges or Shortcomings	• MMSM is responsible for signing up obligated steward companies. There is no set target (other than providing 80% funding to municipalities based on an approved formula) for program performance to be enforced by the Province. • In the interviews with both MMSM staff and Board it was suggested that the Province could do a better job enforcing the regulations and bringing on "free riders" (online materials and/or purchased out of province).
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	• The integration of "away from home" recycling (through CBCRA) with curbside material processing is somewhat unique to Manitoba. • MMSM Board and staff members both indicated that, in their opinion, the process of submitting and getting the approval for a five year plan is a productive process. "Manitoba is a leader and one of the best regulatory regimes right now…but there is room for modernization".

Multi-Material Stewardship Manitoba (MMSM)	
Ability for program to add new materials or programs	• Québec has added and B.C. and Ontario PPP programs are adding "packaging-like" materials. • B.C. stewards (through its PRO Recycle B.C.) have started to work with some local municipalities to measure (through audits) the amount of obligated materials that are managed through organics processing systems (with an eye to potential payment in the future). • B.C. is planning to also obligate PPP materials that are generated in the Industrial, Commercial and Institutional (ICI) sector. • B.C. and Ontario producers have been active in researching and supporting public space recycling challenges and opportunities.
What could change or improve?	• Some Manitoba municipalities' claim that MMSM's funding does not cover 80% of municipal PPP recycling costs. • With MMSM's 2023 program plan still two years away, there is time for the Manitoba government to consider some of the changes in the PPP programs that have evolved in other provinces (e.g. a focus on public space recycling; the inclusion of ICI materials and the inclusion of obligated organics). • Perhaps the single most important policy issue for consideration in Manitoba is the issue of increasing producer funding from 80% to 100%. The key question for Manitobans and municipalities is whether the potential for increased funding is worth the cost of likely losing overall municipal control of the future PPP recycling system (Although like B.C., municipalities could be offered "right of first refusal"). • Municipalities expect open dialogue regarding the program and its potential change to 100% funding. They want clarity on how this will affect them and what their options are. They were not advised of the extension to this program plan (end 2021). • Because MMSM carries lead responsibility for meeting the 50% bag diversion program, it might also have a role to play (along with other producers and interested stakeholders) in the development of single-use plastics strategy (i.e. beyond just bags). • MMSM could/should add annual GHG impacts to its reporting to the province as is done in both B.C. and Saskatchewan CSSA-led PPP programs. • Municipalities in particular would like to see a resolution as to how the newspaper industry participates in the MMSM program. They are feeling money has been withheld during their continuance to collect this material.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/materials for diversion and adapt to market conditions	• "Packaging-like" materials; • Polystyrene foam; • Film; and • ICI PPP.

Multi-Material Stewardship Manitoba (MMSM)	
Increasing Program Accessibility across the Province	Accessibility to PPP recycling is currently reported as 95%.
Potential for New Sectors	• Expanding to include the ICI sector. • Possible added focus on single use plastics (takeout containers).
Potential New Processing Technologies	Progress is being made to better process plastics materials (i.e. through optical sorting technologies). The Winnipeg MRF is "state of the art".
Collaboration Enhancements (with Other Stakeholders)	• MMSM currently collaborates with other PROs to service NACC and remote communities to backhaul various program materials. • B.C. stewards have created a B.C. Stewardship Council to support collaboration among PROs regarding program accessibility improvements, waste audits, etc. A similar council could be encouraged for Manitoba, though most PRO interviews indicate that they are satisfied with the current informal arrangement – "it's the Manitoba way and it works".
Other Enhancements to explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	• Ontario and B.C. have recently established material specific targets. • If targets are set, the targets should be at the point of sale to be used in another product/package (as per European best practice recycling regulation changes).
OTHER	

Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	• Opportunities:
	  ○ Establish specific material targets.
	  ○ Adding materials such as "package-like" materials, polystyrene, film.
	  ○ Expanding into the ICI sector.
	  ○ Harmonizing rules and definitions across the country.
	  ○ In interviews with municipalities, they wanted assurance that plans to move towards some form of 100% EPR for PPP includes active consultation with the municipal sector.
	• Barriers/Challenges:
	  ○ Challenge enforcing materials that are coming out of the province such as online parcels, packing and boxes. Due to regulations being provincial, not all of those retailers and suppliers are obligated to be stewards.

Multi-Material Stewardship Manitoba (MMSM)	
	○ As a federal Crown Corporation, Canada Post is not obligated to become a steward. MMSM has tried to have Canada Post volunteer as a steward in the past without success. ○ MMSM thinks the waste management industry in the province needs to help out with better reporting.
Circular Economy (where applicable)	• Increasing recycled content legislation to include packaging and printed paper recovered would increase CE approach. • Designing packaging to be lighter and take up less space. • Encourage producers to manufacture reusable/refillable products which do not require processing as readily, thereby saving program costs.
Additional Considerations and Analysis	• MMSM is also responsible for working with Manitoba plastic bag stewards (including retailers) to meet a target of reducing the distribution of single-use plastic bags by 50% across the province. The multi-pronged approach includes: plastic bag reduction (e.g. some retailers charge a fee for single use bags); promoting reuse; supporting bag drop offs at retail locations; and measurement and education and promotion. MMSM's annual report monitors progress against the target and reports on several measures (e.g. consumer reuse, bags collected and recycled in schools across the province, etc.). However, MMSM does not report progress against the 50% target. In the fall of 2019, the Premier called for consultations with the private sector on ways to stop the reliance on single-use bags; he asked for feedback on a possible bag ban as one of 100 actions in the first 100 days of his new government and has met with MMSM (and others) to continue these discussions.

Table 11: PRO Review – Product Care Association (PCA)

Product Care Association (PCA)	
PROGRAM OVERVIEW	
Program Name	Manitoba Household Hazardous Waste (HHW) Program
PRO(s) and Key Steward Members	• PRO: Product Care Association (PCA). • Key Steward Members: Product manufacturers, distributors and retailers.

History, Regulatory Instrument, Program Summary Highlights, Targets	The Manitoba HHW Program is a free Canadian recycling program for household hazardous waste. The program has been in place in Manitoba since May 1, 2012. The program is required to report on several metrics including:
	• Quantification of Program Product supplied into the Manitoba marketplace;
	• Number of collection sites;
	• Quantification of waste material collected;
	• Management of the collected material with reference to the waste management hierarchy; and
	• Consumer awareness.
	
	The program plan performance targets are:
	• Increase paint collection volumes by 10% by 2021 (2015 baseline).
	• Increase total collections of fluorescent lights by 20-28% by 2021 (2015 baseline).
	• The number of full service collection sites to be 18 by 2017 and 24 by 2021.
	• For consumer awareness to be:
	  ○ 41% (paint) and 48% (other HHW) by 2017.
	  ○ 43% (paint) and 50% (other HHW) by 2019.
	  ○ 46% (paint) and 53% (other HHW) by 2021.
	
	The program responds to requirements of the Household Hazardous Material and Prescribed Material Stewardship Regulation. Specific targets set fourth for approval of the program plan include:
	• Establish ten new full-service HHW collection sites over the duration of the program plan term.
	• Include compact fluorescent lights and tubes from the ICI sector in Manitoba as part of the program beginning in 2020.
	• Increase public education and awareness efforts to improve public participation in the program.

Designated Materials Collected	• Paint, flammable liquids/gasoline, corrosives, toxics, physically hazardous materials, pesticides, fluorescent lighting tubes and compact fluorescent lights (“fluorescent lights”). Includes product containers.

Product Care Association (PCA)

ANALYSIS of PROGRAM ACCOUNTABILITY

Program Funding

- The program is 100% funded by industry stewardship fees if the material is obligated. Environmental Handling Fees (EHFs), set by PCA, which are based on the volume of sales of acceptable program materials in or into the Province.
- In some cases, retailers recover this expense as a separate visible EHF to the consumer, however, there is no charge to the consumer to drop-off materials for recycling.
- The stewards include manufacturers, distributors and retailers.
- EHFs are used for communications, administration, collection, transportation, processing, reserve fund and government fees.

Reporting Mechanisms and KPIs (Financial)

- Funded by membership fees, Environmental Handling Fees (EHF);
- Fees are remitted to PCA by its members based on the volume of sales per each designated material collected.
- Fee rates are set by PCA.
- Retailers may choose to recover EHF from consumers separately; and
- Program revenue used towards program operations (collection, transport and processing), administration, communication and outreach, maintenance of reserve fund.

	2018	2017
Revenues	**$ 1,611,349**	$ 1,833,931
Program expenses (recoveries)		
Processing	**708,132**	593,164
Collection	**443,715**	327,937
Transportation	**391,783**	319,745
Administration (Note 2(b) & (d))	**300,456**	249,198
Communications	**48,449**	73,507
Regulatory	**(15,507)**	15,776
	1,877,028	1,579,327
Excess (deficiency) of revenues over expenses for the year	**$ (265,679)**	$ 254,604

	2019	2018
Revenues (Note 5)	**$ 1,163,363**	$ 1,611,349
Program expenses (recoveries)		
Processing	**550,753**	708,132
Collection	**382,122**	443,715
Transportation	**343,092**	391,783
Administration (Note 2(b) & (d))	**313,128**	300,456
Communications	**111,287**	48,449
Regulatory	**-**	(15,507)
	1,700,382	1,877,028
Deficiency of revenues over expenses for the year	**$ (537,019)**	$ (265,679)

Program expenses have exceeded Program revenue for 2018 and 2019.

Product Care Association (PCA)

Reporting Mechanisms and KPIs (Non-financial)

- Public Awareness:
  - PCA measures through social media analytics, website hits and online advertisements. An online survey of Manitobans found that 60% of residents are aware of paint recycling in the province and 58% are aware of HHW recycling (have exceeded their plan target).
- Participation:
  - Hoping to increase collection site numbers to increase participation – target of 25 'full service' sites –exceeded.

2019	Paint	Paint Aerosol[9]	Flammable Liquids (incl. Gasoline)[10]	Toxics (incl. Pesticides)[9]	Corrosives[9]	Physically Hazardous[8]
Litres Collected	280,110	86,975	70,626	14,480	21,750	14,298
Litres Sold[11]	6,221,185	952,569	698,604	306,601	169,626	197,715
Recovery Rate	5%	9.1%	10.1%	4.7%	12.8%	7.2%

2018	Paint	Paint Aerosol[8]	Flammable Liquids (incl. Gasoline)[9]	Toxics (incl. Pesticides)[9]	Corrosives[9]	Physically Hazardous[8]
Litres Collected	468,746	81,025	88,458	29,463	27,967	13,020
Litres Sold	6,279,325	976,828	664,192	178,735	179,438	193,097
Recovery Rate	7.5%	8.3%	13.3%	16.5%	15.6%	6.7%

- Percent Processed:
  - The program plan specifies a performance target of a 10% increase of total paint collection volumes by 2021 (compared to 2015 volumes) and a 20 to 28% increase for fluorescent lights. Both have been exceeded.
  - Paint collected in 2015 vs 2019: 235,175 L vs 280,110 L.
  - Fluorescent lights collected in 2015 vs 2019: 96,589 units vs 191,406 units.
- Recovery Rate:
  - Steer away from recovery rates since products are consumables that are intended to be used up.
  - Do include recovery rates for florescent lights however still difficult – need to consider the lifespan of the product. Hard to pinpoint the right match (year sold vs year recovered).
- Contamination:
  - Non-obligated materials are being covered by the province therefore technically no contamination. Officially, the program does not accept products that are unlabeled or cannot be identified (unknowns); products that are leaking or improperly sealed; commercial, industrial or agricultural products; cosmetics, health and beauty aids; insect

Product Care Association (PCA)	
	repellents, disinfectants and pet products; and pre-crushed lamps (so these would all be considered contamination). • GHG: ○ Accessibility is the KPI so they have to be careful with GHG reduction given transport required if maximum accessibility (competing KPIs). Important to look at multiple metrics, not a single metric, to determine program performance. A program is performing well as long as the majority of the metrics are moving in the right direction.
Collection System(s)	• Materials are accepted at a total of 113 collection sites across the Province, of which 68 are municipal/private collection sites and 45 are return-to-retail collection sites. • There are 27 full-service sites (collect all program products). • There were also 17 HHW collection events in 2019, contracted with Miller Environmental. • The program does not directly own or manage collection sites. The program is responsible for providing supplies, post collection management and support to the collection sites.
Processing Technology(ies)	If not reused, materials are incinerated or sent for energy recovery; specifically: • Latex paint is reprocessed into paint and coating products. Unrecyclable latex paint is solidified and sent to the landfill. Oil based paint is consolidated and blended with other flammable liquids and sent for energy recovery at licensed facilities. • The Program has a Paint Reuse program where residents can take collected leftover paint free of charge at participating collection sites. • Aerosol paint cans are punctured and drained. Residual paint is blended with other flammable liquids for energy recovery. Propellant is absorbed by activated carbon. • Flammable liquids and gasoline are blended and sent for energy recovery. Flammable aerosols are evacuated and the contents are treated the same as paint aerosols. • Corrosives are neutralized, treated and stabilized for landfill. Corrosive aerosols are evacuated, the propellant absorbed by activated carbon, and the corrosive liquids neutralized. • Toxic liquids are fuel blended and sent for energy recovery. Toxic solids are incinerated at high temperature in a government regulated and permitted incinerator. • Fuel from fuel cylinders is either sent for energy recovery or is recaptured and used as fuel.

Product Care Association (PCA)	
	• All pesticides are incinerated at high temperature in a government regulated and permitted incinerator. Pesticide aerosols are evacuated, propellants absorbed by activated carbon, and the residual pesticides are sent for incineration. ○ Following the removal of the residuals, metal containers are typically recycled as scrap metal, subject to market conditions. Where possible and economically feasible, plastic containers will be sent for recycling. Where it's not viable or feasible to recycle metal or plastic containers (e.g. pesticides, toxics etc.), they are sent to landfill. • Spent fluorescent lights are collected and shipped to a processor where they are broken down into their component parts (i.e., mercury/phosphor powder, glass, ceramics, electronic circuits and metals) under a controlled environment. The metal end caps are sent to a scrap metal recycling facility. The glass, ceramics and electronic circuits are further processed and utilized as raw materials in various manufacturing processes. The mercury phosphor powder undergoes further processing where it is chemically treated, stabilized, and sent to secure landfill.
Compliance and Enforcement related Challenges or Shortcomings	• No enforcement challenges noted because everything is accepted and paid for by the province if not covered in the program.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	• Manitoba PROs already works well together without anyone asking them to. • Good in terms of structure – B.C. and Manitoba are similar in terms of performance based model and program plans. • Manitoba is one step better than B.C. in the sense that they don't get into the day to day operations of the programs. • Operations are carried out by municipalities and retailers. • The program has an HHW product classification decision tree to assist collection sites with properly sorting products. • Good communication with collection points.
Ability for program to add new materials or programs	Products not accepted in the HHW program or other PRO programs: • Caulking compound; • Oxidizers/Cleaners (e.g., drain opener, bleach); • Swimming pool chemicals/chlorine; • Fertilizers; • Insect repellents, disinfectants and pet products; • Caustics: Cement, grout, mortar;

Product Care Association (PCA)	
	• Agricultural products; • Cosmetics and health or beauty aids; • Refillable Propane Cylinders; • Smoke detectors, CO detectors; Manitoba has the ability to add new materials to the current HHW program. PCA will deal with any products the regulations includes, however, it is not PCA's place to say what should and shouldn't be in.
What could change or improve?	• Manitoba is unique in that PCA also takes care of non-obligated materials at the request of the province. What materials can be collected and handled depends on budget. If this wasn't done could be more push to add materials to regulation. • For non-program materials, there are set rates for different waste materials. Miller will bill based on categories. The cost is passed back to the province. Manitoba sees all the materials processed and the per kg cost (discrepancy with information from the province). • One stop shop is best. Brings in the most convenience for consumers. Challenge is whether a site has the ability and wish to do that (local municipalities are responsible for materials that are non-obligated if they choose to collect at collection sites/depots). • Some jurisdictions will prioritize what products to collect – usually because of funding.
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/materials for diversion and adapt to market conditions	• Oxidizers (including bleach, chlorine and pool chemicals) could be added. • Fertilizers are felt to be a consumable which are supposed to go in the ground – could spend more time regulating than worth what is collected, doesn't make sense to regulate products that intend to be in or on the ground. • Cylinders – camping fuel cylinders single use are already part of PCA. Refillable has not been because of existing propane system by industry (gas stations). But could be managed by PCA. Depends on industry. • Smoke and CO detectors are being added in B.C. but not in MB because of the regulations – driven by regulation not program itself wanting to expand products. • Look at the Outdoor Power Equipment Institute of Canada (OPEIC) program in B.C. that manages outdoor electric power equipment. • Mattresses – industry association in the US (CA/RI/CT). PCA could be involved in the back end side with finances since Mother Earth Recycling (MER) processor here. No equivalent industry association on the Canadian side. Some retailers and manufacturers have their own trade-in program. Most jurisdictions will have MER or a non-profit doing mattresses. MER and similar

Product Care Association (PCA)	
	types of entities do a good job but couldn't manage a province wide program. Would need industry or a stewardship program to set up and do it. PCA would be more than happy to help as long as board approves.

Increasing Program Accessibility across the Province	Adding collection sites is challenging and time-consuming due to some of the program products being hazardous.
	
	Challenges include:
	• Limited existing HHW collection infrastructure at the outset of the Program;
	  ○ Zoning requirements for HHHW storage structures;
	  ○ Higher than anticipated costs for collection sites to accommodate HHW;
	  ○ Competing priorities at the local municipal level as a result of municipal amalgamation and regional flooding (some communities don't even have running water – competing priorities); and
	  ○ Extensive process involved in the installation of any required infrastructure.
	• PCA has a capital funding assistance program to help communities with developing infrastructure for collection sites.
	• Working on Winter Road program – also with backhaul opportunities. Licensing is one challenge that causes delays.
	• Communities have to see products as a priority. You can't force them to participate and EPR programs can't come into the community and force it on them. Need a local champion in the community (e.g. Saint Theresa Point).
	• There has to be a need or a want from the community to do it. PCA is happy to work through the learning curve with the community.
	• Some communities are better suited to have a single collection day event as opposed to a year-round collection site.
	• Contractor – Coordinator/first point of contact for NACC and remote communities:
	  ○ Regular meetings focusing on the north; and
	  ○ Everyone contributes towards paying the Contractors fee.

Potential for New Sectors	Commercial materials – PCA does not go by end user – depends on intended use of product. Currently have a large volume direct pick up service (for paint for example).
Potential New Processing Technologies	Containers – MARRC and ROC – would love to tap into the market. Challenge with HHW is there is residual in containers. The issue is that if you clean the containers, you create more waste. Currently plastic containers are either incinerated or landfilled. Paint – either metal, plastic or combination. HHW can be glass, metal, different types or plastic, different colours of plastic. Mixture makes it hard from an economic perspective to create enough volume to go into any system. Metal is recycled.

Product Care Association (PCA)	
Collaboration Enhancements (with Other Stakeholders)	• Central collection transfer location and partnerships with other stewardship organizations. • For Winter Road Manitoba PROs already works well together without anyone asking them to. • Makes more sense to work together – informal working group to tackle the problem – work with the feds and locals groups. • One program will lead for logistics, payments, coordinate and organize supplies for central location. PCA sent trucks, supplies to St. Theresa. • Would like the province to be more involved. • Similar to B.C. however can move quicker in Manitoba because of less players. • No need for formalization – things are working well as is.
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	Compliance is pretty good. PCA will track down producers not registered and will provide their information to the department. Once a producer receives something on letterhead communication from the province, it will trigger action.
OTHER	

Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	• Opportunities:
	  ○ Flexibility in regulations that allow programs to operate.
	  ○ "One stop shop", Manitoba depots collect multiple products.
	  ○ Generally product groups should fit under a particular basket or industry sector. Lighting products, including Christmas lights, have similar manufacturers. Industry/association buckets are important. Doesn't make sense to have toaster/small appliance in same category as large appliances.
	• Barriers/Challenges:
	  ○ Turnover of staff – challenges having to re-educate staff and loss of momentum because of this.
	  ○ For hazardous waste, there is not only the EPR regulations but there are also regulations under the Dangerous Goods Handling and Transportation Act. This causes inconsistency/incompatibility. The Regulations don't 'dovetail'.
	  ○ The Dangerous Goods Handling and Transportation regulations are designed for industrial waste.

Product Care Association (PCA)	
	○ Campsites were willing to collect single-use camping BBQ propane cylinders from camp grounds with PCA picking them up. However if that happened, they would be out of the Manitoba regulations for transportation. The campsites didn't want to have to go through licensing. ○ There is also the requirement of licensing a community through the Approvals and Licensing Branch with the province (previously called this – now called the Environmental Approvals Branch). Waiting for licensing means waiting to transport material. This causes delays in the north – big challenge since relying on winter roads. ○ GHG and reporting on it – biggest misconception. The program is designed and required to provide maximum accessibility and maximum return of products which inherently means more transport. How do you expect them to report on GHG or cut on GHGs?
Circular Economy (where applicable)	General trend is that industry is moving away from including hazardous material in their products (e.g. moving away from oil based paints to water based paints). Work towards biodegradable products (paint strippers).
Additional Considerations and Analysis	• Landfill bans would help but the timing of the bans cannot be one size fits all. Easy to add packaging, beverage containers or tires. If you ban a product you need a place for consumers to dispose of the product properly. HHW is not ready right now (infrastructure is not there) – still a few years away. Most local governments are focusing on packaging and organics (high volume materials). HHW is down the ladder due to smaller volumes and smaller costs. • In terms of regulating products, look at products with succession technology: ○ CFLs, fluorescent tubes – another five years will be in trouble because no sales, no funding. Sustainability challenges with these "Orphan materials" ○ Generally, traditionally deemed hazardous that are no longer allowed to be sold on the market. PCB ballasts – no funding but will still receive. Mercury in thermostats are prime example. ○ New lights won't create hazardous issue but if focusing on diversion, they will create volume.

Table 12: PRO Review – Tire Stewardship Manitoba (TSM)

Tire Stewardship Manitoba (TSM)

PROGRAM OVERVIEW	
Program Name	Tire Stewardship Program

PRO(s) and Key Steward Members	• PRO: Tire Stewardship Manitoba (TSM).
	• Key Steward Members: Tire retailers, distributors and car dealers. Tire steward defined as:
	  ○ The first person who, in the course of business in Manitoba, supplies a tire to another person; or
	  ○ A person who, in the course of business in Manitoba, uses a tire obtained in a supply transaction outside of Manitoba.
	
	The program responds to requirements of the Tire Stewardship Regulation. Specific targets set fourth for approval of the program plan include:
	• Maintain a recovery rate of 90% or higher for used tires collected throughout the program plan term.

History, Regulatory Instrument, Program Summary Highlights, Targets	TSM has operated a free tire recycling program in Manitoba since 2007. TSM has been designated Manitoba's tire stewardship program since April 1, 2008 when it assumed responsibility for the program from the government's Tire Stewardship Board. The program accepts various tires and tubes. In 2019, 20,717 tonnes of material was sold and 17,835 tonnes of material was collected, equating to 86% of material being recovered. There is no target recovery rate. The program is funded by steward fees which vary according to tire type to avoid cross-subsidization. Stewards include retailers who sell new tires. The program plan outlines that: • Performance measures must be able to show both what is recovered and what is not. • Measure, monitor and report on program performance including meeting designated material recovery target rates. • Include the total amount of product sold and collected, with recovery rate, and the amount of product collected and processed by region if possible. • Track public awareness, accessibility, diversion rates and diversion per capita and consideration of tire recycling hierarchy.

Tire Stewardship Manitoba (TSM)	
Designated Materials Collected	All tires and tubes for passenger/light trucks, medium trucks, large agricultural and small and large off-road tires. The regulation defines designated products as all tires on a motorized vehicle or pulled by a motorized vehicle. Bicycle tires have been added voluntarily.
ANALYSIS of PROGRAM ACCOUNTABILITY	
Program Funding	• The program is funded by steward fees which vary according to tire type to avoid cross-subsidization. Stewards include retailers who sell new tires.

Reporting Mechanisms and KPIs (Financial)	• The program plan requires the following financial KPIs to be reported annually:
	  ○ Total program cost by volume;
	  ○ Recycling costs per tonne;
	  ○ Administrative costs per tonne;
	  ○ Stewardship Programs cost per tonne; and
	  ○ Annual audited statements.
	• In 2019, the total program cost was $317.00 per tonne of material collected ($271.00 for operational costs, $38.00 for administrative costs and $8.00 for stewardship programs).
	• In 2019, the annual expenses were $5.6 million, the stabilization reserve was $4.9 million and the net operating surplus from the previous year was $416,914.00.
	• In 2018, the total program cost was $335.00 per tonne of material collected ($291.00 for operational costs, $36.00 for administrative costs and $8.00 for stewardship programs).
	• In 2018, the annual expenses were $6.1 million, the stabilization reserve was $4.5 million and the net operating deficit from the previous year was $197,887.00.

Reporting Mechanisms and KPIs (Non-Financial)	• Public Awareness:
	  ○ In a 2019 survey, 65% of residents are aware that tires are recycled to make new products (54% in 2018).
	• Recovery Rate:
	  ○ In 2019, 20,717 tonnes of material was sold and 17,835 tonnes of material was collected (13 kg/cap), equating to 86% of material being recovered.
	  ○ There is no target recovery rate.
	  ○ In 2018, 21,381 tonnes of material was sold and 18,177 tonnes of material was collected, equating to 85% of material being recovered.

Tire Stewardship Manitoba (TSM)	

	• Percent Processed:
	  ○ In 2019, 17,835 tonnes of material was collected; and
	  ○ In 2018, 18,177 tonnes of material was collected.
	• Contamination:
	  ○ Not reported.
	• GHG:
	  ○ Do not track GHG but CATRA (Canadian Association of Tire Recycling Associations) is sponsoring a life-cycle assessment. Collectors and processors are always looking to be as efficient as possible.

Collection System(s)	There are 1,567 collection sites across Manitoba, 143 communities and First Nations registered with TSM, with 100% access for all Manitoba residents to a collection site. Currently have one collector who is also the processor.
Processing Technology(ies)	Tires are recycled into aggregate, crumb rubber, blast mats and moulded products. As markets require, tires can also be exported as a fuel supplement to fossil fuels. In 2019, 15% went to crumb rubber, 71% to tire derived aggregate (TDA) and 14% was used in cut products (e.g. mats). OTR tires not a big tonnage (maybe 1,500 to 2,000 tonnes per year) have separate processing.
Compliance and Enforcement related Challenges or Shortcomings	The Minister has set a 90% target. TSM feels they are more at 100%. Tires have a four to five year life cycle so need to go back to sales four to five years earlier to get true recovery.
ANALYSIS of PROGRAM EFFECTIVENESS	
What program aspects or initiatives are effective or working well?	The strength of the Manitoba program is the flexibility of the regulation, which sets a framework and lets industry figure out how to achieve those targets. The regulation is not prescriptive which is good.
Ability for program to add new materials or programs	Program already covers all tires.
What could change or improve?	Need government help to create demand for tire derived products – have specifications to use tire derived aggregate in construction projects.

Tire Stewardship Manitoba (TSM)	
ANALYSIS of PROGRAM ENHANCEMENT	
Potential New Products/Materials for Diversion and Adapt to Market Conditions	Regulation already defines all tires; program has flexibility to adapt to market conditions because of non-prescriptive regulation.
Increasing Program Accessibility across the Province	TSM already has full coverage of the province.
Potential for New Sectors	All sectors are already covered.
Potential New Processing Technologies	De-vulcanization of tires under investigation.
Collaboration Enhancements (with Other Stakeholders)	TSM already collaborates with other PROs on the Backhaul/Winter Road program providing service to NACC, remote and First Nation communities.
Other Enhancements to Explore e.g. adapt to changing market, compliance, goals, targets, steward compliance, e-commerce, free riders, reporting mechanisms, verification, public satisfaction, P&E etc.	New approaches to communication developed in 2020, partly as a result of COVID-19.
OTHER	
Current and Emerging Opportunities – Program Specific (with respect to policy drivers, pressures, issues, focus, adding new materials, adding more programs)	On-going efforts to find new markets and uses for tire products.
Circular Economy (Where Applicable)	The program plan has a hierarchy where tire derived fuel is the lowest level of hierarchy and highly processed crumb rubber is at the top.
Additional Considerations and Analysis	Tire program operates well and is mature. Collection rates are high and there is full provincial coverage.

3.3 Review of Manitoba's Waste Reduction and Recycling Support (WRARS) Program

3.3.1 WRARS Review Objective

This sub-task reviews Manitoba's WRARS (Waste Reduction and Recycling Support) program under the WRAP Act. The WRARS program currently implements a regulated landfill levy ($10.00 per tonne disposed landfill levy). The objective of the WRARS review was to understand the opportunities and barriers facing waste diversion and recycling in Manitoba. As part of our review of WRARS we have included consultation with municipalities and communities to determine impacts the recycling rebates had, where applicable, on the operation and financial sustainability of their waste diversion and recycling programs. One key aspect of the review was to identify the effectiveness of the landfill levy in diverting waste from landfill, and in turn, effectively funding local diversion programs.

This review includes an analysis of:

- How well the program drives actions that reduce waste and divert waste from landfill;
- How the program can be modernized to better incentivize municipalities to meet waste diversion and recycling targets;
- How the cost of the levy impacts behaviour; and
- How to leverage departmental allocation of funds to drive behavior changes that reduce waste and increase waste diversion and recycling.

3.3.2 Part 1 – Landfill Levy Review

The WRARS levy is $10.00 per tonne of material disposed at Class 1, 2 and 3 landfills in Manitoba. While Class 1 landfills have scales to weigh disposed waste, landfill owners of Class 2 or 3 landfills can either:

- Estimate waste tonnage using a volume to weight calculation; or
- Use a per capita waste factor of 660 kg (0.66 tonnes) per year.

Private landfills are subject to the $10.00 per tonne landfill levy for waste collected from other generators or municipalities/NACC. Until this year, the levy revenue was deposited to the WRARS account:

- 80% was disbursed to municipalities based on the recycling tonnages reported to Multi-Material Stewardship Manitoba (MMSM) and a funding formula; and
- The remaining 20% was used for various research and program funding needs.

To be eligible for the rebate the community/municipality/NACC has to submit a landfill levy to be in compliance of the WRAP Act. To receive the Recycling Rebate, they have to be registered for the Recycling Rebate, but also pay the landfill levy first. The Recycling Rebate is based on recycling tonnages

that are also reported to MMSM as designated materials in the Packaging and Printed Paper Regulation of the WRAP Act.

The recycling rebate calculation is as follows:

$$Rebate\ (\$)\ per\ Program\ Particpant\ = \frac{Total\ Amount\ to\ be\ Rebated\ (\$)}{Total\ Recycling\ Reported\ (tonnes)} \times Recycling\ Reported\ by\ a\ Program\ Participant\ (tonnes)$$

In March 2020, the Manitoba government announced the remediation of special funds, including the WRARS Fund[81]. The bill dissolving the WRARS program's fund was passed and received Royal Assent on November 6, 2020[82]. In anticipation of the fund being dissolved, the department was allocated $8,722,000.00 in program funding in the 2020/21 budget to be spent on the intended purposes of the WRARS Fund. Eighty per cent of the allocated funds ($6,977,600.00) have been allocated to recycling rebates in 2020/21. To conclude the WRARS Fund, and ensure that unspent funds from prior years are used for legislated purposes, the Treasury Board made a one-time Internal Service Adjustment of $2,806,000.00 available for 2020/21.

The $10 million in funding announced in September 2020 is drawn from the departmental allocation and the Internal Service Adjustment[83]. The remaining balance has been allocated to Northern household hazardous waste collection, Manitoba Compost Support Payments, non-program household hazardous waste collection, the Green Impact Bond and other waste diversion initiatives.

Table 13 presents the amount of packaging and printed paper (PPP) recyclables reported to the WRARS program from 2011 to 2019, and the amount of funding disbursed based on the reported PPP recycling tonnages. Of interest is the fact that the total PPP tonnage recycled has decreased since 2016, from a reported high of 78,541 tonnes in 2016 to an eight year low of 65,019 tonnes in 2019. It should be noted that the 2019 tonnage is the lowest amount of recycling reported since 2012. A number of reasons are suspected to contribute to this quite dramatic drop in the tonnes recycled. The reasons include the loss of end markets for blue box type PPP materials, difficulty in recycling materials such as mixed plastics and broken mixed glass, the "evolving tonne" of recycling material as a result of dramatic drops in newsprint, and an increase in light-weight plastics in the recycling stream.

[81] Province of Manitoba, "Manitoba Government Introduces New Budget Accountability" (2020). Retrieved from: https://news.gov.mb.ca/news/index.html?item=46900.

[82] Province of Manitoba, "Bill 2 The Budget Implementation and Tax Statutes Amendment Act, 2020" (2020). Retrieved from: http://web2.gov.mb.ca/bills/42-3/pdf/b002.pdf.

[83] Province of Manitoba, "Province Ensures Support for Recycling and Waste Diversion Programming" (2020). Retrieved from: https://news.gov.mb.ca/news/index.html?item=49220.

Table 13: Eligible WRARS Recycling Reported and Annual Rebates Issued to Municipalities, 2011 to 2019

Year	Eligible WRARS PPP Recycling Reported (Tonnes)	Year-over-year Percent Change (%)	Eligible WRARS PPP Recycling (kg per Capita)	Annual Municipal Rebates
2011	68,937	n/a	65	$7,697,699.00
2012	68,328	-0.9%	62	$7,883,661.00
2013	69,084	1.1%	62	$7,565,434.00
2014	77,297	11.9%	70	$7,607,950.00
2015	76,211	-1.4%	67	$7,580,760.00
2016	78,541	3.1%	69	$7,072,761.00
2017	73,926	-5.9%	62	$7,327,328.00
2018	70,760	-4.3%	59	$7,243,816.00
2019	65,019	-8.1%	52	$7,217,264.00

Table 14 presents the tonnes reported to the WRARS program for the purpose of remitting the levies. The table shows that the amount of waste reported has been similar for 2016 to 2019, at about 903,000 to 916,000 tonnes per year (719 to 771 kg disposed waste per capita per year), whereas the total was considerably higher in the early years of the program, at over one million tonnes disposed in 2012. There was a considerable drop in the tonnes reported disposed between 2015 (977,585 tonnes) and 2016 (913,991 tonnes) which has not been fully explained to date.

Table 14: WRARS Reported Waste Disposed and Revenue from WRARS Levy, 2011 to 2019

Year	WRARS Reported Disposed Waste (tonnes)	WRARS Reported Disposed Waste (kilograms per capita)	Revenue From WRARS Landfill Levy ($)
2011	972,957	923	$9,708,681.00
2012	1,000,439	878	$10,004,856.00
2013	960,705	841	$9,607,070.00
2014	981,040	836	$9,810,436.00
2015	977,585	831	$9,776,033.00
2016	913,991	771	$9,141,412.00
2017	916,054	743	9,159,614.00
2018	905,500	729	$9,055,119.00
2019	902,848	719	$9,021,713.00

The table shows that the WRARS landfill levy revenue was generally around $9 million per year for 2016 to 2019. The highest year was 2012, when the levy revenue was $10 million.

3.3.2.1 WRARS Project and Program Funding

When the levy was first implemented, 20% of funds allocated to projects and programs primarily funded the management of household hazardous waste (HHW) and electronic waste. Once the producer responsibility programs were established for HHW (Product Care Association (PCA)) and electronic waste (Electronic Products Recycling Association (EPRA)), the amount of funds needed to manage HHW as reduced to only cover the costs of non-program materials and there were no further costs associated with managing electronic waste.

Under Green Manitoba, project and program funding was allocated to on-going initiatives (e.g., non-program household hazardous waste, Manitoba Composts Program), successful applications submitted to the Waste Reduction and Pollution Prevention (WRAPP) Fund (WRARS funds were transferred to the WRAPP program for grant administration), applications submitted directly to Green Manitoba, and projects developed in collaboration with partners and internal initiatives. Project proposals submitted to Green Manitoba were reviewed by program analysts and the manager and then funding recommendations were made to the Chief Operating Officer. Project and program funding authorization was sought from the Minister at the end of each six-month reporting period.

3.3.2.2 Impact of WRARS Levy on Waste Diversion Behaviour

The objective of the WRARS landfill levy of $10.00 per tonne was to make the cost of disposal more expensive and therefore encourage more diversion activity by using an economic instrument (price) to alter human behaviour. While the idea has merit and has been successful in other jurisdictions, the relatively modest size of the landfill levy was probably not sufficient to change behaviour. Particularly considering that landfill tipping fees at a site like the Brady Road Resource Management Facility in Winnipeg are $68.00 per tonne for residential waste (previously $47.00 per tonne) and $83.00 per tonne for other waste.

Stakeholders interviewed for this project felt that the tonnes of packaging and printed paper (PPP) recycled during the years from 2011 to 2019 were likely more related to the availability of additional local recycling opportunities and diversion program awareness, rather than as a result of disposal deterrence due to the landfill levy itself. Where the cost of disposal to a business is $150.00 per container, and recycling costs $350.00 per container, a landfill levy of $10.00 per tonne will not make up the difference in cost sufficiently to cause the business to recycle, unless they want to do so for other reasons (reputation, corporate responsibility, etc.). For this reason, recycling tonnes is attributed largely to the residential sector efforts, rather than the Industrial, Commercial & Institutional (ICI) sector. Waste diversion and recycling under the municipal jurisdictions is largely focused on its residents. The ICI sectors are responsible for their own waste management and recycling services. There are some exceptions, such as schools or small main street business that may receive municipal waste and recycling services.

Data from Statistics Canada Waste Management Information Survey (WMIS) was analysed to determine the extent to which overall waste disposal from all sectors (residential and non-residential including construction and demolition waste) has changed in Manitoba since 2000, before the WRARS landfill levy was introduced.

Figure 1 presents the amount of waste disposed of in Manitoba (kg per capita) from year 2000 to 2018. The figure shows that the disposed waste varied between 764 to 798 kg per capita disposed from 2000 to 2010. This is often the case with disposed waste which is influenced by the economy and other factors. The amount disposed was highest in 2012 at about 814 kg per capita, and has dropped quite dramatically since that time to a low of 712 kg per capita in 2018. The data for 2012 appears to be an anomaly (Manitoba flooding in 2011) in many ways (including the amount paid in the WRARS levy) so should probably be discounted when looking at overall trends. **Figure 2** compares data from other provinces across Canada without landfill levies with the exception of Québec who implemented a landfill levy in 2006. This comparison shows that Manitoba has the same trends of waste disposal to provinces without landfill levies. Up to 2006, Manitoba was at a similar level as Québec. With the implementation of a landfill levy, Québec saw a decrease in waste disposal while Manitoba stayed relatively stagnant.

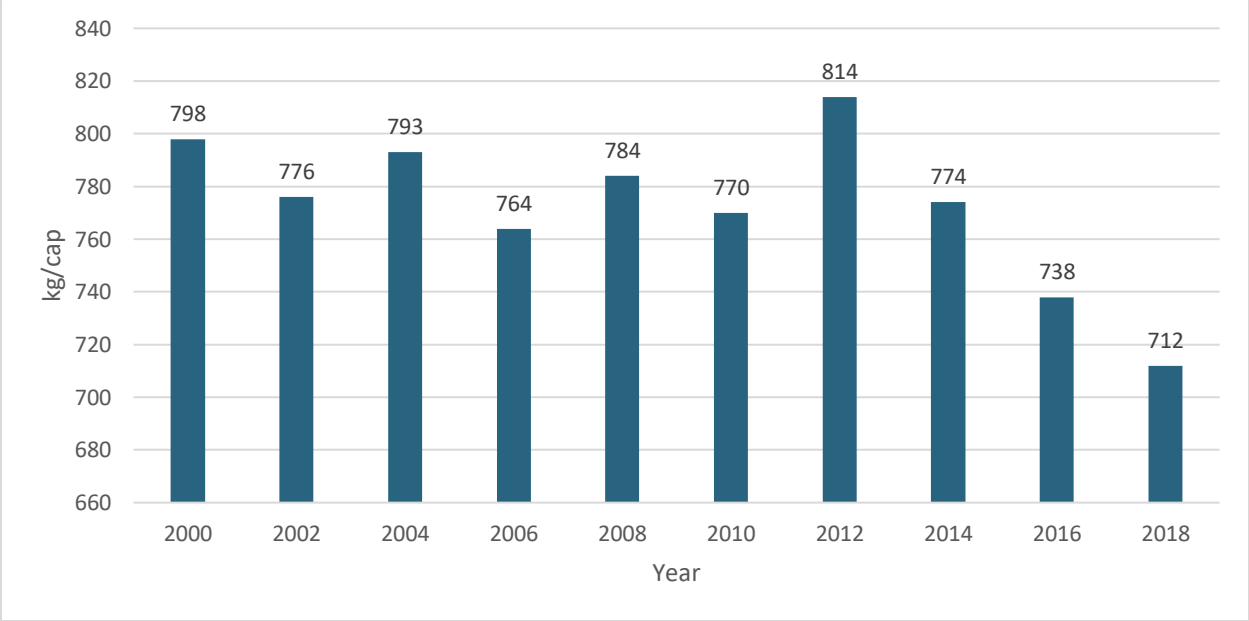

Figure 1: Amount of Waste Disposed in Manitoba, 2000 to 2018

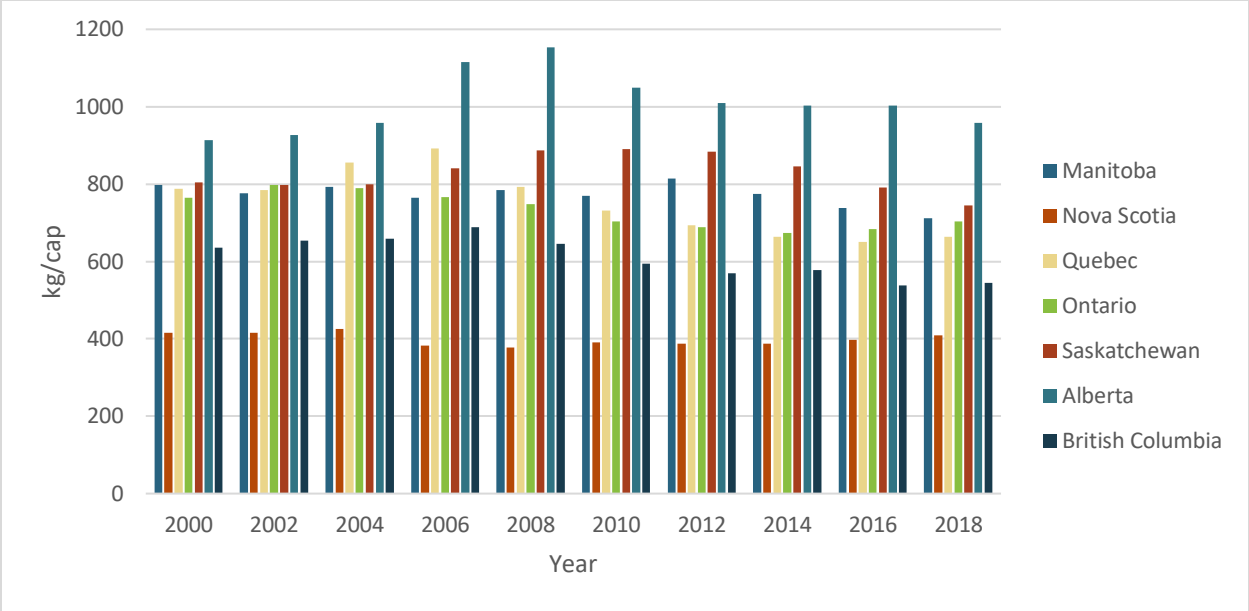

Figure 2: Amount of Waste Disposed in Provinces across Canada, 2000 to 2018

Figure 3 presents the reported waste diverted in Manitoba from the Statistics Canada WMIS, which includes all municipal activity and private sector waste hauling and disposal activity, but excludes private business-to-business recycling.

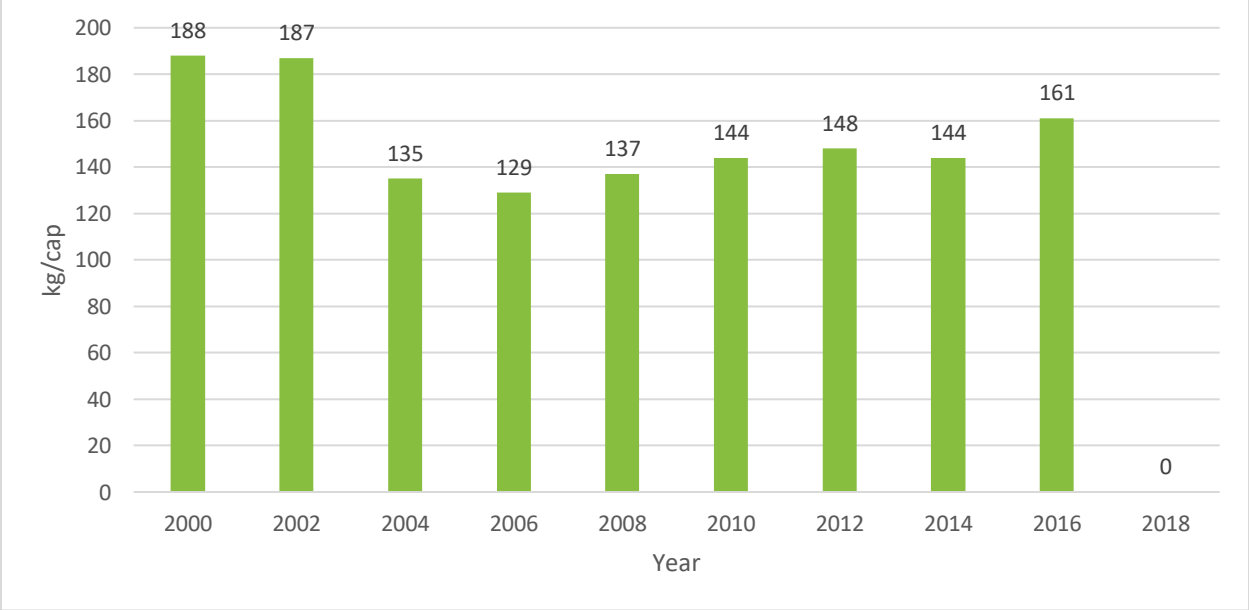

Figure 3: Amount of Waste Diverted in Manitoba, 2000 to 2016

The figure shows that the amounts of waste diverted in Manitoba has increased steadily from 2006 to 2012 – likely as more programs came on board. Data from 2000 and 2002 should probably not be included in the analysis as they appear to be unusually high for the time. Diverted amounts dipped

slightly in 2014 and rose again in 2016. Data are only available to 2016 at this point, as it takes Statistics Canada considerable time to verify and reconcile the survey results.

Looking at the trends of waste generated is a good indicator of the impact of waste reduction practices. Waste generated is calculated by adding disposal and diversion. Waste generation for Manitoba per capita from 2000 to 2016 is presented in **Figure 4**. Again, data for 2012 should probably be discounted because of unusual disposal values. Excluding 2012 data there appears to be a steady drop in waste generation from 2008 to 2016.

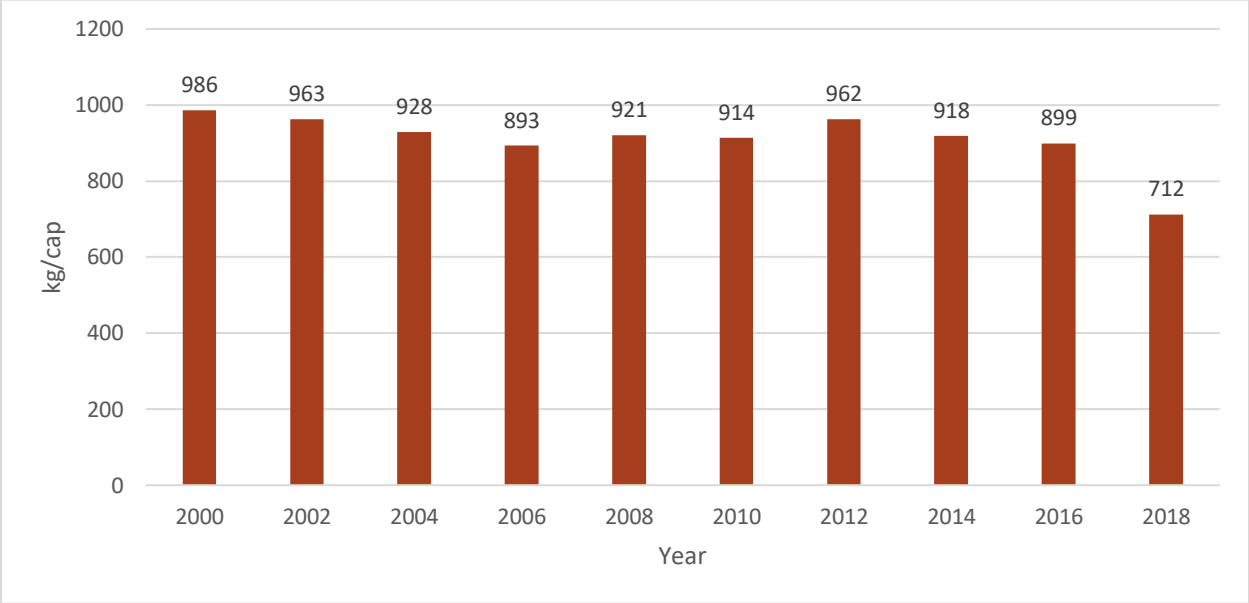

Figure 4: Amount of Waste Generated in Manitoba, 2000 to 2016

3.3.2.3 Impact of Levy on Waste Disposed

It is likely that the WRARS landfill levy of $10.00 per tonne did not have a significant impact on waste reduction behaviour change because it was a relatively small increment on the cost of disposal, and most consumers do not see the cost of disposal directly on their waste bill.

A 2012 European Union (EU) study of economic instruments concluded that the United Kingdom (UK) landfill levy did not have much impact on disposed municipal solid waste (MSW) when the levy was only £10.00 per tonne ($17.42 per tonne), but quickly had a significant impact on disposed waste when it increased to £45.00 per tonne ($78.37 per tonne) as shown in **Figure 5**.

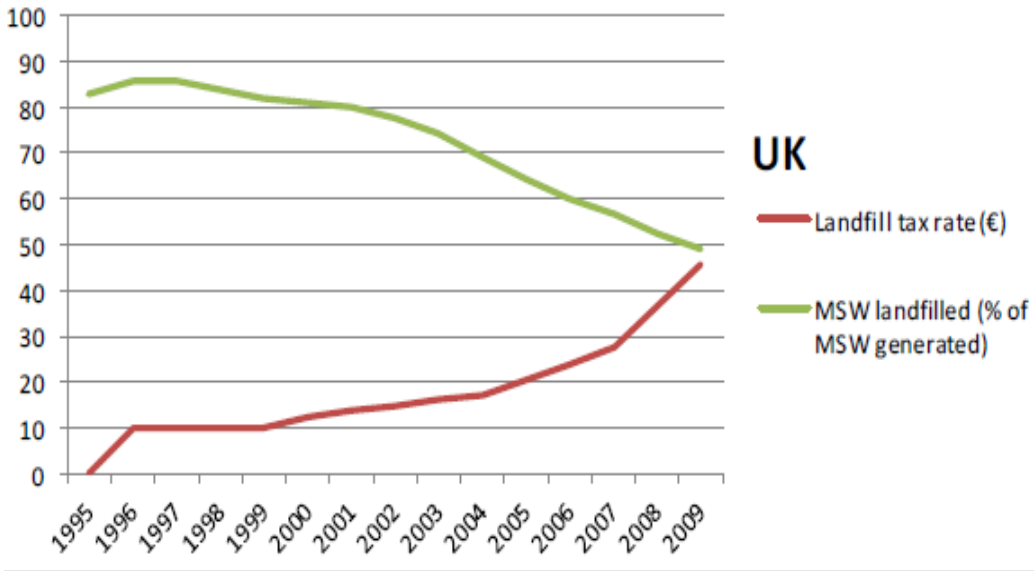

Figure 5: Impact of UK Landfill Levy on Waste Disposed, 1995 to 2008

However, many other factors were also happening at the same time in Europe:

- The EU Landfill Directive, 1999/31/EC required Member States to reduce the amount of biodegradable municipal waste going to landfill with specific targets:
  - To 75% of the total amount of biodegradable municipal waste generated in 1995 by 2006;
  - To 50% of 1995 levels by 2009; and
  - To 35% of 1995 levels by 2016.
- The EU WEEE Directive (waste electronics and electrical equipment) required the diversion of a long list of electronic equipment from landfill.

Similar data from France show that when the landfill levy stayed at the same level of €10.00 per tonne ($14.80 per tonne) for many years, disposed waste still went down because of these factors.

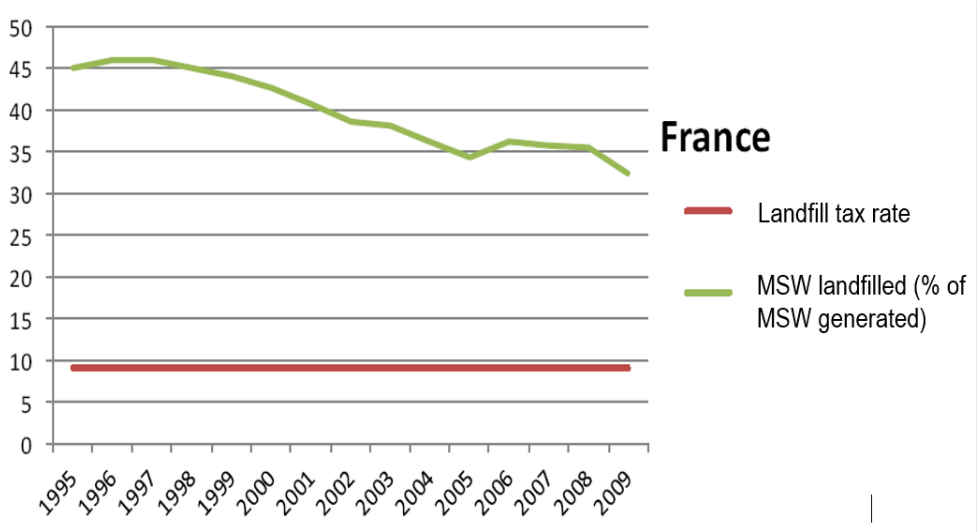

Figure 6: Impact of Landfill Levy on Disposed Waste in France, 1995 to 2009

The European Commission released a research report in April 2012 which explored the use of economic instruments to reduce waste disposed and achieve desired environmental performance. The report *"Use of Economic Instruments and Waste Management Performances"* was prepared by BioIntelligence Service S.A.S based out of Paris.

The study reported that nineteen EU member states had landfill taxes in place for the disposal of non-hazardous municipal waste (Lithuania is the most recent EU Member State to add a landfill tax in 2012). The landfill taxes vary widely in amount, ranging from a low of €3.00 per tonne ($4.00 per tonne) in Bulgaria to over €107.00 per tonne ($145.00 per tonne) in the Netherlands. The average range of costs to landfill waste (adding landfill taxes and tipping fees) in the nineteen countries studied ranged from €17.50 per tonne ($24.00 per tonne) in Lithuania to over €155.00 per tonne ($210.00 per tonne) in Sweden.

The study found that in most cases (but not all) there was a correlation between high costs to landfill (tipping fees and landfill taxes combined) and high waste diversion rates. The researchers noted that EU Member States with total landfill charges of lower than €40.00 per tonne ($54.00 per tonne) generally landfilled more than 60% of their waste (i.e. had waste diversion rates of 40% or lower). The researchers further noted that EU Member States were much more likely to achieve a 50% diversion rate or higher where landfill charges approached €100.00 per tonne ($136.00 per tonne). While data for countries such as the UK and Austria show that landfill tonnages decrease significantly when landfill taxes increased; and, data for Ireland and France show a 25% reduction in landfill waste during times when the landfill levies remained relatively constant.

The study also noted 100% compliance with the EU Landfill Directive by France, Ireland and Austria; therefore, significant amounts of organic waste was directed away from landfills to composting and

anaerobic digestion in preparation for meeting the 2006 and 2009 targets, but started before 2006 in these countries.

Québec has had a landfill levy for a number of years ($10.00 per tonne; plus $9.50 per tonne to support organics diversion -increasing at the cost of living rate). Québec increased the levy from $23.51 to $30.00 per tonne at the beginning of 2021. The purpose is to raise $1.2 billion to pay for the infrastructure needed to divert 70% of organic waste from landfill by 2030, and reduce GHG by 300,000 tonnes of CO_2 equivalent. Because Québec (like Manitoba) uses mostly hydro generated electricity, GHG emissions from electricity generation is modest, and waste management is a more significant opportunity to meet GHG reduction targets.

3.3.3 Part 2 – Funding Formula Review

The objective of the funding formula review was to identify options to better leverage departmental allocation of funds to drive behavior changes that could reduce waste and increase waste diversion and recycling in Manitoba.

3.3.3.1 Funding Formula Background

Prior to the remediation of special funds in year 2020, all WRARS landfill levy revenue was held in the WRARS Fund established under the WRAP Act as a special fund. The WRARS Program was initially managed by Green Manitoba, a Special Operating Agency (SOA) of the Province of Manitoba. The WRARS Levy was intended to reduce waste generation and encourage increased recycling and waste diversion activities province-wide. While eighty percent (80%) of the WRARS Fund landfill levy revenue was rebated to municipalities with the intent of promoting recycling in Manitoba, less program administration cost recovery, the remaining revenue (20%) was used to support provincial waste management programs such as HHW management, organics composting programs, CR&D waste diversion and an agricultural plastics pilot.

Funding also went towards recycling pilot programs to prove the concept until they could be implemented full scale or moved into an EPR program. For example, mattress recycling with Mother Earth Recycling (MER) is currently a pilot program with the City of Winnipeg. Initially it was a waste diversion pilot program funded by the Province under the WRARS program.

The trend of funding diversion programs until they could launch and be self-sufficient continued with work to fund MER's mattress recycling initiative, Green Action Centre's Compost Winnipeg social enterprise, and CleanFarm's agricultural plastics recycling.

The Manitoba Composts Program launched in June 2014 with up to $1 million available annually to support compost initiatives and provide the Manitoba Composts Support Payment (MCSP). The intent of the program was to increase diversion of organics and significantly reduce per capita waste generated

and disposed, enabling Manitoba to achieve its per capita organics diversion target of 85 kg per person by 2020.

3.3.3.2 Historical Project Funding

Based on historical data provided by Manitoba, the following charts illustrate the allocation of program funds from 2011 to 2020. We have assigned the following categories to summarize the major types of projects that received WRARS program funding from 2011 to 2020:

- Research and Development (R&D);
- Engagement/Training;
- Organics;
- Household Hazardous Waste (HHW);
- Agricultural;
- Residential Non-Hazardous and Construction, Renovation and Demolition (CR&D);
- Other; and
- Cancelled.

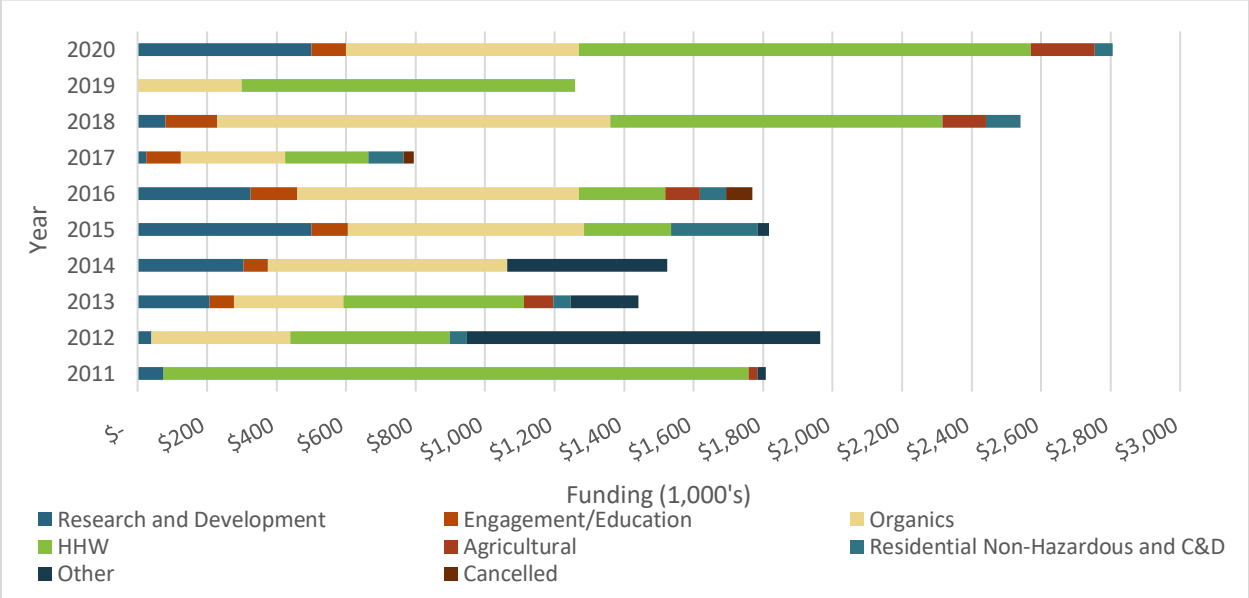

Figure 7: Historical Allocation of WRARS Funding by Project Category from 2011 to 2020

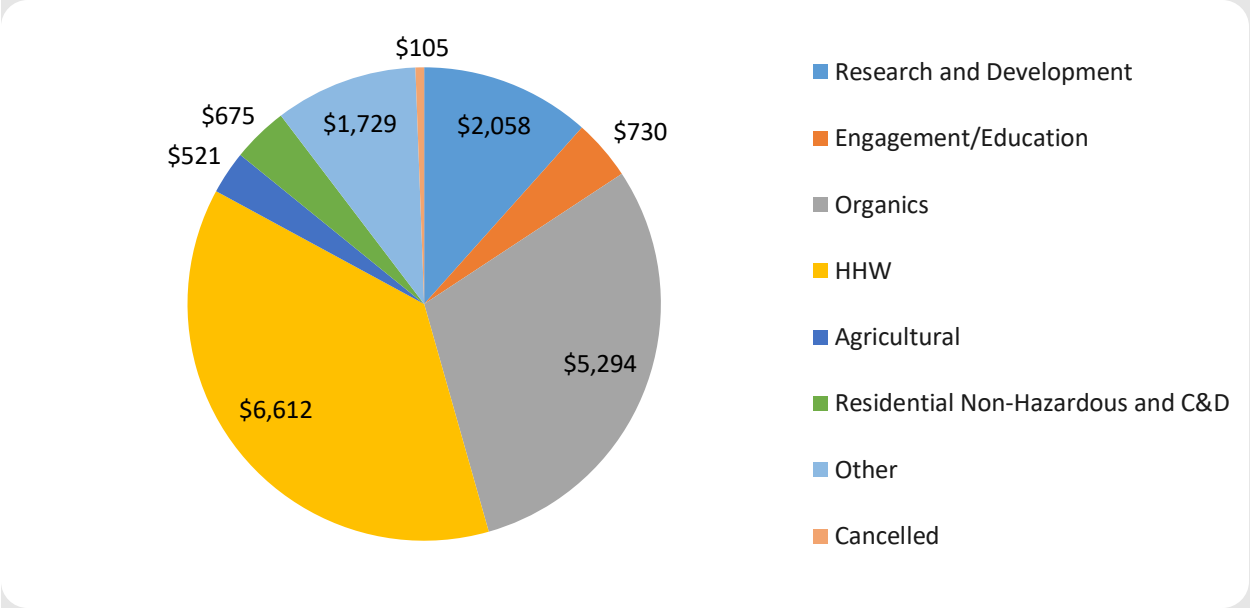

Figure 8: Percent Allocation of WRARS Funding by Project Category from 2011 to 2020

Based on the above historical data, since 2011:

- 37% of funding has gone towards HHW recovery
- 32% towards organics projects
- 12% towards research and development
- 10% towards other
- 1% to 4% towards the remaining categories

From 2011 to 2017 the WRARS program objectives included an education and awareness focus, as per the Green Manitoba mandate. When Green Manitoba was a Special Operating Agency, it was represented on the WRARS program funding committee. Since inception in 2006, Green Manitoba served as a knowledge portal and service delivery agent for government departments and a wide range of public and private sector organizations to help create a cleaner and greener Manitoba. During that time, there were more WRARS projects with much smaller budgets, and a focus on education and sustainability awareness.

Since 2017, the Manitoba government has managed the programs and the most recent projects have been awarded funding for waste diversion and recycling opportunities. For this reason, we recommend that landfill operations not be funded through any future program, rather the program funding should focus on direct diversion activities with measurable results and impacts and shared learning outcomes.

3.3.3.3 Considerations for Future Program Funding Allocation

The following suggestions could be considered when modernizing the departmental allocation of funds to drive waste diversion and recycling outcomes for the Province.

- We understand that going forward, the WRARS replacement funding will have a specified annual budget (approximately $8.4 million) and the landfill levy will go into the general revenue for the province. The question remains on what portion should go towards the municipal rebate for diversion and what portion should go towards project funding. One option is to maintain the current 80/20 split (or even move it to 90/10 depending on what research program needs are identified) with additional monitoring and program data gathering.
- The 80/20 split from landfill levy revenues currently is allocated as municipal rebate (80%) and WRARS program funding (20%). While municipalities feel they should receive 100% of the revenue, this would not allocate any funds to developing new diversion programs or studies, especially for programs that typically do not cater to EPR frameworks such as organics and CR&D waste streams. Should the funding continue to be provided to municipalities, there should be more restrictions. The funding should not be used for landfill related activities, and should be approved only for use in diversion related activities.
- Consult further with municipalities, AMM (Association of Municipalities of Manitoba), MARR (Manitoba Association of Regional Recyclers) on their needs, gaps and challenges with respect to funding. Initial municipal feedback suggested that 100% of the levy revenue should go directly back to municipalities. This relates to their general challenges with lack of funding to pay for waste diversion programs. Any future funding provided to municipalities should be earmarked for diversion related activities only.
- Municipal rebates currently (80%) are not required to fund future waste diversion and recycling activities. A suggested future requirement is to publicly earmark the rebates towards supporting waste diversion and recycling activities to improve diversion performance and maintain transparency and public trust in recycling programs. Using the funding to support disposal activities should not be permitted.
- Programs should support diversion from disposal activities and report on funded project outcomes; e.g., tonnes diverted, impact of program, GHG, and lessons learned. A final report should be submitted to Manitoba, and all project funding applications should include a plan to share lessons learned with the broad municipal waste diversion community in Manitoba.
- Funding and project final reports should be shared publicly (support program transparency) as a growing resource library for diversion programs in Manitoba.
- A long-term future program plan (strategy) would set out priority areas, targets and goals over the next two, five and ten years.
- Consider renewing the current program, including renaming the program (new phase or version) and updating the program guideline, objective and expectations. Present this renewal, or new phase, in virtual webinars to all stakeholders.

- Initial municipal consultation suggests that the rebates do not cover municipal diversion costs. In addition, the municipal efforts to implement stewardship EPR type programs in their community remains largely a municipal financial, resource, infrastructure and P&E burden rather than entirely the responsibility of the PROS, even long after these stewardship programs have matured and been established in the province, with some established in the mid-1990s.
- Many municipal landfills are reaching their capacity. Municipalities are looking for other diversion programs like organics composting to divert waste and extend landfill life. A rise in renewed interest in waste to energy (WTE) or energy from waste (EFW) alternatives is reported; both WTE and EFW are low on the waste hierarchy and are low value retaining processes (VRPs) in a circular economy. By designating future program funds towards reduction or diversion activities only, projects under WTE or EFW would not be eligible for funding.

3.3.3.4 Priority Programs Funding

The following two types of program priorities are suggested in allocating funds:

1. Materials specific program funding; and
2. Operational Support funding for various aspects of developing waste diversion programs in the province such as resources, collaboration and operations.

1. Material Specific Funding

Household Hazardous Waste

- Household Hazardous Waste (HHW): obligate additional HHW materials that were typically managed through the former WRARS program funding and are not currently managed under the HHW stewardship program through its PRO, Product Care Association. Ideally, under an EPR framework, municipalities and the public purse should not be responsible for end-of-life management of HHW type materials. Currently, HHW is a large financial and operational burden to municipalities. The former WRARS program has allocated over 37% of its program budget to HHW alone, typically ranging from $700,000.00 and $800,000.00 per year to pay for the proper management of non-designated HHW, with the province committing up to $850,000.00 for this management, and approximately $1 million if including the northern cleanup of stockpiles of HHW. The province has a few choices:
  - Continue to fund non-designated HHW management;
  - Designate additional HHW so that the costs move to HHW producers; or
  - Cease to fund non-designated HHW management and put the onus back on municipalities to manage the drop-off of HHW to their depots to only include designated HHW products. This carries a risk of improper disposal of hazardous materials in Manitoba. However, either of the other two options involve significant effort or costs.

Organics

- Because the electricity produced in Manitoba is mostly from hydro and is low-carbon, organics diversion from landfills is the largest opportunity to reduce GHG from the waste management sector

and meet the province's climate strategy goals. Up to 40% of Manitoba's entire waste stream is organic, and is the largest waste stream that can be diverted.

- There are 11 Manitoba Composts Support Program (MCSP) registered compost facilities in Manitoba. Support payments for compost are $10.00 or $25.00 per tonne based on the size of the facility – this funding is not sufficient to drive organics diversion. See significant efforts by Québec and Ontario on organics diversion as examples of what needs to be done. These are profiled in the Best Practices part of the study.
- Current funding levels are not sufficient to support development of organics diversion infrastructure (both collection and processing). The challenge for municipalities is to be able to access capital funds for composting or waste diversion infrastructure.
- Provide organics program support for leaf and yard waste (LYW) composting pads, backyard composter rebates, community gardens, food waste reduction campaigns (Love Food Hate Waste™), Single Stream Organics (SSO) kitchen waste collection programs. Examples of support include financial support to build infrastructure, roll-out awareness campaigns, facilitate regionalization discussions, or undertake feedstock studies.
- Do not recommend the promotion of compostable plastics due to high contamination operational issues and low quality compost grade.
- In the December 2020 Probe Research Omnibus Survey titled "Views on Waste Diversion Initiatives", the public survey respondents highly supported government efforts to divert organic materials from landfills. The survey results indicated that there is a high level of recognition and understanding that it is important to divert organic materials from landfills. The public survey administered as part of this report also indicated strong support for organics diversion from landfills.

Construction Renovation and Demolition Materials (CR&D)

- CR&D materials are heavy – sometimes 10% to 25% of MSW depending on economic activity. Diversion of CR&D materials are needed for many reasons:
  - To contribute to the CCME goal of 490 kg of waste per Canadian by 2020 (a 30% reduction from 706 kg per Canadian);
  - Commitment has already been made by Manitoba as part of CCME Phase 2 EPR Plan;
  - Preserves considerable landfill capacity; and
  - Contributes to the circularity of Manitoba economy.
- CR&D diversion: support divertible CR&D material municipal programs for shingles, clean wood, drywall, asphalt, metal, bricks and concrete. Support circular economy initiatives such as the reuse of concrete in building or structure renovations, and establishing "building passports" protocol where all building material used is documented for new developments.

2. Operational Support Funding

The following set of waste diversion and recycling-related program and management needs and supports for effective services and performance are a long list of suggestions. The priorities among this list should be further consulted on with impacted stakeholders in the development of the future program funding. The list is ranked with the suggested highest priority needs first.

- Municipal supports: resources (skills training, workshops, program setup and initiation), waste diversion representative for direct operational support locally or regionally, establishing collection systems and depots, and support for long distance transportation of materials.
- Pilots and research leading towards expanded or new EPR programs (e.g. the Agricultural plastics pilots leading to the CleanFarms EPR program).
- Collaboration events: regional or district waste diversion collaboration strategies through regional approaches and shared resources.
- Financial support for municipal staff to attend waste diversion conferences (e.g., MARR), training, collaboration events, and operations (e.g., weigh scales, data reporting, online reporting alternatives and support).
- Promotion and Education: public and staff.
- NACCs and remote additional local support.
- Support programs to divert materials to be obligated in potential future landfill bans.
- Provincial benchmarking, provincial central data call annual reporting, provincial enforcement support. Establish a verification process for diversion information reported to Manitoba.
- Community programs: Repair, Reuse, Swap, Sharing programs (tool libraries).
- Illegal dumping support (potential unintended consequence of any landfill bans or increased landfill levy) such as best practices resources, province public and education (P&E) campaigns, and enforcement.
- Support suspension of burning operations at landfills and transition to diversion or reduction (e.g. composting and chipping/mulching of clean wood or brush). Provincially establish burning activities to not count towards diversion.

4.0 Current State Consultation Results

As discussed in **Section 2.3** Stakeholder Consultation and Engagement Methodology, consultation related to the Manitoba Waste Diversion and Recycling Framework review was comprised of two parts:

- Part 1 – Preliminary Consultation and Surveys; and
- Part 2 – Stakeholder Workshops.

The goal was to engage with program users and targeted stakeholders to gain an understanding of the current challenges and gaps within the current system, to introduce best practices and proposed concepts to stakeholders for targeted feedback, and to allow the stakeholder groups to engage with each other.

In order to achieve engagement objectives, seek input from key stakeholders and the general public, and run a thorough engagement process, several techniques were utilized. A succession of interviews were conducted throughout February and March 2021 with stakeholder representatives from the twelve PROs, municipalities (and representative organizations), Indigenous and northern communities (and affiliated organizations), industry, NGOs, and community groups. Several stakeholders were sent questionnaires developed specifically for them and written responses were exchanged through emails. Concurrently, two surveys were conducted. First, a public survey was developed and posted on EngageMB platform from January 21, 2021 until February 10, 2021. Second, a detailed municipal survey was sent to 27 municipalities, selected to represent Manitoba's diverse communities, of which 12 completed the survey. The review also considered the results from the recent 2020 Omnibus public survey that included several waste and recycling questions.

The list of consultation participants, questionnaires, public survey questions and municipal survey questions are provided in **Appendix A, B** and **C**.

- **Appendix A** – Consultation – Key Stakeholders and Questionnaires;
- **Appendix B** – Public Survey Results; and
- **Appendix C** – Municipal Survey Results.

The following sections summarize "what we heard" from the preliminary stakeholder consultations, conducted as part of the current state analysis (Phase 1) of the review. These consultations included interviews, questionnaires and surveys. The consultation results are presented in the following order:

- Producer Responsibility Organizations;
- Private Sector, Non-Government and Industry Organizations;
- Federal Government, Indigenous Organizations, Initiatives and Communities ;
- Municipal Interviews and Survey Results; and
- Public Survey Results (including Omnibus Public Survey).

Analysis of the findings from 1) this Current State Consultation, as well as 2) the Engagement Workshops detailed in **Section 5.0**, is presented in **Section 8.0** Waste Diversion Framework Gap Analysis.

4.1 Stewardship Program Organizations Feedback

The existing Waste Diversion and Recycling Framework has established relationships and funding agreements between waste producers (represented by the 12 PROs) and the municipalities and Indigenous communities which implement the waste programs at the local level. Other industries (such as waste collection services), industry groups, non-government organizations (NGOs) and the general public function within this framework, creating a complex network of varying interests.

All 12 PROs were interviewed in an effort to ensure awareness of this review, ensure understanding of the scope of the project, and establish an opportunity to provide input. Additional follow up interviews and emails were conducted when requested (MMSM Board of Directors, Canadian Beverage Association) to ensure all input was received and PROs felt 'heard'.

In general, we received positive feedback regarding the current legislation and its allowance for industry to take the lead role. There was acknowledgement of good collaboration between PROs currently, highlighted by the 'Winter Road' initiative and other backhaul efforts. MARR was deemed a supportive forum to share information and networking ideas. There was general support for national harmonization of materials that should be covered by stewardship programs, and of landfill bans as a means to divert those same materials to EPR programs. Notable challenges included 'free riders' not paying into programs and provincial staffing fluctuations (getting 'up to speed'). There was recognition that support from the province would be welcomed in this regard. As GHG reporting is not required currently by legislation, concerns were expressed that a reduction in emissions requirement may compete with an increased accessibility target. Agreement was conveyed regarding the need to focus on plastics, and in particular, single-use items.

Additional commentary and noteworthy takeaways have been amalgamated under 14 overarching themes as summarized below.

4.1.1 Regulations

- Some product stewards consider Manitoba the best program because the government sets the framework but allows industry to run the program. If framework is non-prescriptive, industry will find the best way to achieve goals and targets;
- Manitoba is a leader and one of the best regulatory regimes right now, but there is room for modernization;
- The definition of some materials is better done in other provinces (e.g. sharps in Ontario);
- Updated legislation and/or regulations should aim for harmonization nationally; and

- Program plans are updated every five years, but some would prefer more often, in order to adapt to market changes (e.g. every three years).

4.1.2 WRARS

- Adjusting the landfill levy will not make a difference to programs where consumer fees are paid at point of sale when the product is purchased; and
- Manitoba is unique in that PCA also takes care of non-obligated materials at the request of the province. Which HHW materials can be collected and handled, depends on the budget from the former WRARS funding. If funding is not allocated for this purpose, there could be more push to add non-designated HHW materials to the regulation.

4.1.3 Accountability and Transparency

- Some programs lack financial Key Performance Indicators (KPIs) as requirements in annual reporting (e.g. batteries), therefore no financial information provided;
- Important to look at multiple metrics, not a single metric, to determine program performance;
- If there are no added consumer EHFs (such as for phones and agricultural products), there is no requirement to report the program costs or steward's fees;
- COVID-19 impacts will skew the reported data (due to change in consumer's behaviour during the pandemic);
- Some programs said they have no required timeline to meet their recovery (diversion) targets;
- Seven of the 12 programs do not have a recovery (diversion) target;
- Lack of transparency regarding accounting practices challenged by some third parties (e.g. CBCRA);
- Some programs have consumable material and are not able to set recovery targets (e.g. expired medications);
- Some program funding formula information is not shared; internal to stewards only;
- Some stewards are not reporting amount of material sold into Manitoba (e.g. phones); and
- Certain PROs work with local municipalities to measure (through waste audits) the amount of obligated materials that are managed/recovered.

4.1.4 Accessibility

- Some programs have high accessibility (94% by population), while others have low accessibility (e.g. HRCI) due to how the materials are recovered;
- Permanent programs for remote communities have not yet been established for some programs;
- Some PROs report the number of collection sites while some report the percent of population that have accessibility;
- Mail-back programs are an alternate to drop-off collection sites. No indication of performance of this kind (e.g. phones); and
- Return-to-retail is a collection option for few programs (e.g. phones).

4.1.5 Participation and Awareness

- Landfill ban would support collection of designated materials through diversion;
- Participation in programs varies by a wide range depending on the program (e.g. 44% for batteries, 93% for MMSM);
- Some programs do not measure participation in Manitoba but use BC results (e.g. LABs);
- Some conduct national or other provincial surveys and pro-rate results for Manitoba;
- Certain Manitoba programs have low awareness results (e.g. 53% for medication, 26% for phones);
- Some programs did not provide amount of funding budgeted for P&E efforts; and
- Majority of programs' participation is from the more populous southern part of the province.

4.1.6 Enforcement

- PROs would appreciate additional Government support with letters, enforcement regarding freeriders – some sectors included in legislation but not enforced;
- Batteries of all chemistries and sizes are included as a designated material; however, the Manitoba government does not enforce beyond lead and small single-use and rechargeable batteries. Stakeholder interviews indicated that they should enforce their regulation fully;
- Loss of materials and revenue felt due to some non-program compliant distributors and lack of enforcement (e.g. 15% for LABs);
- Some recovery targets are industry set voluntarily, therefore enforcement is not an issue;
- Some materials are collected by multiple programs (e.g. phones), so enforcement difficult to audit;
- Free riders are an issue/enforcement challenge for some programs (e.g. EPRA); and
- One program, PCA, has no enforcement challenges noted, because all HHW materials are accepted and paid for by the province, even if they are not obligated in the PCA program.

4.1.7 Materials to Add for Diversion

- Take-out food containers;
- Hot and cold cups;
- Newspapers in public spaces;
- All types of batteries; not just those in program now;
- Anything with a battery;
- Small appliances; already receive them in drop-offs, even though their producers are not paying into the program fees (free riders) and therefore the cost to recover these products is unfairly carried by other producers;
- White good (large appliances) as its own EPR program;
- Outdoor equipment/tools;
- Anything with a plug;
- IC&I sector generated materials;
- Public spaces generated materials;

- Organics (compostable) products under the PPP designated materials;
- Aerosol containers (like Québec);
- Black plastics need solution as cannot be sorted at the Winnipeg Material recovery Facility (MRF);
- Plastic films;
- Styrofoam (foamed polystyrene);
- Some programs also accept non-designated materials at their own cost (HHW at municipalities, EPRA takes small electronics, Tires accepts bicycle tires);
- Mattresses;
- Carbon monoxide and smoke detectors (requires HHW regulation amendment);
- Camping fuel cylinders; and
- Oxidizers (bleach, chlorine, pool chemicals).

4.1.8 Contamination

- Not an issue for some while it is a large issue for others (e.g. beverage containers, MMSM);
- Some try to reduce contamination by increased promotion and education; and
- Changed collection option (program boxes) due to contamination.

4.1.9 GHG

- Most programs do not track GHG emissions as it is not a required KPI by the province; and
- Some PROs noted reporting GHG emissions reduction may compete with accessibility targets (requiring increased transportation).

4.1.10 Collaboration

- Cooperation currently exists amongst Manitoba PROs on backhaul and the winter roads opportunity to bring designated materials back from NACC, remote and Indigenous communities;
- Some have developed plans to work with the municipalities to cover the cost of public space recycling;
- Some programs do not pay for collection expenses by collection agents (e.g. CBCRA);
- Work with grassroots organizations on litter campaigns;
- Consider incentives for transporters to collect more tonnes of designated materials (e.g. tires);
- Some programs collaborate with schools and community groups;
- Resource burden on the municipalities to operate the programs without financial support from the PROs;
- New EPR programs (e.g. agricultural film and twine) will provide financial incentives to municipalities once implemented;
- MARR is a supportive forum for networking;
- Much support for continued PRO workshops or semi-annual meetings, including the Manitoba government as these are beneficial;
- Beneficial to have consistent messaging, nationally;

- Would like to see more awareness, advertising of the programs through the AMM website;
- Municipalities should assist with more advertising to increase public awareness;
- For the north, a higher collection financial incentive should be considered (e.g. used oil);
- Co-operate with other PROs at some sites and through collection events where practical; and
- Should consider creating a Manitoba stewardship council to support collaboration among PROs regarding program accessibility improvements, waste audits, etc.

4.1.11 Circular Economy

- Some feel they are already contributing towards a circular economy;
- Opportunities should exist for reparability, refurbishment and reuse;
- Reparability viewed as a potential harm to brand owner quality;
- Increase recycled content legislation and procurement to include PPP recovered;
- Need government help to create demand for recycled products – set specifications to use products that use recycled materials (e.g. tire derived aggregate (TDA) in local construction projects); and
- Expand ongoing efforts to find new markets and uses for recycled products.

4.1.12 Plastics

- Any bans should also consider the safe storage of materials (e.g. used batteries) that currently use plastic bags for storage and recycling collection;
- Agriculture has launched a zero plastic waste strategy;
- Plastic bags fall under MMSM's program, and they would like to be involved in the development of a Manitoba single-use plastics reduction strategy (i.e. beyond bags);
- Address biodegradable plastics under the PPP designated materials;
- Designate plastic films;
- Designate Styrofoam (foamed polystyrene); and
- Increase focus on single-use plastics/items.

4.1.13 Technology

- Implementing the ROC system (Innovative NRG Inc.) for material feedstock pilot (e.g. used oil, antifreeze, DEF containers); and
- De-vulcanization of tires under investigation as an emerging technology to reuse rubber.

4.1.14 Barriers

- The cost of recycling is much higher than the cost of disposal (low tipping fees), especially when considering recycling for the ICI sector;
- Online sales are still an issue for producer free riders in Manitoba for some programs (e.g. EPRA, medications);

- PROs have experienced a lack of stability/continuity in Ministry's staff and resources which has had a negative impact on the programs;
- Need improved ongoing communications with the Ministry and program organizations;
- Frequent government staff changeover is a challenge as it takes a long time for a new staff member to get up to speed;
- The waste management industry in the province needs to help out with better reporting (i.e. haulers);
- HHW has additional requirements due to the hazardous nature of the materials and transportation of dangerous goods regulations. Municipalities require licensing through Conservation and Climate's Environmental Approvals Branch for collection/depot approval. Waiting for licensing means waiting to transport material, causing delays in remote and northern communities; and
- Higher than anticipated costs for collection sites to accommodate HHW and the non-designated materials.

4.2 Private Sector, Non-Government and Industry Organizations Feedback

Service providers, NGOs and other stakeholders in the waste industry noted concern with a lack of program transparency and understanding of roles (specifically, what the PRO is responsible for). They felt that while there may be a PRO focus on recycling, reduction should be the greater focus. There were general sentiments that levies or fees were being paid in return for limited access to programs, services and transport of collected materials. Many would like to see some kind of northern point person or technical steering committee to assist in implementing regional servicing contracts outside of the Winnipeg area. There was also a request for more local and culturally appropriate educational materials, and support for 100% EPR for MMSM materials.

Additional commentary and takeaways have been amalgamated under eight (8) overarching themes as summarized below.

4.2.1 Regulations

- Support for landfill bans (e.g. organics). Need to have a composting program in order to have a ban in place. After ten year discussions with province, the Province is to announce an imminent deadline for a full organics disposal ban in the Manitoba capital region;
- Products we can't recycle (e.g. Styrofoam, plastic bags, plastic cutlery, straws) should be banned;
- If there were a Province-wide ban, some communities may be scrambling as they don't have the facilities or information to deal with those materials in another way. Should be more of a municipal decision based on options;
- Encourage Pay-As-You-Throw (user pay) model for disposal financing – charge residents for garbage collection, not composting; and

- Perceived lack of Manitoba reporting on regulations, stewardship programs and data availability on the Ministry's website.

4.2.2 WRARS

- School presentations funding was cut;
- Not very clear how WRARS funding works and how to apply for it;
- WRARS funding – doesn't sit well with municipalities – not a direct reflection of community recycling as it is not a proportional return since it's based on the whole province. No clear answer for percentages (the 80/20 split). They never feel they get the 80%. No recognition in money received back – very small portion for cardboard (57% of their material was OCC but only allowed to claim 15% since it is capped);
- Increase the WRARS levy – incentivise the right thinking;
- Manitoba diversion rate is 17% overall (for all sectors). The levy does not seem to drive diversion;
- If a fee is being paid at point of sale, it should be eligible as funding to the municipalities;
- Higher tipping fees are needed. Fees in Manitoba are well below the national average; amd
- Class 2 or 3 landfills do not need scales; scales are expensive. Increased levy may make a difference to landfills with scales.

4.2.3 Stewardship Programs

- Not familiar with other EPR programs in Canada, but consider Manitoba to be a leader;
- Prevent the EPRA monopoly; we want choice;
- The PRO and EPR boards and organizations need more diverse representation on them;
- Consumers do not really get the EPR funding, as opposed to funding in Europe EPR programs;
- Lack of transparency in management of the stewardship recycling programs;
- Information not fully shared to inform other stakeholders;
- For Indigenous communities, may not be able to get material out for a couple years, which means they need to stockpile and won't get money until much later;
- Current diversion targets, as well as the actual level of diversion in the province are not hitting the mark. Manitoba continues to dispose of more waste than most other provinces and the amount of waste we send to landfills continues to be above the national average;
- More must be done to enhance waste diversion and recycling solutions for northern and remote communities. Many Indigenous communities have expressed a sense of being overwhelmed by the number of PROs involved and their different program requirements and complexities. A one size fits all approach cannot be applied in the south and in northern or remote communities;
- For MMSM there is some value in having financial obligations on the municipalities (the 20% part to be invested). Consider option for 90/10 instead; and
- Collection and transportation should be paid by the producer.

4.2.4 Awareness

- Factors influencing public involvement and participation in waste management and recycling include incentives (i.e. bottle return fees), accessibility (make it convenient), knowledge and awareness of existing opportunities and why participation matters; and
- New focused efforts should not come at the expense of public education programs and awareness activities which encourage Manitobans to undertake waste reduction and recycling efforts.

4.2.5 Collaboration

- Discouraging when you provide information at policy consultations, but nothing comes out of it;
- Staff turnover at the province has been an issue as information/discussions/communication has been lost;
- Some collaboration/funding with Pathfinders/ISC for indigenous communities. Overly exhaustive efforts needed for those communities. A Toolkit was created;
- Working more closely with the Northern Stores. Key player throughout Manitoba in Indigenous communities; backhaul project with PROs; more outreach needed;
- Approved of Province-led waste sector working group; need more of this;
- MARR grew out of the EPR model, when they were first setting up PPP (early 1990s);
- Landfill waste characterization audits for the province would support identification of the types of materials everyone should focus on for future diversion programs; and
- Stakeholders need to be presented with data and clear information in order to achieve effective consultation processes.

4.2.6 Materials to Add

- Organics;
- ICI sector materials;
- White goods;
- CR&D materials;
- Mattresses/box springs;
- Bulky items;
- Scrap metal;
- All kitchen appliances; and
- HHW for small businesses, especially in small towns.

4.2.7 Plastics

- Products we cannot recycle (e.g. Styrofoam, plastic bags, plastic cutlery, straws) should be banned, or have really strict targets on those for recovery, and leave it up to industry to focus on how to go about it; and
- Provided comments in 2018 submission to Manitoba's Recycling & Plastic Reduction Task Force.

4.2.8 Circular Economy

- Brand owners should be incentivized to think in a way that is more circular (e.g. easily repaired). In Ontario, there are incentives that are built into the regulations that support circularity. For example, higher rebates are available for repair and refurbishment as compared to recycled units;
- Waste *reduction* focus;
- There needs to be more focus on the top of the waste reduction hierarchy, such as reducing or eliminating waste. There is too much emphasis on recycling as the solution;
- The Manitoba government could lead by example (office recycling and composting programs, banning single-use plastic water bottle distribution in government buildings, and following green and sustainable procurement requirements and practices); and
- Promote food waste prevention and reduction.

4.3 Federal Government, Indigenous Organizations, Initiatives and Communities Feedback

Indigenous and northern communities (and affiliated organizations) were invited to respond to emails and telephone interviews. Much of the same feedback was heard as described in Section 4.2 above. We note that the scope of this review with respect to First Nations focused on accessibility, as lands fall outside of provincial jurisdiction. Waste diversion and recycling challenges, as well as stakeholder recommendations, have been summarized below.

- People living in northern communities and on reserve lands are paying the enviro fees on some designated materials, but are not provided service access through the current EPR programming;
- Communities are limited by capacity and funding for waste management as a whole, and many First Nations communities find it challenging to register for PRO programs and meet the requirements to participate;
- Materials are already being stockpiled in most communities, but there is not sufficient clarity/responsibility on what to do next with the stockpiles;
- The newly developed backhaul program is effective, but is currently only serving a small number of remote communities;
- Recommend that a complete northern regional strategy be developed;
- The MARR forum is useful, but suggestion to add a ‘northern’ working group;
- There is support for organics diversion in the northern communities;
- Recommend aligning provincial goals and programs with federal funding already available through the First Nations Waste Management Initiative (FNWMI); and
- Support for addition of mattresses and large appliances as diversion materials.

4.4 Municipal Engagement Summary

Municipal interests were obtained by way of an online survey, interviews and an engagement webinar. Note that northern municipal perspectives and feedback are presented in **Section 4.3** above**.**
Through all forms of media we predominantly heard frustration with the WRARS funding model and a desire for additional funding over and above the existing 80/20 allowance for eligible expenses. Interest in 100% EPR for PPP was equalled with a lack of understanding regarding what that implies; there is a strong desire to be involved in consultation as it relates to producer vs. municipal roles. Additional commentary and key takeaways are summarized under the three overarching themes below.

4.4.1 PRO Programs

- 100% EPR is complicated for municipalities; requires substantial consultation, needs producer accountability and service standards;
- Lack of consultation perceived regarding 100% EPR for PPP;
- Lack of transparency regarding funding, particularly as it relates to PPP eligible expenses and how to apply for WRARS project funds and evaluation of projects receiving funding;
- Collection by PROs not frequent enough, particularly outside of urban core;
- Most stewardship programs would not function without municipal support (i.e. collection, storage);
- Ease of accessibility desired (e.g. 'one stop shop'); and
- New items should include consideration of biggest impact on diversion and items which contaminate recycling streams and the environment.

4.4.2 Funding and Program Costs

- Recycling collection, transportation, staffing is a huge cost burden/barrier, too much financial responsibility on municipalities; programs are not adequately funded;
- Generally positive sentiments/awareness of the following EPR programs: blue box materials, beverage containers, tires, used oil and car products, and batteries (both household and vehicle batteries);
- Generally mixed experience (often lack of awareness) regarding cell phone program and collection of commercial/agricultural containers for pesticides and chemicals;
- Generally lack of resources to manage and/or lack of awareness regarding the following programs: electronic waste, paint, fluorescent light bulbs and household hazardous waste, mercury containing thermostats, and expired medications;
- Concerns about adequate compensation for current municipal efforts; and
- Need increased public education and awareness, as well as funding and technical support, especially if organics to be diverted.

4.4.3 Collaboration and Other Comments

- A Lot of municipalities are actively involved in issues – participate in MARR meetings;

- Municipalities need more consultation and input into diversion effort. They cannot absorb any additional costs;
- Municipal feedback not historically reflected in government outcomes;
- The Province should help facilitate communication and consultation;
- Lack of dialogue between municipalities and PROs – need a forum/council to moderate;
- Missing diversion opportunities for organics and CR&D;
- Support for increased user fees; however Illegal dumping is a major concern related to any increase in levies or introduction of landfill bans;
- Concerns that onus will be on municipalities to enforce bans.
- Composting needs to be operationally and financially attainable for municipalities.
- The main barriers/requirements for increased diversion are perceived as:
  - High costs – additional funding required or producers to fund all collection, storage and transport;
  - Technical support and infrastructure requirements;
  - Increased public education and awareness;
  - High amounts of contamination in certain programs; and
  - Ease of accessibility (need one stop shop EPR).

4.5 Public Survey Results

The public survey was designed by Landmark Planning & Design (Landmark), in collaboration with Dillon and the Province. A total of 1,624 people visited the survey and 1,052 competed the survey. There were respondents from all regions across Manitoba with the majority of respondents living in Winnipeg.

4.5.1 Key Findings – Public Survey

While responses may be biased given the nature of those responding to a survey titled *Recycling in Manitoba*, over two-thirds (71%) of respondents indicated they always recycle. Barriers to diversion/program participation implied a lack of options/access, as well as a lack of convenience and confidence in preparation of material or in the actual eventual recyclability of the product. A general summation of responses is provided under three main themes below.

4.5.1.1 Awareness and Participation

When asked about awareness of specific aspects of programming and resulting participation, we received the following feedback:

- A majority indicated a lack of confidence in what can be recycled (34%);
- Awareness of how to prepare or clean items to be recycled (26%);
- Overall, a there was a lack of awareness of specific recycling programs in their communities; and
- A lack of information dissuades respondents to recycle a specific item.

When asked about additional reasons discouraging respondents from recycling or from recycling *more*, the top reasons were:

- A perceived lack of options for recycling programs in Manitoba (26%);
- Specific lack of convenience because specific recycling is not provided at their place or residence (19%); and
- A lack of confidence that was is being recycled actually gets recycled in Manitoba (17%).

There is a strong sentiment from respondents who don't recycle that most of what is put into blue bins ends up in the landfill.

- In many cases, the core reason that respondents don't recycle a specific item is related to a lack of awareness of specific recycling programs in their communities, followed closely by a lack of information, and simply not having that item to recycle in their possession.

4.5.1.2 Diversion Materials

When asked what other materials should be included in the Province's recycling programme, the top materials provided by respondents were:

- Plastics (specifically soft plastics like grocery bags, black plastics like coffee cup lids, and other larger plastic items like toys or agricultural materials);
- Compost (specifically from household waste streams);
- Glass (including beverage containers and broken glass); and
- Styrofoam (specifically food packaging).

Many respondents also indicated there should be a deposit return system, similar to other provinces, to further divert waste from landfills for:

- Glass containers; and
- Plastic containers.

4.5.1.3 Organics

Respondents were split on whether they compost or not (50% say they compost and 50% say they do not). For those that do compost, the vast majority do so by means of backyard composting, as it diverts waste and is good for the environment (and because they use it in their gardens). For those that don't, a wide range of reasons were provided, including:

- A lack of education on how to compost;
- Nuisances (including smells and pests); and
- Limitations due to living arrangements (either lack of space or not being allowed because they live in apartments or condominium housing).

4.5.2 Program Satisfaction

- 41% of respondents indicated they were either very satisfied or satisfied with the waste diversion and recycling programming available in their community; and
- 34% of respondents indicated they were either dissatisfied or very dissatisfied.

The detailed public survey results report is presented in **Appendix B**.

5.0 Stakeholder Workshops Results

A series of three stakeholder engagement workshops were held in March 2021. The results of these workshops is summarized in **Appendix D**. The feedback heard during the workshops closely mirrored what we heard during the stakeholder interviews and in the survey results. It is recommended that additional stakeholder engagement be undertaken as part of the next steps for the Province; these workshop results provide insight into where engagement is needed most, as well as topics for relevant discussion.

The **Stakeholder Webinar Summary** includes:

- A summary of the virtual session stakeholder groupings and why selected;
- Attendees of virtual sessions;
- Brief description of how the current state analysis and its consultations were used to create the themes and questions for the stakeholder virtual workshop sessions;
- Topics presented for facilitated discussion at sessions;
- The three sessions' findings and key outcomes summary; and
- Summary of the sessions' presentations and data.

5.1 Workshop Areas for Exploration

The following "areas for exploration" were developed from the gap analysis and provided for discussion during the stakeholder engagement workshops. These topics were chosen as areas for discussion because they were anticipated to highlight key differences in approach, level of satisfaction, risks and barriers perceived by different stakeholder groups. These are not all specifically recommended for action by the Province, but are intended as discussion topics to broadly represent some of the recommendations presented as part of this study and potential outcomes resulting from future consultation. The topics chosen for discussion included:

- **Landfill Bans:** for specific material(s) for which alternative diversion programs are active in Manitoba and have viable end markets.
- **100% EPR**: extended producer responsibility (full EPR), in particular for PPP as managed by MMSM in partnership with CBCRA. As an EPR province, this is the next stage for modernization of Manitoba's framework and to shift full responsibility back to the producers and reduce financial and resource burdens currently carried by Manitoba's municipalities, communities and the tax base.
- **Expanded Materials List**: in particular for existing stewardship programs, as well as the creation of new EPR-type programs for white goods, mattresses and box springs.
- **Introduction of Organics and CR&D Diversion Programs**: introduction of the concept of expanding diversion programs, incentives and opportunities for organics (kitchen waste, leaf and yard waste, brush, wood) and CR&D materials. These materials typically do not fit stewardship-type frameworks.

- **Increase to Landfill Levy**: proposal to increase landfill levies ($ per tonne) on disposed waste (all landfilled garbage in the province) to encourage diversion alternatives to landfilling.
- **Accessibility through Regional Collaboration**: option to expand diversion and stewardship/EPR program access to more Manitobans, especially in outlying communities (northern, remote and Indigenous communities).
- **Enhanced Targets**: expand targets for more performance based metrics and KPIs to increase diversion from landfill. The questions included preferred target types, approach to target setting and enforcement levers.

The stakeholder feedback on each of these topics for discussion is presented in the **Engagement Memo**. The goal was not to gather exhaustive feedback, but to present a snapshot of the opportunities and barriers perceived by the stakeholder groups on each of these concepts, allowing the Government of Manitoba to better understand the current issues and viewpoints.

6.0 Policy Landscape Scan

The Policy Landscape Scan aims to summarise high level policy influencing drivers and their context to Manitoba. The Policy Landscape Scan provides an overview of the following eight topics that are impacting solid waste management policy and frameworks in Canada and internationally at this time:

1. Plastic Waste;
2. CCME EPR: Harmonization and Phase 2 Materials;
3. COVID-19;
4. Waste to Energy vs Landfill;
5. Municipal Regional Considerations;
6. Landfill Bans;
7. GHG/Climate Change; and
8. Circular Economy.

Table 15 provides a brief overview of each policy landscape topic, followed by a high level scan of each topic.

Table 15: Policy Landscape Topics

Policy Landscape Topics	Overview Components
Plastic Waste	Includes relevant national and regional targets, initiatives, pacts and agreements, such as the CCME National Zero Plastic Waste Strategy and Ocean Plastics Charter; Federal government's proposed approach to plastic products, such as the recent proposed national ban on six single-use plastic (SUP) items; "big picture" issues when updating legislation. Plastics are addressed through a number of Federal long term Plastics Strategy commitments and industry initiatives such as the recent Canada Plastics Pact. Specifically: • Federal Plastics Waste Initiative; • CCME – Zero Plastic Waste Strategy (Manitoba is on the working group, chair for two years, and has contributed to discussion); and • Industry's new Canada Plastics Pact. It comments on how these may impact Manitoba moving forward, stays flexible and considers options to ban plastic bags. It comments on recommendations to ban compostable plastic cutlery, etc. It comments on Federal regulatory mechanism for bans and material management.

Policy Landscape Topics	Overview Components
	It comments on local options for Manitoba: • Materials; • Processing options for plastics; • Single-use items (SUIs) and bans (jurisdictional review); • Options to stay nimble to align with Federal government as required; and • How Manitoba can move forward and take action while waiting for Federal initiatives.
CCME EPR: Harmonization and Phase 2 Materials	Manitoba has committed to CCME Extended Producer Responsibility (EPR) Phase 1 and 2 materials. Phase 1 has largely been accomplished (packaging and printed paper (PPP), mercury containing thermostats, electronics and electrical equipment, automotive (oil, lead-acid batteries (LABs) and a list of other materials). Phase 2 includes construction, demolition, furniture, textiles carpet and appliances including ozone depleting substances (ODS). CCME has a disposal target of 490 kg per capita per year by 2030; still to tackle organics, construction and demolition waste and bulky wastes such as textiles, furniture, mattresses and carpets (all in CCME EPR Phase 2 list) to help reach the target. EPR Harmonization CCME: British Columbia (B.C.), Québec and Ontario transition to 100% EPR funding for PPP programs.
COVID-19	COVID-19 impact on the recycling industry: • The increase of residential waste generated and the decrease in commercial waste generation, and its impact on waste audit data analysis in the near future. • Provides insight/considerations into how diversion and generation numbers are impacted by COVID-19. • Long term behavioural changes related to waste generation (old corrugated cardboard (OCC) and municipal waste). • Producer Responsibility Organization (PRO) program implications (e.g. program revenue increases due to higher sales during COVID-19 and the impact to program annual surplus [e.g. battery programs experience]). • Impacts on reporting for the next few years due to COVID-19 consumer behaviour and lifestyle changes.
Waste to Energy vs. Landfill	Increased interest in Waste to Energy (WtE), specifically in some prairie provinces and smaller municipalities, led by an interest in decreasing landfill capacity and the “incentive” of revenue generation potential by new technology providers (gasification, pyrolysis, incineration and energy from waste).

Policy Landscape Topics	Overview Components
Municipal Regional Consideration	Regional considerations (infrastructure, transportation, etc.) such as the geographical spread of rural communities throughout Manitoba and the lack of accessibility and infrastructure in remote, Indigenous and winter road communities; consider Regional or District approach. Stewardship programs and end market issues volatility of end markets for blue box recycled materials and the lack of economy of scale and accessibility of programs for distant rural communities for their materials to reach processors and end markets.
Landfill Bans	Emerging trend of landfill bans as policy/regulatory approach to divert material from landfill. Diversion programs need to be in place before a ban is implemented.
GHG/Climate Change	GHG and climate change will be a growing focus in the future – diversion of organics is the most important aspect of waste management waste streams to contribute to GHG reductions.
Circular Economy Framework	International growth of interest and implementation of Circular Economy roadmaps and interventions to support resource value retention by applying higher waste hierarchy efforts.

6.1 Plastic Waste

Plastics have become a problem of global concern and thus the focus of much government action – at all levels – given the scale of their production and consumption, low levels of recycling and release in the form of littering/pollution. It is estimated that 300 million tonnes of plastics are manufactured globally each year, half of which are used for single-use items[84].

The current recycling rate is only 10% globally[85], and has been further challenged by China's 2018 requirements to ensure less than 0.5% contamination rate[86] in plastic collected for recycling. A recent analysis[87] found that 60% of all plastics ever produced have been discarded in landfills or in the natural environment, 30% are still in use, 12% have been incinerated and only 9% have been recycled.

6.1.1 Federal Actions

Plastic waste, largely through its impact on marine litter, has become a high priority to all levels of government across Canada. In June 2019, the Government of Canada announced[88] steps to reduce

[84] Plastic Oceans International, "Plastic Pollution Facts" (February 4, 2021). Received from: https://plasticoceans.org/the-facts/.
[85] Environmental Defence, "Towards a Zero Plastic Waste Canada" (n.d.). Received from: https://environmentaldefence.ca/plasticsdeclaration/.
[86] Waste Dive, "With China's 'nearly impossible' contamination standard, where are MRFs looking now?" (April 4, 2018). Received from: https://www.wastedive.com/news/china-contamination-standard-MRFs/519659/.
[87] Plastics Oceans International, "Production, Use and Fate of All Plastics Ever Made" (July 19, 2017). Received from: https://plasticoceans.org/wp-content/uploads/2018/05/Production_use_and_fate_of_all_plastics_ever_made.pdf.
[88] Prime Minster of Canada, "Government of Canada taking action to reduce plastic pollution" (June 10, 2019). Received from: https://pm.gc.ca/en/news/backgrounders/2019/06/10/government-canada-taking-action-reduce-plastic-pollution.

Canada's plastic waste by identifying single-use plastics to be banned in 2021, and working with provinces and territories to support the development of consistent EPR across the country.

In October 2020, the federal government followed through with its promise and announced that it would be adding "plastic manufactured items"[89] to the **List of Toxic Substances** set out at Schedule 1 of the **Canadian Environmental Protection Act***, 1999* (*CEPA*). It also would use the regulation making powers under *CEPA* to ban six plastic waste products: plastic bags, stir sticks, six-pack rings, cutlery, straws and food service ware from hard-to-recycle plastics by the end of 2021. Two other notable components of the "proposed integrated management approach to plastics products to prevent waste and pollution" are plans to establish recycled content requirements for plastics products and packaging and collaboration among all levels of government to develop pan-Canadian targets to ensure that rules are consistent and transparent, making producers and sellers of plastic products responsible for collecting them (through expanded producer responsibility).

The government's move is supported by a science assessment of plastic pollution that was published on the Canada.ca (**Chemical Substances**) website on October 7, 2020, and summarizes the current state of the science regarding the impacts of plastic pollution on the environment and human health. The science assessment recommends pursuing action to reduce macro-plastics and micro-plastics that end up in the environment, in accordance with the precautionary principle. The move is also supported by a 2019 economic study of the Canadian plastic industry, markets and waste[90] commissioned by the federal government and conducted by Deloitte. The study estimated that 86% of Canada's plastic waste was landfilled in 2016, with a further 4% incinerated, 1% released into the environment as plastic pollution and only 9% recycled.

6.1.2 CCME Actions

As part of the move towards zero plastic waste in Canada, the CCME approved in principle a Canada-wide Strategy on Zero Plastic Waste in November 2018. The strategy places a significant emphasis on SUIs and prioritizes reducing demand for disposable plastic items. Single-use plastics are one of ten (10) priority result areas in the Strategy and a priority action focus in the accompanying Canada-wide Action Plan on Zero Plastic Waste, released in 2019.

Phase 1 of the Canada-wide Action Plan on Zero Plastic Waste focused on product design, single-use plastics, collection systems, recycling capacity and domestic markets. Details include the development of a roadmap to strengthen management of SUIs, identifying the SUIs that are most likely to be released into the environment or pose management challenges, and working with stakeholders to promote solutions and identify sustainable alternatives. The Phase 2 Action Plan was released in 2020 and targets

[89] Government of Canada, "A proposed integrated management approach to plastic products: discussion paper" (October 7, 2020). Received from: https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/plastics-proposed-integrated-management-approach.html.

[90] Government of Canada, "Economic Study of the Canadian Plastic Industry, Markets and Waste" (2019). Received from: http://publications.gc.ca/collections/collection_2019/eccc/En4-366-1-2019-eng.pdf.

the remaining result areas of the Strategy that address actions to reduce plastic pollution and serve as enablers to achieve the CCME's goal of zero plastic waste. Its six priority areas were:

- Information exchange and awareness;
- Management of waste from aquatic activities;
- Fishing and aquaculture;
- Capture and clean-up;
- Research; and
- Global leadership.

Current CCME specific priority projects include:

- Developing best management practices for disposal bans of end-of-life plastics, levies and incentives to support implementation by jurisdictions;
- Developing guidance to facilitate consistent EPR policies for plastics;
- Compiling a reference compendium of existing guidelines for recyclability and recommendations for use by jurisdictions and industry; and
- Developing guidance on the use of labels and terms such as recyclable and compostable to facilitate common understanding.

6.1.3 Provincial Actions

Across Canada, there's been an expansion of existing provincial EPR programs for PPP and a professed will to implement EPR in the provinces that currently lack it.

B.C. is the provincial leader in taking actions on plastic. In 2019, the **Clean B.C. Plastics Action Plan** cited four main areas of potential activity:

- Bans on single-use packaging;
- Reducing SUPs in landfill and waterways;
- Expanding plastic container returns; and
- Reducing plastics overall.

In June 2020, the Recycling Regulations were amended to expand the bottle deposit system and to add packaging-like and single-use products to the province's blue box program by 2023. In the fall of 2020, B.C. also released for consultation an "Intentions Paper" with five (5) target areas:

- Mattresses;
- Moderately hazardous products;
- Electronic and electrical products and batteries;
- PPP beyond residential sources (i.e. the Industrial, Commercial and Institutional (IC&I) sector); and
- Lost fishing and aquaculture gear.

Ontario is transitioning from a shared costs producer responsibility model to a full financial and operational producer responsibility model. Additionally, it is expanding the list of materials subject to EPR to include packaging-like and certain single-use items. Ontario's new blue box plan (though not yet finalized) is planning to designate single-use food and beverage service item such as straws, cutlery, plates and food service ware. Compostable items are also designated but only incur reporting requirements at the outset of the new plan.

Québec, which currently has a full financial responsibility model, is transitioning to a full financial and operational producer responsibility model[91]. Québec also announced in February 2020 a plan to develop a circular economy for plastic. Five leading companies in Canada's food, beverage and packaging sector are working with Environment and Climate Change Canada (as a supporter) and Eco Enterprise Québec (as a consultant and financial partner) in this new initiative[92].

Alberta has announced plans to undertake ambitious consultations on EPR in the province with aspirations to be a "hub" for plastic recycling "in the western hemisphere"[93]. New Brunswick is working with Recycle NB to develop an EPR program for PPP[94]. Prince Edward Island and Newfoundland already have in place a ban on plastic shopping bags; Nova Scotia is committed to doing the same.

A similar push to introduce or expand EPR programs can be seen around the world, including in the United States, with proposals being discussed in California, Connecticut, Indiana, Maine, New York, Oregon, Vermont and Washington[95]. Changes to EPR programs in Europe are discussed further below.

6.1.4 International Action

The Ocean Conservancy has been monitoring the types and amounts of litter being collected on beaches internationally for the past 30 years. By 2018, all of the top ten marine litter items collected contained plastic. The top ten items included cigarette butts (containing plastic filters), food wrappers, plastic beverage bottles, plastic bottle caps, plastic bags (grocery bags and other bags), straws and stirrers, plastic take-out containers, plastic lids and foam take-out containers[96]. Governments and businesses

[91] Retail Council of Canada, "Major overhaul of the Québec curbside recycling, introduction of extended producer responsibility in Québec" (February 24, 2020). Retrieved from: https://www.retailcouncil.org/advocacy/sustainability-advocacy/major-overhaul-of-the-quebec-curbside-recycling-introduction-of-extended-producer-responsibility-in-quebec/.

[92] Transcontinental, "Federal Government and six key players partner to create a circular economy for plastics" (February 25, 2020). Retrieved from: https://tctranscontinental.com/en-ca/company-overview/news-room/press-releases/federal-government-and-six-key-players-partner-create.

[93] Recycling Product News, "Alberta to advance extended producer responsibility consultation in early 2021" (December 8, 2020). Retrieved from: https://www.recyclingproductnews.com/article/35452/alberta-to-advance-extended-producer-responsibility-consultation-in-early-2021.

[94] Recycling Today, "New Brunswick to develop EPR for packaging, printed paper" (October 21, 2019). Retrieved from: https://www.recyclingtoday.com/article/new-brunswick-canada-develops-extended-producer-responsibility-program-recycling-paper/.

[95] Resource Recycling, "Recycling operators sound off on packaging EPR" (December 22, 2020). Retrieved from: https://resource-recycling.com/recycling/2020/12/22/recycling-operators-sound-off-on-packaging-epr/.

[96] USA Today, "Top 10 trash items found littering our beaches and waterways – and the weirdest" (June 27, 2018). Retrieved from: https://www.usatoday.com/story/news/nation-now/2018/06/27/ocean-beach-pollution-plastic-trash/738173002/.

around the world are now taking heed. Many jurisdictions have established or aim to enact a range of policies and programs, ranging from education campaigns to out-right bans on a range of single-use plastic products.

Other jurisdictions have a slightly different set of focus materials. Pursuant to their Single-Use Directive, the **European Union (EU)** is making efforts to reduce plastic cotton buds, cutlery/plates/straws/stirrers, balloons and sticks for balloons, food containers, cups, beverage containers, cigarettes butts, bags, wrappers, wet wipes and sanitary items and fishing gear. The EU is also implementing EPR schemes in line with the "polluter pays" principle to require, among other things, coverage of litter clean-up costs[97].

Numerous pacts and commitments have been established and joined by governments and businesses around the world, aimed at fostering collaboration on innovation, leveling the playing field for businesses and pursuing aggressive targets. Notable pacts and commitments include The **G7 Oceans Plastics Charter**, The **New Plastics Economy Global Commitment**, The **Canada Plastics Pact** and **The European Strategy for Plastics in a Circular Economy**. The first two are further discussed in **Appendix B** and the latter in **Section 6.8.**

6.1.5 The Canada Plastics Pact

On October 1, 2020 the **Natural Step** organization based in Ottawa (the leading founder) announced that following the lead of Ellen MacArthur Foundation's **New Plastics Economy Initiative**, Canada will join the network of nine other national-regional Plastic Pacts now in place around the world (including the United Kingdom and the United States). The **Canada Plastic Pact** will initially focus on plastics packaging (i.e. beginning its work in the fall of 2020) with the intention of expanding beyond packaging to other types of plastic in the future. The Canada Plastics Pact[98] – consistent with the commitments of the other Pacts in the global network – has set four 2025 targets:

- Define a list of plastic packaging that is to be designated as problematic or unnecessary and take measures to eliminate them by 2025;
- Support efforts towards 100% of plastic packaging being designed to be reusable, recyclable or compostable by 2025;
- Undertake ambitious actions to ensure that at least 50% of plastic packaging is effectively recycled or composted by 2025; and
- Ensure an average of at least 30% recycled content across all plastic packaging (by weight) by 2025[99].

The Canada Plastics Pact – Information Package, designed to attract member companies from across the packaging value chain, identifies the systemic barriers to be addressed that cannot be solved in isolation, namely:

[97] European Commission, "Single-use plastics: New EU rules to reduce marine litter" (May 28, 2018). Retrieved from: https://ec.europa.eu/commission/presscorner/detail/en/MEMO_18_3909.
[98] Canada Plastics Pact, "Canada Plastics Pact Information package" (October 5, 2020). Retrieved from: www.plasticspact.ca.
[99] Ibid. p. 4

- Making recycled plastics competitive with virgin plastics;
- Fragmentation between various actors in the plastics life cycle;
- Technical and policy barriers that block the adoption of new circular economy practices at scale; and
- Unpriced and unmitigated externalities effectively subsidizing the status quo.

6.1.6 Relevance to Manitoba

Policies related to plastics in Manitoba should be developed with the understanding that certain plastics are already addressed through existing stewardship programs (Multi-Material Stewardship Manitoba – MMSM and Canadian Beverage Container Recycling Association – CBCRA). With ongoing federal regulations and policies in development, the province should remain flexible when considering Manitoba-specific plastic diversion.

While ocean and marine litter do not have a direct impact in Manitoba, and commitments made internationally and globally may not be directly relevant to Manitoba, and what the Manitoba government might consider as part of the policy review, plastic pollution in lakes and rivers is definitely relevant to Manitoba residents and needs to be addressed through a Manitoba specific approach.

It should be noted that both Unilever and PepsiCo said plastics reduction was their number one issue in recent remarks at a **Metro Winnipeg Circular Economy** conference and as part of the interviews conducted for this review, respectively. This allows Manitoba a unique opportunity to do some innovative work in the plastics diversion area, with CBCRA and MMSM eager to harmonize with movement taking place in the rest of the country in this regard.

The province has already moved successfully forward with the 50% plastic bag reduction target. Public acceptance on this front could encourage Manitoba to gain further momentum and join other municipalities and provinces in banning not only plastic checkout bags, but other SUIs. Action in this regard could move Manitoba forward as leaders while waiting for Federal initiatives to be implemented.

6.2 CCME EPR: Harmonization and Phase 2 Materials

Under the terms of the Canada-Wide Action Plan for EPR, jurisdictions committed to working towards the development of EPR framework legislation and/or regulations for the implementation of EPR programs and/or requirements in two separate phases. Significant progress has been made establishing EPR programs for many of these “Phase 1” materials in many parts of the country, especially over the past five years. These include:

- Packaging (currently handled by municipalities);
- Printed materials;
- Mercury-containing lamps;
- Other mercury-containing products (e.g. thermostats, thermometers, etc.);
- Electronics and electrical equipment;

- Household hazardous and special wastes; and
- Automotive products.

Much less progress has been made with Phase 2 product categories which include:

- Construction and demolition materials;
- Furniture (including mattresses);
- Textiles and carpet; and
- Appliances, including ODS.

6.2.1 Construction, Demolition and Renovation Materials

Construction, demolition and renovation (CD&R) materials include wood, drywall, shingles, concrete, brick, scrap metal, cardboard, plastic and other packaging, carpet and underlay, as well as small amounts of wiring, pipe and other materials. CD&R materials from construction sites can be source separated into relatively clean piles and recycled. CD&R materials from demolition sites are more mixed. EPR is not easily applied to CD&R materials because of their very long lifespan, and the fact that producers of today's materials may not be in business when the materials are at end-of-life. For instance, wood purchased today to build a house may stay in place for 50 to 100 years, therefore the concept of collecting levies on materials sold to pay for recycling, which works well for PPP, waste electrical and electronic equipment (WEEE), tires and other materials. The Province of Alberta commissioned a study on EPR of CD&R materials in 2007 and concluded that different approaches to pursue EPR were needed to properly manage CD&R materials and producer responsibility may not be implementable. Policies such as landfill bans, or mandatory diversion planning as a condition of getting a building permit are better ways of ensuring diversion of CD&R waste. Prior to implementing either of these options, a jurisdiction needs to ensure that adequate diversion options are available.

Metro Vancouver has landfill bans on materials including wood, drywall and scrap metal. A number of recyclers accept CD&R wastes and process them for diversion into a number of different markets.

6.2.2 Furniture

No North American jurisdiction has an EPR program for furniture, and most furniture waste is either donated to charities, sold on websites such as Kijiji and others, or is given to neighbours, friends or family members. A small proportion is recovered for remanufacturing/refurbishing, but this Circular Economy approach is mostly only seen in the office furniture sector. The remainder is landfilled. France was the first county in the world to establish a national EPR program for a wide-range of bulky furniture of two types; items upholstered with textiles (e.g. couches chairs, bedframes, etc.) and un-upholstered items (e.g. tables, chairs, desks, cabinets, bookshelves, etc.).

6.2.3 Mattresses

B.C. is the first (and only) province in Canada that has committed to an EPR program for mattresses. B.C.'s Ministry of Environment and Climate Change Strategy's (BCMoECCS's) Recycling Regulation Policy

Intentions Paper (September 2020), expressed the intent to establish a new EPR Schedule for mattresses (subject to public and industry feedback). Every year, approximately 200,000 mattresses are already recycled in B.C., costing about $40.00 per unit to recycle. Mattresses in landfills damage machinery and take up landfill space costing B.C. local governments up to $340,000.00 annually in landfill costs alone. The recycling infrastructure to manage mattresses is in place in B.C.; adding a new Schedule within the regulation would ensure more consistent standards for recycling all the materials found in mattresses (including foundations and box springs).

California, Rhode Island and Connecticut were the first three states in the United States (and in North America) to have established state-wide mattress EPR programs. In its first year (2017), the California program collected 1.3 million mattresses and foundation units through its 165 collection sites. In May 2016, Rhode Island established a fee of $16.00 for every mattress and box spring sold. The fee collected was $9.00 per unit in Connecticut.

6.2.4 Textiles

There is a reasonably robust system of textiles reuse and recycling operated by not-for-profits across the country. No province in Canada has implemented an EPR program for textiles, although Nova Scotia has been researching the idea for some time. Return-It (formerly Encorp) in B.C. recently piloted textiles collection from a small number of its beverage depots. The City of Markham in Ontario has been a national leader by banning targeted textiles from landfill (mainly clothing, accessories, linens, towels and shoes), thereby diverting about 4,000 tonnes per year, along with a curbside textile collection bag program. France started the world's EPR program for textiles in 2007.

6.2.5 Carpets

Every year Americans discard about two million tons of carpets. California remains the only jurisdiction in North America to have an EPR program for carpets, starting in 2011. It has been estimated that the current program fee costs California householders about $35.00 for carpeting in an average home. The voluntary carpet industry agreement (called Carpet America Recovery Effort – CARE) diverts only about 5% of carpets per year, although the program has been in place for over 20 years.

6.2.6 Large and Small Appliances (Including ODS) and Outdoor Power Equipment

B.C. is the Canadian leader in the diversion of large and small appliances and outdoor power equipment through three different PROs:

- ElectroRecyle for small appliances;
- The Major Appliances Recycling Roundtable (MARR) for major appliances; and
- The Outdoor Power Equipment Institute of Canada (OPEIC) for electric outdoor power equipment.

6.2.7 Relevance to Manitoba – CCME Phase 2

Tackling CCME Phase 2 materials will be a considerable challenge for the Province of Manitoba, as other provinces across Canada have not had significant success implementing EPR for Phase 2 materials.

CD&R waste can contribute 10% to 25% of disposed municipal solid waste, depending on economic activity in a particular year. Because of the significant amount and weight involved, reaching any aggressive waste disposal target, such as CCME's 490 kg per capita by 2030 target, requires a concerted focus on recycling and reusing construction and demolition waste. This could start with disposal bans on readily recyclable materials such as scrap metal and clean wood, eventually expanding to add drywall and concrete/brick as processing options become available or local markets are developed. Procurement specifications at the provincial level could mandate high diversion targets and reuse or repurpose of materials for all construction or demolition projects funded by the provincial government. If this approach could be expanded to municipal projects, diversion could be significantly increased and demand for reuse of CD&R material increases.

Carpets, textiles and bulky goods make up around 10% of the disposed waste stream. A few jurisdictions have implemented EPR for carpets (California in particular), and EPR for carpets is under consideration in B.C., therefore carpets could be a possible target for an EPR program in Manitoba.

Diversion of textiles could be improved through partnerships with organizations already involved in textile reuse. There is very limited experience with EPR programs for textiles, except in France.

B.C. already has EPR programs in place for large and small appliances. These should be evaluated for possible consideration and adoption in Manitoba.

6.3 COVID-19

The impacts of COVID-19 have presented unanticipated challenges for the waste management industry. The Province of Manitoba declared a public health emergency on March 20, 2020 and categorized waste management as an essential service. Health and safety protocols to ensure worker safety at waste facilities were adjusted. The Province did not suspend any waste management services.

With stay-at-home orders declared, and many employees working from home, waste generation in the residential sector increased, while commercial waste generation decreased. From these stay-at-home orders, more waste was produced at homes in all waste streams including garbage, recyclables and HHW materials. The City of Winnipeg saw a large increase in materials in the waste management system[100]. Waste generation has shifted from commercial to residential with activities such as online shopping, take-out food and additional packaging protocols. Single-use items such as face masks, gloves and other personal protective equipment (PPE) have increased in volume in the waste composition. The stockpiles of items that were bought during the "panic buying" periods will eventually add to the amount of waste generated. This may change how regulatory programs are run. Currently, EPR programs are funded by the sale of their products. If product sales increase, there is an assumption that the recycling recovery rate of that product will also increase, which may not be the case during

[100] CBC News, "'Amazon effect' at play in Winnipeg recycling bins as residents stay home, shop online" (November 30, 2020). Retrieved February 10, 2021, from: https://www.cbc.ca/news/canada/manitoba/winnipeg-waste-recycling-covid-1.5821967.

COVID-19 panic buying and hoarding. These products may not be consumed soon after purchase, but rather stored and therefore not show up in recycling programs volumes until a later time, for example batteries. As a regulator, Manitoba will need to be aware of these data anomalies when reviewing annual reports from the stewardship programs or considering program plan renewals and more robust targets in the next couple of years.

The waste management sector can expect more skewed data results and anomalies from waste composition studies carried out during the pandemic. The province will continue to see an increase in residential waste generation as many residents are working from home, online schooling and a reduction in social activities. While it may take several years for lifestyles to return to pre-COVID activities, there may still be a portion of the population that continues to work from home and in turn continue to impact residential and commercial waste data characterization and volumes, for example an increase in organics generated in the residential sector. When forecasting short and long term waste generation and recovery rates for program planning, data may need to reflect the pre-COVID era or a hybrid of both.

6.4 Waste to Energy vs. Landfill

Across Canada, interest in new Waste-to-Energy (WtE) solutions, or Energy-From-Waste (EFW) has been growing. Initially, many Canadian jurisdictions looked to Europe as an example of how waste-to-energy is used to decrease waste to landfill, and also generate significant quantities of electricity and heat. In Canada, this model has been shown to be less effective, as the population density is typically lower than in Europe and the total residual waste stream is small in comparison. In addition, electricity and energy costs are lower in Canada compared to Europe. The economics of capital cost compared to potential energy recovery in Canada have not been favourable for locations other than the major urban centres. Despite this, small municipalities across Canada have continued to show interest in waste-to-energy solutions, largely as a result of their increasing solid waste management costs, and the promise from new WtE technology providers who offer the opportunity to generate revenue from residual waste.

The Province and its municipalities are now faced with decisions related to the relevance of the waste hierarchy (see **Section 7.8**), as well as the long term implications of WtE infrastructure and liabilities related to contracts, long term costs, ongoing feedstock requirements and residuals management.

Facility licensing and prescribed provincial approvals and waste facility levies can be used as a policy lever to manage waste ending in WtE, especially materials that have diversion programs in place. Regulator's approvals process for new facilities must align with the Ministry's mandate and long term goals for the province. New facility proponents should also demonstrate how the new facility meets the provincial goals and is the best option for the materials it will consume as feedstock. Manitoba must decide where WtE lies as a waste management priority in the future waste diversion and recycling framework. For example, in Ontario, any form of combustion, gasification or incineration is not considered diversion and approvals for such proposed facilities are lengthy and exhaustive.

6.5 Municipal Regional Considerations

The geographical spread of rural communities throughout Manitoba (particularly in the north) and the lack of waste facility accessibility and infrastructure in remote, Indigenous and winter road communities suggests that the province consider a Regionalization (Regional District or Local Authority) approach to waste management.

Although true EPR stewardship programs are intended to remove the volatility of end markets for blue box and other recycled materials, there remains the lack of economies of scale and accessibility to programs for distant rural communities. Regionalization could allow for cost sharing measures to build 'one-stop-shop' depots and/or transfer stations with coordinated transport or backhaul to reach processors and end markets. While other municipal services typically lend to a regional shared approach, such as police, water and emergency services, waste management services however have less of an appetite for municipal buy-in if municipalities have ample landfill capacity and do not feel the pressure of limited disposal options. The reginal approach is an alternative to delivering diversion and recycling programs that generate economies of scale through collection services that are more efficient and effective and less of a financial burden to each municipality.

As an example, the local government system in B.C. is unique in Canada. In addition to its 162 municipalities, it is composed of 27 regional districts. Regional districts range in population from under 4,000 to over two million and range in size from 2,000 to 119,337 km^2. Regional districts are modeled as a federation composed of municipalities, (smaller, mostly rural) electoral areas and in some cases, Treaty First Nations, each of which have representation on a regional district board.

6.5.1 Relevance to Manitoba

When speaking to Winnipeg Metro Region (WMR), they acknowledged their goal to work in terms of solutions within 'quadrants'. The quadrants, split by geography, aim to accommodate transportation based on routing and where Class 1 landfills/recyclable materials are located. WMR hopes to bring municipalities and First Nations together to facilitate collaboration and discussion on waste management for regional solutions. There is optimism that regional sharing agreements, currently used for water, could be applied to solid waste management. We recognize that some municipalities do not have an appetite for regional approaches, but some do.

6.6 Landfill Bans

Many jurisdictions have landfill bans on specific materials, or in some cases charge much higher tipping fees or surcharges on banned materials. Two examples are profiled in this section; landfill bans in Metro Vancouver and the Province of Nova Scotia.

6.6.1 Metro Vancouver Landfill Bans

Metro Vancouver (MV) bans three categories of materials from disposal:

- Recyclable materials (with organics added in 2015);
- Materials which cause operational challenges (e.g. mattresses or hazardous materials that are a danger to staff); and
- Product stewardship materials where other disposal options are provided by producers.

At MV disposal facilities, loads are inspected for banned materials that shouldn't be in the garbage, such as recyclable materials, product stewardship materials or hazardous materials that pose a risk to waste collection workers, the public or the environment.

Surcharges apply if these materials are found in the garbage at MV disposal facilities. A $50.00 minimum surcharge, plus the potential cost of removal, clean-up or remediation will be applied to loads containing banned hazardous and operational impact materials or product stewardship materials. A surcharge of 50% of the tipping fee on the entire load will be applied to loads containing banned recyclable materials. Instead of disposing of these items in the garbage, banned recyclable materials and product stewardship materials can be dropped off for recycling.

Recyclable materials are banned to drive up the regional recycling rate. These include: corrugated cardboard; recyclable paper and recyclable containers made of glass, metal or plastic (1, 2, 4 and 5), expanded polystyrene packaging and beverage containers. There are accessible recycling options region-wide, often at the same facility. In fact, MV has recently renamed the Transfer Stations to reflect this (e.g. Coquitlam Recycling and Waste Centre -formerly Coquitlam Transfer Station).

There is a comprehensive ban on organics materials including green waste, food waste and clean wood. Banned "hazardous and operational impact materials" are hazardous to the environment or workers, or have high operational impacts. These include a lengthy list (see **Appendix C**) but those of note or direct relevance to Manitoba include gypsum (drywall) and mattresses.

Banned "product stewardship materials" have provincially regulated recycling programs and accessible recycling options province-wide. The list includes:

- Antifreeze and antifreeze containers;
- Gasoline;
- Pesticide products;
- Pharmaceutical products and medications;
- Lead-acid batteries;
- Oil, oil filters and oil containers;
- Paint products;
- Solvents and flammable liquids;

- Electronic and electrical products including metal household or commercial appliances as identified in Schedule 3 – Electronic Products Category to *Recycling Regulation*;
- Tires pursuant to Schedule 4 – Tire Product Category to the *Recycling Regulation*;
- Thermostats;
- Fluorescent lights; and
- Batteries.

MV faced a number of challenges implementing or addressing the landfill bans in 2017 when a number of unrelated events showed the vulnerability of the region's recycling system to the impacts of unanticipated or extraordinary events:

- A fire at a mattress recycling facility eliminated a substantial amount of mattress recycling capacity until the business was able to re-establish itself at another location;
- WorkSafeBC's concerns regarding asbestos in drywall mud from pre-1980s buildings resulted in the short term closure of New West Gypsum, the major drywall recycling facility in MV;
- MV's closure of six drywall collection sites in 2015, due to the aforementioned asbestos-related safety concerns, caused a significant issue for contractors (and increased illegal dumping region-wide);
- A shipping strike at Fraser Surrey Docks in 2014 caused delays in shipments of recycled materials overseas, and resulted in delayed payments for recycled materials; and
- The significantly larger amount of organics (which contain food wastes) being processed led to odour issues at some compost processing facilities; as capacity is concentrated at a few large scale locations.

These issues were eventually resolved and a risk mitigation strategy was developed to address any future issues.

6.6.2 Nova Scotia Landfill Bans

Nova Scotia has had landfill bans in place for many years on three general categories of waste:

- Material which is readily recyclable (e.g. cardboard);
- Organic material (agreed as a condition for new landfills in the province in the mid-1990's); and
- Materials for which a product stewardship program is in place.

The list of banned materials includes:

- Materials covered by the electronics stewardship program: Desktop, laptop and notebook computers, including CPUs, keyboards, mice, cables and other components; computer monitors; computer printers, including printers that have scanning or fax capabilities or both and televisions.
- Redeemed beverage containers;
- Materials covered in other stewardship programs including: used tires; post-consumer paint products; ethylene glycol (automotive antifreeze);

- Automotive lead-acid batteries;
- Readily recyclable materials for which options are available such as: corrugated cardboard; newsprint; steel/tin food containers; glass food containers; #2 HDPE non-hazardous containers (ice cream containers, plastic jugs, detergent bottles, etc.) and low density polyethylene bags and packaging; and
- Compostable organic material (food waste, yard waste, soiled and non-recyclable paper), leaf and yard waste.

An extensive recycling network is available throughout the province, administered by **DivertNS**. In addition, composting facilities have been constructed to manage organic waste in all seen regions of the province. See also **Section 7.2.1**, Nova Scotia's approach to accountability.

6.6.3 Relevance to Manitoba – Landfill Bans

- Where landfill bans are imposed they need to be properly enforced. This is resource intensive as it involves visual inspection of loads going to the landfill. Regional, municipal, and/or contracted employees must be trained and committed to the program.
- There is a risk of illegal dumping of materials when landfill bans are in place. With effective promotion and education and imposed illegal dumping penalties, illegal dumping can be mitigated as the public transitions to new landfill bans.
- It is ineffective to implement a landfill ban for a material unless other processing/recycling options are readily available and markets have been developed to absorb the banned materials. Development of recycling options and alternatives should be implemented prior to the landfill ban.
- A contingency plan and risk management strategy is needed to address situations where recycling or diversion processing options or markets are not available.

6.7 GHG/Climate Change

Manitoba's provincial GHG emissions reduction goal for the January 1, 2018 to December 31, 2022 period is one mega-tonne of carbon dioxide equivalent relative to a forecast of the total greenhouse gas emissions that would have occurred in that period. Manitoba has developed a "**Carbon Savings Account**" (CSA) approach to GHG reduction which sets GHG reduction goals for each five-year period and monitors progress towards achieving these goals. Where one five-year period's goal is not achieved, the deficit is added to the subsequent five-year target. Actions to reduce GHG emissions have been identified in the **Made-in-Manitoba Climate and Green Plan** and in **The Climate and Green Plan Act**. Actions already taken by the Manitoba government to reduce GHG and contribute to their reduction goal include:

- Early shut down of the province's last coal-fired electricity generation unit in August 2018;
- Establishment of an efficient trucking program launched in March 2020, with $11.7 million provincial-federal support for incentives for fuel-saving devices and retrofitting of heavy-duty freight trucks; and

- Establishing **Efficiency Manitoba**, and under **The Efficiency Manitoba Act**, which must achieve set energy savings targets.

Figure 9 shows historical Manitoba GHG emissions and forecasts of GHG emissions based on current actions on climate change as well as economic and population growth forecasts.

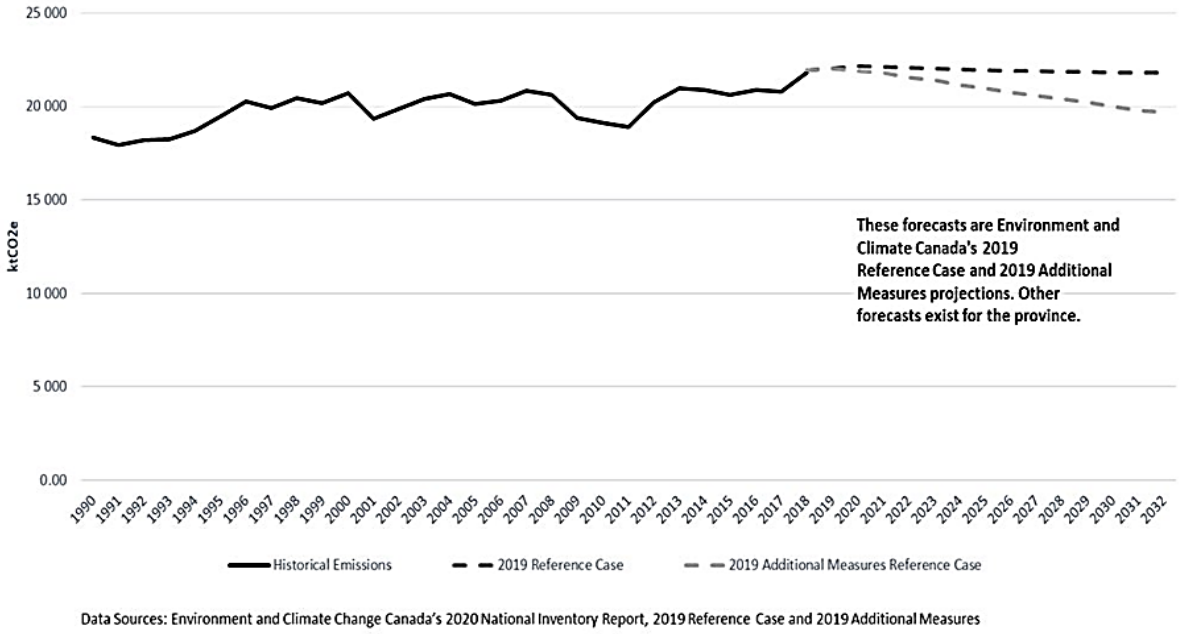

Figure 9: Historical Manitoba GHG Emissions and GHG Emissions Forecast

Whereas climate change and GHG targets were on the legislative radar in 1990 when the Waste Reduction and Prevention (WRAP) Act was adopted, the urgency of climate change, and the need to reach mandatory GHG targets in addition to local GHG reduction targets now drives many waste management approaches. GHG reduction needs to be one element of any future waste management legislation. Management of organics is probably the most significant contributor to GHG reduction on a go-forward basis, and reduction of organics landfilled is now a core part of current waste management strategies across Canada and globally, and therefore needs to be part of Manitoba's legislative framework on a go-forward basis. The **Made-in-Manitoba Climate and Green Plan** targets diversion of 100,000 tonnes reductions by diverting organics from landfills.

The waste sector in the **National Inventory** produced by Environment and Climate Change Canada (ECCC) includes GHG emissions from the treatment and disposal of liquid and solid wastes. Emissions from waste contributed 18 million tonnes (2.4%) to Canada's total emissions in 2018 and 20 million tonnes (2.7%) in 2005. The primary sources of emissions in the waste sector are municipal solid waste (MSW) disposal in landfills (12 million tonnes in 2018) and industrial wood waste landfills (3.4 million tonnes in 2018). In 2018, these landfills combined accounted for 89% of waste emissions, while

biological treatment of solid waste (composting), wastewater treatment and discharge and incineration and open burning of waste together contributed the remaining 11%.

Of the 26 million tonnes CO_2 equivalent of CH_4 (methane) generated by MSW landfills in 2018, only 12 million tonnes CO_2 equivalent (48%) were actually emitted to the atmosphere. A significant portion (46% or 11 million tonnes CO_2 equivalent) of the generated CH_4 was captured by landfill gas collection facilities and flared or used for energy—compared with 36% in 2005.

6.7.1 Relevance to Manitoba – GHG/Climate Change

Because most of Manitoba's electricity is hydro-based, and contributes minimal GHG to the provincial inventory, there is a bigger focus on areas such as waste management to achieve GHG reductions to meet the committed GHG reduction goal of one million tonnes in the 2018 to 2022 period. Organics are big contributors to GHG emissions when landfilled because the breakdown of organics in a landfill (anaerobic, without oxygen) generates methane which is a powerful GHG. Diverting organics from landfill therefore has a GHG benefit. In addition to preserving landfill capacity, extending landfill lifespan it creates by-products such as compost or digestate which are beneficial soil conditioners which contribute to a circular economy by returning soil amendment to the soil and displaces chemical fertilizers and other additives.

While landfill gas capture may reduce methane emissions, most landfills in Manitoba, except for Winnipeg, are too small to consider the large capital costs to install LFG collection systems. Therefore, the diversion of organics from landfill is the more practical approach to GHG reduction in the waste sector, as well as the efficient transportation of diverted materials to its recycling/processing facilities and end markets. Developing local and regional markets for diverted material also reduces GHG and supports a local circular economy.

6.8 Circular Economy Frameworks

Canadian companies are developing innovative solutions to increase the lifespan of products and divert from the landfill much of what we throw away. The idea behind the circular economy is extending the lifespan of resources and reducing pollution by reusing, repurposing or repairing. Currently, most products are made using the "Linear Economy Model" of produce, use and dispose. A circular economy is an economic system that uses a closed-loop approach to using finite resources, i.e. raw materials. The benefits of a circular economy include economic growth, material cost savings, job creation potential, and innovation, increasing land productivity and soil health and the reduction of carbon dioxide emissions and primary material consumption.

Global uptake of the circular economy has increased over the past five years. Several countries in Europe and Asia have adopted circular-economy strategies, and momentum is growing in Canada. More and more companies are testing out new circular business models; universities are conducting research

into different pathways to a more circular economy; and policy initiatives are underway at all levels of government, including the **Canada-Wide Action Plan on Zero Plastic Waste**.

In 2016, the Legislative Assembly of Ontario passed the **Waste-Free Ontario Act**. The act enacted two Acts: **The Resource Recovery and Circular Economy Act** and the **Waste Diversion Transition Act**. The **Strategy for a Waste-Free Ontario: Building the Circular Economy** outlines the roadmap to achieve zero waste Ontario and zero greenhouse gas emissions from the waste sector by enhancing provincial direction and oversight, enabling efficient and effective recovery systems, creating conditions to support sustainable end-markets and increase waste reduction and resource productivity. The overall goal is to reach a 50% diversion rate by 2030 and an 80% diversion rate by 2050. The City of Toronto and the City of Guelph/Wellington County are also two municipalities leading circular economy initiatives and developments on measuring local circularity baselines and establishing sustainable food futures.

In 2017, B.C. conducted a jurisdictional scan to help implement circular economy initiatives. The scan noted cross-government, multi-stakeholder collaboration, focusing on upstream and waste prevention efforts, and establishing robust measurement, monitoring and enforcement frameworks. In 2019, **Project Zero** launched a five-year action plan for the development of a circular economy on Vancouver Island. Through this incubator, new business ideas and start-ups will have the opportunity to create business plans and gain access to resources. Along with small businesses, non-profits, and government support, British Columbia is slowly transitioning into a circular economy[101].

6.8.1 European Commission – A European Strategy for Plastics in a Circular Economy

In 2015, the European Opinion (EU) released its Circular Economy Package aimed at transitioning the EU to a circular economy. The EU Strategy for Plastics supports this package. By 2030 it aims to drastically decrease leakage of plastics into the environment (address single-use-plastics, fishing gear, leakage at marine ports, garbage dumped by ships, etc.).

In 2018, the EU reformed EPR rules in the context of its first Circular Economy Action Plan to require higher overall recycling targets for packaging (65% in 2025 and 70% in 2030) and higher material-specific targets (including 55% for plastics by 2030). The Union has also moved the calculation of recycling targets based on the weight of municipal waste that enters recycling, removing any losses of materials due to sorting or other preliminary operations. The EU's Waste Directive now also requires Member States to establish "adequate" monitoring and enforcement frameworks to ensure that those responsible under the EPR framework carry out their obligations, use financial means properly and report reliable data.

The EU also plans to revisit the requirements of the Packaging and Packaging Waste Directive to address the limited competitiveness of recycled materials relative to virgin feedstock, which is now even more

[101] Recycling Council of British Columbia, "The Circular Economy" (August 9, 2019). Retrieved from: http://www.rcbc.ca/resources/circular-economy#:~:text=Circular%20Economy%20Definition&tex.

inexpensive given the oil industry crisis brought about by the COVID-19 pandemic. The changes will also address the rise in public consumption of packaging driven by a shift from reusable to single-use disposable packaging, growing online sales and the over-packaging for goods. European recyclers are encouraged by Europe's recent focus on improving access to recycled resin as part of the EU's Green Deal set of programs.

Under government jurisdictions, governments can implement policy and incentives for consumers and industry to move towards a more circular economy. Government can implement green procedural policies internally that support markets for green supplies and services. "Product as a service" is a circular concept whereby the service is purchased, for example lighting service rather than the lights as a product. In this arrangement, the lights are leased and are the responsibility of the leasing company, rather than the consumer. Government policy can also implement recycled content targets. This supports recycling markets more locally and reduces the need for virgin raw material in product manufacturing. It also ensures a reliable end market for recyclables and lessens the burden on volatile global markets. Ideally, full responsibility EPR frameworks are designed to reduce raw material consumption, but are only truly effective when producers are fully responsible 100% for their products from the manufacturer design stage to the end of life recovery of those products.

The circular economy model is an opportunity to advance environmental priorities, create innovation and stimulate economic growth. The province of Manitoba can use circular economy principles in modernizing their waste diversion and recycling framework. The end goal is to drive materials up the waste hierarchy of reduce, reuse, recycle, recover and disposal. Typically jurisdictions have focused on the bottom of the waste hierarchy, of disposal and recycling. A circular economy would focus more on the reduce, reduce and recycling stages of material use.

7.0 Best Practices Jurisdictional Scan

The best practices jurisdictional scan outlines best practices identified, and lessons learned, for the following eight topics:

1. **Framework**: Jurisdictional EPR frameworks, including: the management, regulatory structure, administration, oversight of stewardship programs and required industry funding rate (percent funded by industry).
2. **Accountability**: Techniques and approaches for ensuring compliance and improving accountability of stewardship programs in regard to financial as well as non-financial performance indicators (i.e., public awareness, participation, contamination, recovery rate, percent processed, etc.) and includes enforcement by regulators.
3. **Collaboration:** Techniques and approaches for enhanced coordination and collaboration between the government, stewardship organizations, municipalities and other key waste diversion and recycling stakeholders.
4. **Implementation**: Ensuring consistency of program implementation across a jurisdiction (i.e., accessibility for remote, northern and Indigenous communities).
5. **Municipal Supports:** Providing financial and technical supports to municipalities to participate in industry-funded stewardship programs.
6. **Participation:** Increasing program participation rates through public awareness and education.
7. **Levies:** The use of landfill levies for reducing waste sent to landfills and achieving increased waste diversion and recycling.
8. **Waste Hierarchy:** Waste hierarchy policy principle as a waste reduction and diversion policy objective.

Additional commentary on the following is included where applicable:

- **Governance** between industry stewards, producers and municipalities; and
- **Circular economy** context and interventions where applicable.

Table 16 lists the jurisdictions for the eight best practices topics and the rationale for selecting the jurisdictions as it relates to Manitoba.

Table 16: Best Practices for Jurisdictional Scan List

Best Practices Topics	Suggested Best Practices Jurisdictions	Rationale for Jurisdiction Selection (i.e. Why/what MB may learn)
Full EPR Frameworks	British Columbia (100% PPP EPR)	The three most recently modernized frameworks in Canada; all three are (or will be) 100% funded by industry. Supports the CCME EPR framework for a harmonized system.
	Ontario (Individual producer responsibility (IPR) producer run and financed, Waste Free Ontario Act)	ibid
	Québec PPP (producer financed, municipal involvement mandated)	ibid
Compliance and Improving Accountability, including Enforcement	Nova Scotia (1995) mandatory recycling, organics and construction and demolition material bans. Nova Scotia Datacall (but needs additional verification resources)	Compliance and enforcement approaches to mandatory waste regulations. Nova Scotia Datacall – database of program reported data, but needs more resources and enforcement (lessons learned). Implemented landfill bans.
	Ontario – Waste Diversion Ontario/Resource Productivity and Recover Authority (WDO/RPRA) – Datacall online database reporting and verification system, tires, waste electrical and electronic equipment (WEEE), municipal hazardous or special waste (MHSW) programs. RPRA enforcement resources and regulations added.	Ontario Datacall – accountability and enforcement by authority and monitoring by provincial database of program mandatory reported and verified data. RPRA enforcement and compliance (Act enforced).
	Québec WEEE – penalties	Québec EPR regulations, financial penalties for producers who fail to meet collection targets (effective in 2018), five years after program commencement. These penalties also act as an incentive for stewards to join a collective PRO rather than attempting more administratively complex individual programs.

Best Practices Topics	Suggested Best Practices Jurisdictions	Rationale for Jurisdiction Selection (i.e. Why/what MB may learn)
Enhanced Coordination and Collaboration (among various stakeholders)	Ontario Municipal Industry Programs Committee (MIPC) (Blue Box PPP) and Continuous Investment Fund (CIF) and Ontario Recycler Workshops (ORWs)	Municipal and Industry Program Committee, lessons learned.
	Metro Vancouver's National initiative: National Zero Waste Council (NZWC)	NZWC – Cross sector public private members.
	Product Stewardship Councils	Product Stewardship Institute (PSI), United States, British Columbia.
Ensuring Consistency of Program Implementation (Program Accessibility)	Ontario Electronics Products Recycling Association – EPRA (formerly OES until December 31, 2021)	Accessibility is mandated by population as a number of collection sites per 1,000 capita. New Ontario regulation in effect January 1, 2021.
	British Columbia depot system	Extensive depot system in northern and remote areas of British Columbia.
	Northern Europe/Scandinavian	International experience.
Providing Municipal Financial and Technical Supports	Ontario CIF Funding program for Blue Box	CIF – program for blue box related projects for municipalities in the interest of supporting efficiency and effectiveness.
	Ontario's Orange Drop MHSW (transitioning to Individual Producer Responsibility (IPR) in 2021)	MHSW typically operated by municipalities with some financial support from stewards. Now transitioning to IPR (several PROs) and municipalities are assessing whether to continue services (lessons learned).
	Circular Economy supports (Pacts, Hotspots and Working Groups)	Ellen MacArthur Foundation (EMF), Netherlands Hotspots partnerships, Ontario Circular Regulations, Toronto Working Group, Metro Vancouver.

Best Practices Topics	Suggested Best Practices Jurisdictions	Rationale for Jurisdiction Selection (i.e. Why/what MB may learn)
Increasing Program Participation Rates through Promotion and Education (P&E)	Mobile Apps P&E: Digital Approach (landing page: email newsletters, central website, web banners, social sharing, twitter, contact centre, digital ads)	Peel Region (CIF project) – Measured before and after P&E impacts - organics and bagged recycling issues.
	Blue in the Loo – Ad campaign (increasing Blue Box capture rates)	Peterborough, Ontario – award winning campaign.
	Love Food Hate Waste campaigns	Waste and Resources Action Programme (WRAP) United Kingdom and others, British Columbia
Landfill Levies	Québec	Canada – Provincial
	Ireland/United Kingdom	International experience
	Metro Vancouver	Canada – Regional
Waste Hierarchy	Metro Vancouver	Apply a waste hierarchy as a waste reduction and diversion policy: disposal is a low preference vs diversion as a higher preference.

7.1 Full EPR Frameworks

7.1.1 British Columbia Full EPR

B.C.'s first 'true' EPR program came in 1994 with the Post-Consumer Paint Stewardship Program Regulation. The **Recycling Regulation**[102] under the **Environmental Management Act** (the "**EMA**")[103] makes producers responsible for the life-cycle management of their products, including financing the collection and recycling of discarded products. The regulation includes all of British Columbia's EPR product categories, which are detailed in the schedules to the regulation, or, in some instances, by documents of the Product Steward[104]. When implemented in 2004, the regulation took the place of all prior regulations (used oil, paint, etc.) under the **EMA**.

[102] B.C. Reg. 449/2004.
[103] S.B.C. 2003, c. 53.
[104] For instance, the Membership Agreement of the British Columbia Used Oil Management Association (BCUOMA) includes a detailed list of fees and products in Appendix 1 — Environmental Handling Charges (EHC) Applicable Products List and Rates Schedule.

In 2014, British Columbia was the first Canadian province to launch a 100% EPR system for residential PPP. **Recycle B.C.** is among more than 20 EPR programs introduced in B.C. over the past two decades. The province amended the **Recycling Regulation** to include PPP from households and streetscapes under Schedule 5. The regulation provides a single, results-based framework for EPR with an emphasis on environmental outcomes and program performance. Prior to this EPR system, legal waste management responsibilities for PPP materials lay entirely with municipalities.
Like in Manitoba, producers' "extended producer responsibility plans", whether individual or through Product Stewards, are approved by the Ministry of Environment and Climate Change Strategy (the "B.C. MOE") and reviewed every five years. Through membership agreements with Product Stewards, producers can delegate to these Product Stewards their collection, processing and marketing duties under the Recycling Regulation.

When the B.C. system transitioned to EPR, local municipalities were offered the right of first refusal to continue to provide (or oversee) collection services. Municipalities had three options:

- Continue to provide services under contract with the PPP Producer Steward, now called Recycle B.C.;
- Transition operational responsibility to Recycle B.C.; or
- Opt to continue providing services as is, without subscribing to the new EPR system.

Many cities and Regional Districts opted to contract with Recycle B.C. and receive the "per household" financial incentive, while continuing to act as the collection service provider (in-house or managed). Over time a number, notably Vancouver,[105] eventually transitioned operational responsibilities to Recycle B.C. Recycle B.C.'s contracts with municipalities stipulate that the contamination level for all forms of collection (curb, multi-family or depot) is set at no more than 3% non-PPP. If a municipality is acting as a service provider to Recycle B.C., they face penalties under contract if they are unable to reduce contamination levels.[106]

The B.C. Ministry of Environment (MOE) has oversight of the EPR program and enforces the Recycling Regulation mainly through the use of administrative penalties of either $10,000.00 or $40,000.00, depending on the contravention, under the **Administrative Penalties (Environmental Management Act) Regulation**[107] also under the EMA. A contravention of the Recycling Regulation is also an offence and may result in a fine not exceeding $200,000.00. The current EPR regime in B.C. does impose penalties on producers' failure to meet recycling rate targets.

With respect to targets, Recycle B.C. has agreed to recovery targets for PPP, and has quickly met the goal targets of 85 to 90% collected PPP being directed to recycling commodity end markets without

[105] Continuous Improvement Fund, "Transiting City of Vancouver's Recycling Program to Recycle BC (January 18, 2017). Retrieved from: https://thecif.ca/wp-content/uploads/2020/08/Vancouver-PPT-Transitioning-to-Recycle-BC.pdf.
[106] Continuous Improvement Fund, "Part I. Learnings from British Columbia: Advice for transition" (July 24, 2020). Retrieved from: https://thecif.ca/learnings-from-british-columbia-advice-for-transition/.
[107] B.C. Reg. 133/2014.

servicing all single-family, multi-family, and public spaces[108]. Recycle B.C. has also been very active in public space research and recycling for PPP where contamination rates continue to be in the 30% range. Incentives are available to local governments for streetscape collection of PPP but few have taken up the offer, as the amount per tonne is not felt fair for the operations required. Cities and regional districts in B.C. have material bans and ticketing in place as a means of enforcing proper streaming of materials. The PPP program in B.C. has not experienced the setbacks faced by other provincial waste management systems resulting from the global decline in recycling markets for plastics as most (99%) plastic materials are recycled in B.C. due to Recycle B.C. investments.[109]

The EPR program in B.C. is undergoing changes. The B.C. MOE has announced plans to include PPP from the institutional, commercial and industrial (ICI) sector (currently unregulated) as obligated materials at some point in the future. It has also increased deposit refunds for beverage containers to ten cents across the board for all sizes, added milk and milk substitute beverages to deposit programs, and announced intentions to add single-use and packaging-like products to B.C.'s PPP EPR system[110]. It is also considering EPR for mattresses, moderately hazardous products, expanding the list of designated electronic and electrical products and batteries, packaging and paper products beyond residential sources and lost fishing and aquaculture gear[111].

7.1.2 Ontario Full EPR

Following B.C., Ontario is the next province to consider a full EPR model for PPP. It already had a full EPR model for other materials (WEEE, MHSW and tires), but these materials are currently in the process of transitioning to full IPR (individual producer responsibility) under new legislation. Tire and WEEE have transitioned and MHSW will transition in mid-2021.

The province has operated under a shared responsibility EPR model for PPP since 2002 under the **Waste Diversion Act***,* 2002.*[112]* Under this act, one product steward (Stewardship Ontario) was designated in the regulation and submitted industry stewardship plans on behalf of producers for approval by **Waste Diversion Ontario (WDO)**, a non-government corporation with a mandate to develop, implement and operate waste diversion programs. WDO in turn submitted its business plan each year for approval by the Ministry of Environment (now the Ministry of Environment, Conservation and Parks (MECP).

Municipalities maintained flexibility in designing PPP programs. Stewardship Ontario charged and collected fees from producers to pay their share of program costs. The Product Stewards held liability and risk of non-performance or non-compliance on behalf of producers. For PPP materials, producers

[108] Recycle B.C., "Annual Reports" (June 2019). Received from: http://www.multimaterialbc.ca/annual-report/.
[109] Northeast Recycling Council, "Building a strong recycling industry and contributing to the circular economy – The Case of EPR in Quebec" (October 24, 2019). Retrieved from: https://nerc.org/documents/Webinars/Canadian%20Packaging%20EPR/Canadian%20Packaging%20EPR%20Webinar.mp4 .
[110] Resource Recycling: British Columbia expands EPR and bottle deposit systems" (July 21, 2020). Retrieved from: https://resource-recycling.com/recycling/2020/07/21/british-columbia-expands-epr-and-bottle-deposit-systems/.
[111] RCA Webinar, "Advancing a Circular Economy - Policy Changes Across Canada".
[112] S.O. 2002, c. 6.

were required to fund 50% of the net program costs. The regime did not set performance targets and, as such, there were no consequences or penalties for non-performance against targets.

The shared model for PPP increased transparency of municipal costs due to annual municipal **Datacall** to provide cost information necessary to determine the stewards' fee obligations. On the other hand, disputes between municipalities and producers on producers' funding obligations also led to two arbitrations, the first in 2014 and the second in 2018[113]. Municipalities cited rising costs of blue box programs resulting from the shifting mix of materials ending up in Ontario's blue boxes given producers' design choices, while producers claim inefficiencies in municipal recycling systems. In reality, the effective closure of markets in China also had a significant impact on costs by lowering material revenues.

In 2016, Ontario replaced the **Waste Diversion Act***, 2002*, with the **Waste Free Ontario Act***, 2016*,[114] which enacted the **Resource Recovery and Circular Economy Act***, 2016*[115] (the "***RRCEA***") and the **Waste Diversion Transition Act***, 2016*[116]. The *RRCEA* sets the framework of the new EPR system in Ontario and its regulations create specific obligations and targets for obligated materials, and in some cases incentivizes recycled content use in products[117]. The *RRCEA* seeks to implement an IPR policy in Ontario, a type of EPR that tracks end-of-life performance of products to individual producers. Its goals are to reduce free-ridership (companies not paying their fair share) and incentivize improvements in the end-of-life performance of products.

The new regime also created the **Resource Productivity and Recovery Authority (RPRA),** a non-governmental oversight, compliance and enforcement organization to oversee the EPR programs established under the *RRCEA*. The RPRA operates a registry to monitor producer performance against targets, collects fees to cover its administrative costs, and oversees the compliance and enforcement of producers' responsibilities. The RPRA has various enforcement powers including compliance orders or administrative penalties and it may also resort to prosecutions in court. The province has also announced that it intends to implement an administrative monetary penalties regulation under the *RRCEA* to provide an additional compliance tool for the RPRA[118]. One of benefits of enforcing the EPR system through an organization such as the RPRA, rather than a Ministry, is that the costs of oversight and enforcement are paid by producers.

Unlike B.C., Ontario municipalities are not "guaranteed" a future role in curbside recycling as a result of the move to 100% producer funding. The new blue box system is also looking to include "packaging like

[113] Recycling Today, "Commentary: The pitfalls of shared responsibility" (July 13, 2020). Retrieved from: https://www.recyclingtoday.com/article/ontario-blue-box-program-funding-arbitration-lessons/.

[114] S.O. 2016, c. 12.

[115] S.O. 2016, c. 12, Sched. 1.

[116] S.O. 2016, c. 12, Sched. 2.

[117] Batteries and EEE products regulations so far but expected to be the case for the blue box program as well.

[118] Environmental Registry of Ontario, "A proposed regulation, and proposed regulatory amendments, to make producers responsible for operating blue box programs" (October 19, 2020). Retrieved from: https://ero.ontario.ca/notice/019-2579.

materials" (as in Québec – e.g., sandwich and freezer bags, moving boxes etc.) and an extended range of single-use items, including plastics like straws, cutlery, plates and stir sticks that the federal government is considering banning. The province has announced intentions to carry out a consultation program on an IC&I waste framework to improve waste diversion activities in the IC&I sector[119].
Transition of the Ontario Blue Box system from the current shared responsibility model to 100% producer responsibility is scheduled for 2023 to 2026. The new regulations are expected to have material specific recycling targets and accessibility targets for service throughout the Province.

7.1.3 Québec Full EPR

Québec has had some version of EPR since 1989, when major brand owners started a voluntary initiative to develop a curbside collection program for residents. Today, Québec's EPR programs are enabled by the **Environment Quality Act** (the "**EQA**"). Like B.C., Québec does not have a specific regulation for each program but rather a general regulation called the ***Regulation respecting the recovery and reclamation of products by enterprises***[120] that regulates several classes of products[121] and was enacted in 2011.

In Québec, to date, the producers' role is only financial and not operational. Although at first, the costs of EPR programs were shared between municipalities and producers, industry has been responsible for covering all municipal curbside collection and processing costs since 2013[122]. Product Stewards such as **Éco Entreprises Québec (ÉEQ)** for PPP run the programs on behalf of industry. EEQ develops the schedule of contributions (producer's fees) for obligated producers and reimburses local programs through a governmental agency called **RECYC-QUÉBEC.**

Like Ontario, Québec has also felt the pressures related to the decline of global recycling markets, with MRFs having to find new markets for all sorted materials, even hard-to-recycle ones. The net cost of collection and sorting has skyrocketed, while recovery of PPP has plateaued at around 65%[123]. Under the current system, producers do not have to attain a certain recycling rate or be involved in collection nor sorting operations for curbside recycling. Producers currently fund about 93% of the net costs for municipal curbside recycling services (collection and MRF operation minus revenue from material sale)[124].

This is about to change as Québec is currently reviewing the EPR regulation under the **EQA** to transition to a full EPR system, designate new product categories and create a new EPR regulation for deposit

[119] Environmental Registry of Ontario, "A proposed regulation, and proposed regulatory amendments, to make producers responsible for operating blue box programs" (October 19, 2020). Retrieved from: https://ero.ontario.ca/notice/019-2579.
[120] chapter Q-2, r. 41.
[121] Including Electronic Products, Batteries, Mercury Lamps, Paint and Paint Containers, and Oils, Coolants, Antifreeze, their Filters and Containers and Other Similar Products.
[122] Plastics Recycling Update, "An EPR Evolution" (September 15, 2020). Received from: https://resource-recycling.com/plastics/2020/09/15/an-epr-evolution/.
[123] Plastics Recycling Update, "An EPR Evolution" (September 15, 2020). Received from: https://resource-recycling.com/plastics/2020/09/15/an-epr-evolution/.
[124] Retail Council of Canada, "Major overhaul of the Quebec curbside recycling, introduction of extended producer responsibility in Quebec" (February 13, 2020). Received from: https://www.retailcouncil.org/advocacy/sustainability-advocacy/major-overhaul-of-the-quebec-curbside-recycling-introduction-of-extended-producer-responsibility-in-quebec/.

return programs. Under the new EPR system, producers are to enter into partnership agreements with municipalities for proximity services (collection, transportation and outreach with the local population). The government will also set recycling rate targets and allow companies to be involved in collection and sorting operations for curbside programs, whether through direct contracts between PROs and processors, or through right of inspection or traceability monitoring[125]. Targets are expected to include a 75% recycling rate for PPP, domestic end markets for 60% of marketed materials and a 15% recycled content for plastic packaging[126].

The new system will be managed by a producer organization approved by RECYC-QUÉBEC[127]. The transition of municipal contracts to this EPR-partnership scheme is expected to begin in 2022, and the new full EPR system to be in place in 2025; similar to the year for completed transition to full EPR for PPP in Ontario. The regulation to implement this new system is expected by fall 2021. At the same time, Québec is reviewing current disposal levies, considering new levies to cover certain materials and CR&D wastes. It is also taking steps to implement plans for the diversion of organic materials[128].

The Québec EPR regulation is currently enforced through monetary administrative penalties, ranging from $250.00 to $750.00 for individuals and $1,000.00 to $3,500.00 for corporations depending on the type of contravention. The regulation also contains penal sanctions ranging from fines of $1,000.00 to $500,000.00 for individuals, or to a maximum of 18 months' imprisonment, or to both; and minimum fines of $3,000.00 and maximum fines of $3,000,000.00 for corporations, depending on the violation. Penalties may be adjusted through amendments to the EPR regulation.

7.1.4 Implications for Future PPP Management Options in Manitoba

Manitoba has the benefit of being able to assess three quite different approaches to a move towards 100% producer responsibility for PPP. These provincial profiles indicate common characteristics but also some important differences.

7.1.4.1 Commonalities

- Each province is moving towards material specific targets for PPP. Each province is also defining recycling/recovery post-collection (i.e., at the point where materials are recycled back into new products).
- All three jurisdictions recognize that the transition to 100% EPR for PPP takes time and requires a process of continuous improvement.

[125] Plastics Recycling Update, "An EPR Evolution" (September 15, 2020). Received from: https://resource-recycling.com/plastics/2020/09/15/an-epr-evolution/.
[126] Retail Council of Canada, "Major overhaul of the Quebec curbside recycling, introduction of extended producer responsibility in Quebec" (February 13, 2020). Received from: https://www.retailcouncil.org/advocacy/sustainability-advocacy/major-overhaul-of-the-quebec-curbside-recycling-introduction-of-extended-producer-responsibility-in-quebec/.
[127] *Ibid*.
[128] RCA Webinar, "Advancing a Circular Economy - Policy Changes Across Canada".

- In all cases, producers have assumed ultimate responsibility for PPP material processing and marketing (i.e., the risk of declining market value for recovered materials has been transferred to producers).

7.1.4.2 Differences

The future role of municipalities in curbside recycling is quite different. In B.C., municipalities have the right of first refusal for recyclables collection. In Ontario, they can bid to provide collection services, but there is no guaranteed role. In Québec, producers are to enter into partnership agreements with municipalities for services such as collection/transportation and local resident education.

Program oversight and enforcement are very different in each province. In Ontario an independent agency (the Resource Productivity and Recovery Authority) was created to both operate a registry and oversee individual producer compliance. In B.C., the industry Product Stewards reports directly to the provincial Ministry of Environment and requires new plans for PPP recycling to be approved by the Ministry and reviewed every five years. In Québec, under the new regime, producer organizations will be approved by RECYC-QUÉBEC, a governmental agency and the on-going partnership relationship between producer organizations and municipalities is likely to be managed through the terms of the partnership agreements (i.e., contracts) between these parties.

Unlike Manitoba and Ontario, which have their own separate EPR statutes, B.C. and Québec have implemented an EPR regulation under that province's environmental statute. B.C. and Québec have then added obligated materials under the schedules to these regulations. This allows these provinces to make substantial amendments to their EPR regimes through the amendment of a single regulation. In Manitoba and Ontario, addition of new materials would require the implementation of new regulations under the province's EPR statute or the amendment of an existing regulation (if the new packaging or product falls in a category already regulated). Changes to the EPR regime to, for example, transition to full producer responsibility or improve the enforceability of obligations, would likely require amendments to, or possibly a repeal and re-enactment of, that province's enabling EPR statute.

7.2 Accountability

7.2.1 Nova Scotia Accountability

In Nova Scotia, product stewardship plans are required under the **Solid Waste-Resource Management Regulations**, N.S. Reg 25/96. The provincial policy objectives are to outline the information brand owners or third party stewardship plan operators must include in stewardship plan proposals, and to outline the criteria the **Minister of Environment and Labour** (NSEL) uses to evaluate stewardship plans submitted for approval. The manager of NSEL **Waste Resource Management Branch** is responsible for determining the policy's efficacy. For example, the electronic stewardship program shall ensure that 80% of the reusable and recyclable portion of the post-consumer electronic products collected at the

return collection facility is reused or recycled and implement a "design for the environment" program for each of the brand owner's products.

In 1994, the government had embarked on an extensive public consultation. Nova Scotia's **Solid Waste Resource Management (SWRM) Strategy** (1995) grew out of public concern about issues such as leachate and air pollution from landfills and waste incinerators. The government adopted the Canadian target of 50% solid waste diversion goal for the year 2000. The SWRM Strategy created seven Solid Waste Regions. Having municipalities work toward waste diversion and prevention on a regional basis allowed for economies of scale and increased the financial viability of recycling and composting. In 1995, the province implemented province-wide mandatory PPP recycling, organics and CD&R bans from all landfills. Since 1996, Nova Scotia has enacted 21 different material bans.

As a tool to support waste diversion enforcement, Halifax Council's clear bag policy program came out of a 2014 curbside monitoring review of participation in waste diversion programs by households. A 2014 review showed that 9% of residents never set out their green bin, 24% of residents never set out their blue bag of container recyclables and 30% never put out paper recycling. Implementation and enforcement of the clear bag policy began in 2015. Under the new policy, garbage is collected bi-weekly.

Nova Scotia Environment operates a "Datacall" software program which collects information from all seven regions and their municipalities involved in solid waste-resource management. The Datacall provides information on collection and processing costs, including amortized costs of the collection system, as well as operating costs. These costs vary widely by region and municipality. A recent study concluded that the reported data is typically inconsistent in the manner it is reported by the regions and needs additional verification resources and aggregation of data resources. This is not the experience with the **Ontario Datacall** managed by RPRA; see **Section 7.2.2.**

The Beverage Container Deposit Refund Program is operated by the **Divert NS** and is regulated within the **NS Solid Waste Resource Management Regulations**. The Deposit-Refund Program for Beverage Containers came into effect on April 1, 1996. Divert NS is a not-for-profit corporation that operates the **Beverage Container Deposit-Refund Program** (81% recovery) and the **Used Tire Management Program** (90% recovery) and supports municipal waste programs province-wide. Divert NS collects beverage containers through a network of 78 **Enviro-Depots** and mobile service locations across the province. They do not receive government funding but are self-sustaining through the environmental fees collected from the used tire recycling program, deposits collected from the beverage container recycling program and through the sale of recyclable materials. Over 70% of revenue goes back to municipalities to support curbside collections. Divert NS provides $700,000.00 annually in enforcement funds for the seven solid waste municipal regions across the province. The funding is used for activities such as investigating illegal dumping, auditing waste at facilities and undertaking compliance activities with residents and businesses on waste management. In November 2020, they hosted the **Annual Enforcement Meeting** with 30 enforcement and compliance stakeholders from across the province. As part of their annual reporting to **Nova Scotia Environment**, a third party audit report must accompany

combined financial statements of the Resource Recovery Fund Board Inc. and Resource Recovery Fund (operating as Divert NS). Disclosure of expenses are posted online annually, including salaries.

Of note, Nova Scotia does not have an EPR industry-funded program for PPP, but has been in recent years, exploring what 100% EPR for PPP could look like for Nova Scotia.

See also the Policy Landscape (**Section 6.6**) above on landfill bans.

7.2.2 Ontario Accountability

In Ontario, the **Resource Productivity and Recovery Authority** (RPRA) was created in 2016 by the Government of Ontario to support the transition to a circular economy and a waste-free Ontario. RPRA receives their authority from the **Resource Recovery and Circular Economy Act**, 2016 (RRCEA) and the **Waste Diversion Transition Act**, 2016 (WDTA) and has a memorandum of understanding with the Ontario Ministry of Environment, Conservation and Parks to carry out this responsibility as a non-crown corporation funded by stewardship fees.

They oversee Blue Box, Municipal Hazardous or Special Waste (MHSW) (until transition to new regulations pending) and enforce IPR requirements for producers of tires, batteries, and electrical and electronic equipment and any future programs. RPRA responsibilities include:

- Approving plans developed by industry funding organizations and overseeing their implementation;
- Developing and operating a registry for producers responsible for materials under the RRCEA to register with the RPRA and report on waste recovery;
- Managing, analyzing and reporting on the information in the registry;
- Carrying out compliance and enforcement activities;
- Fostering the circular economy to spur innovation and protect the environment; and
- Manage the Datacall annual reporting database.

The **Fee Setting Methodology** sets out the methodology the RPRA uses in setting fees for those producers who are obligated to register with the RPRA under the Resource Recovery and Circular Economy Act, 2016 (RRCEA). The Fee Setting Methodology is based on the RPRA's **General Fee Setting Policy**.

RPRA supports compliance with individual producer responsibility through education and enforcement, and takes a risk-based approach to compliance. This approach focusses on the risks that arise from non-compliance, and uses an assessment of those risks to guide the selection of compliance tools to be used, and the deployment of resources to minimize risk and maximize compliance. A risk-based approach allows for appropriate priority setting and efficient allocation of resources, a more efficient recovery of regulatory costs from regulated entities and provides a basis to measure and improve performance. A risk-based approach to compliance requires a series of steps to be taken for each designated product or packaging.

As a general principle, a progressive approach is used to achieve compliance, informed by risk assessment. A progressive approach matches the choice of compliance tool to the nature of the noncompliance. The choice of compliance tools follows a progressive approach, informed by a risk analysis and the specific facts of a particular case. The following compliance tools are available to the Registrar:

- Po-active education and awareness;
- Inspections and audits;
- Communication to address non-compliance;
- Compliance order;
- Administrative penalty order; and
- Prosecution.

As an update to the **RRCEA Act** in 2016, the legislation brought in greater oversight and enforcement powers for RPRA. RPRA now employs program enforcement officers as part of its mandate to oversee Ontario PROs. RPRA is funded by the producers mandated to provide diversion programs for their materials sold in Ontario.

7.2.3 Québec Accountability

The Québec **Waste Electrical and Electronic Equipment** (WEEE) program has been in operation since July, 2012. There are 990 drop-off sites throughout the province where over 20,000 tonnes of WEEE, translating to 2.5 kg per capita, were collected in 2019 (the most recent year for which data are available). The program is operated by EPRA which represents 1,785 designated WEEE producers in Québec. The EPRA annual report states that 99% of the population has access to a WEEE drop-off site, defined as urban dwellers having a site within a 30 minute drive, and rural residents having a site within a 45 minute drive. The rules on number of drop-off sites by municipality are set out in Section 16 of the **Regulation Respecting the Recovery and Reclamation of Products by Enterprises – Environmental Quality Act** (2019) and are:

- One seasonal site for municipalities with populations 15,000 or less;
- For municipalities with populations between 15,000 and 25,000, at least one permanent and one seasonal drop-off site;
- For municipalities with populations between 25,000 to 100,000, at least one permanent site for each 25,000 inhabitants and one seasonal site per 15,000 inhabitants; and
- For populations of greater than 100,000, three permanent drop-off sites for the first 300,000 residents and one per 50,000 residents after the first three sites.

Recovery targets are 25% to 40% depending on the group of EEE products, with a target of 65%, increasing from current rates at 5% per year until the 65% target is reached. Québec performance data, along with performance of a number of other provincial programs which EPRA operates, is presented in the EPRA Annual Report.

The regulation has both monetary administrative penalties and penal sanctions for non-compliance with the requirements of the regulation. Monetary administrative penalties include fines ranging from:

- $250.00 for an individual and $1,000.00 for a corporation for a series of minor non-compliance with provisions of the regulation;
- $350.00 for an individual and $1,500.00 for a corporation for offences related to audits and maintaining sufficient data;
- $500.00 for an individual and $2,500.00 for a corporation for failing to comply with a number of provisions of the regulation related to management of depots and transportation of collected material, and insufficient payments to the Green Fund; and
- $750.00 for an individual and $3,500.00 for a corporation for improperly recycling collected materials.

Penal sanctions include:

- Fines of $1,000.00 to $100,000.00 for an individual or $3,000.00 to $600,000.00 for a corporation for a number of offences related to registration, visible fees, etc.;
- Fines of $2,000.00 to $100,000.00 for an individual or $6,000.00 to $600,000.00 for a corporation for improper reporting in the Annual Report (Section 55 of the Regulation);
- Fines of $2,500.00 to $250,000.00 for an individual or $7,500.00 to $1,500,000.00 for a corporation for improper management of collected materials and other offences (Section 56 of the Regulation);
- Fines of $4,000.00 to $250,000.00 for an individual or $12,000.00 to $1,500,000.00 for a corporation for failing to set up a collection and recycling program in accordance with the Regulation (Section 56.1 of the Regulation); and
- Fines of $5,000.00 to $500,000.00 for an individual or $15,000.00 to $3,000,000.00 for a corporation for submitting false or misleading documents in connection with the Regulation. Clause 56.1 also stipulated that “despite article 231 of the Code of Penal Procedure (chapter C-25.1)” to a maximum imprisonment of 18 months, or both fine and imprisonment (Section 56.1 of the Regulation).

Recyc Québec enforces the EEE regulations. Progress towards targets are reported at a detailed level by product category on the Recyc Québec website. At this stage (five years after regulations were brought in), none of the PROs have met their targets. This could lead to millions of dollars in fines, which are triggered if the five-year target in the regulation is not met. Recyc Québec has waived the fines owed by all PROs. Québec is updating the EPR regulations to address a number of issues including modulated fees (modelled on French legislation), penalties, targets and other issues. New regulations are expected in spring 2021. Québec is the only province in Canada that has not yet addressed internet sales of electronics.

7.2.4 Relevance of Ontario and Québec WEEE Regulation Provisions to Manitoba

Accessibility standards set out in both regulations are applicable and relevant to Manitoba. The penalties in the Québec legislation may not be applicable in Manitoba, as significant enforcement and

follow-up inspections are required to actually fine a producer or bring them to court. Detailed penalties are labour intensive to administer and require dedicated staff, which is expensive. The relevance to Manitoba is that targets need to be reasonably achievable.

7.3 Collaboration

7.3.1 Ontario Municipal and Industry Program Committee

The Ontario Municipal and Industry Program Committee (MIPC) was created in 2002, and has served as the principal forum for discussions relating to the Blue Box program between representatives for municipalities and stewards represented by **Stewardship Ontario** (SO) – the stewardship organization for PPP in Ontario (until pending full EPR transition by 2026). The original Blue Box Program Plan (BBPP), approved by the Minister of the Environment (MOE) in late 2003, outlined the basic structure of MIPC a program committee of Waste Diversion Ontario (WDO); now RPRA. MIPC, is chaired by the RPRA CEO as a non-voting member, includes equal representation from members from the **Association of Municipalities of Ontario** (AMO) and the City of Toronto and Stewardship Ontario (five to six members each). MIPC makes recommendations to the RPRA Board relating to Blue Box program management in the following specific areas:

- Collection and analysis of recycling program (i.e. blue box) program data;
- Calculating and reporting on payments to individual municipalities;
- Cash flow to municipalities; and
- Reporting on progress toward targets.

From its inception, MIPC has included a **Datacall Working Group** that originally included representatives from AMO, SO and the MOE. The MOE no longer participates in the Datacall review, but receives the annual summary from RPRA. The Datacall Working Group now includes the MIPC municipal Blue Box Coordinator and representatives from SO. This group determines the Performance and Best Practices components of the annual funding and compiles the funding spreadsheet for MIPC's approval and subsequently for RPRA's approval. The spreadsheet is posted on the RPRA website annually.

MIPC also negotiates the annual Steward Obligation (the stewards annual payment to municipalities for PPP costs) and determines funding levels for **Best Practices and Innovation** programs through the **Continuous Improvement Fund** (see **Section 7.5.1**). The Datacall Working Group uses the annual "Reported Gross Cost" and runs a model that determines reasonable costs for all PPP programs functioning at "Best Practices". Prior to the July RPRA Board meeting, MIPC undertakes a fee negotiation exercise that determines a "Negotiated Net Cost".

Steward Obligation = 50% of the Negotiated Net Cost of PPP

With the guidance of MIPC, the Blue Box Program has consistently exceeded its program objectives, exceeding the original 2004 goal of 50% recovery of Blue Box materials and the 2008 updated goal of 60% recovery of PPP in Ontario.

Manitoba's PPP program, managed by MMSM, also has a MIPC like committee or forum. In the recent program plan, Section 4.2:

"Given the number of municipalities in Manitoba, MMSM has established the Municipal Industry Programs Committee (MIPC) as a forum to discuss operational issues with representatives from the Association of Manitoba Municipalities (AMM). MIPC provides the forum for MMSM to consult with municipal representatives on various aspects of program delivery, including changes to the services agreement and a review of eligible costs. MIPC will also serve as a means through which Manitoba municipalities are kept informed of changes to the program. MIPC includes members from MMSM and AMM, and will consider the interests of all municipalities. MIPC is co-chaired by representatives from MMSM and AMM and meets at minimum twice a year."

In discussing this committee with City of Winnipeg during the review's consultation interview, the City's waste management and financial staff were not familiar with the Manitoba MIPC. Effective ongoing use of the MIPC committee in Manitoba could provide opportunity for annual negotiations between the municipalities and the MMSM, with the regulatory oversight support by Manitoba's Waste Diversion and Recycling unit to ensure the stewardship cost of 80% is returned to the Manitoba participating municipalities in the PPP program. Based on the review's consultation with Manitoba municipalities, the forum may not be currently effective at advocating for municipal payments (80%) and could benefit from the expanded Ontario model representation.

7.3.2 National Zero Waste Council

National Zero Waste Council (NZWC) is a Canada-wide leadership initiative that was founded in 2013 by Metro Vancouver in collaboration with the Federation of Canadian Municipalities (FCM) with a mission to act collaboratively with business, government and the community at the national and international level, as an agent of change for waste prevention and reduction in the design, production and use of goods. NZWC has a forty (40) member Management Board that has about 50% business and 50% municipal and non-government organization (NGO) representation. Two of many of its most successful campaigns are the **Love Food Hate Waste** program (see **Section 6.6.3**) and a useful handbook assembled by NZWC's **Plastics Advisory Council** in 2019 called "Regulatory Approaches for Priority Plastic Wastes". NZWC was also an implementation partner of the **Canada Plastics Pact** (described as part of the Plastic Waste Policy Landscape profile above in **Section 6.1.5**) and a founding member of the **Circular Economy Leadership Coalition** that was established as part of the **Oceans Plastics Charter** developed by G7 leaders meeting in Halifax in 2018.

The Council has united, among others, five of Canada's largest metropolitan regions with key business and government leaders, academia and non-profit organizations in a call for national action and systems change to address waste generation. The five regions currently represented are Metro Vancouver, Toronto, Montreal, Halifax, Calgary and Edmonton. Additional partners are listed at:

http://www.nzwc.ca/Documents/MembershipList.pdf.

Core funding for the NZWC is in the form of in-kind services and project development and administration services provided primarily by Metro Vancouver. Responsibility for approving the project development and administration allocations resides with the Council Management Board. External project funding is managed by the Council Secretariat and reported to the Management Board as part of its financial update. In 2020, the Board allocated the project development support and administration funds among three core areas:

- Strategic Initiatives;
- Working Groups; and
- Logistics and Meeting Support.

The governance model includes management and collaboration boards, working groups and a secretariat supported via Metro Vancouver. NZWC has very strong ties to Metro Vancouver and would not exist without Metro Vancouver. Additionally, any campaigns that NZWC promotes compliment what Metro Vancouver does (e.g. Love Food Hate Waste). British Columbia Ministry of Environment is currently the only provincial member. There are approximately thirty (30) government members.

The Province of Manitoba can join, in addition to encouraging the Winnipeg Metro Region (WMR) and Association of Manitoba Municipalities (AMM) to join, they just have to submit an application at http://www.nzwc.ca/about/membership/Pages/default.aspx. NWZC also hosts an annual Zero Waste Conference every November in Vancouver that is well worth attending.

7.3.3 Product Stewardship Councils

There are three different types of stewardship councils that have emerged across both Canada and the United States over the past several years: national level stewardship policy and program organizations; formal and informal producer groups and provincial and state level product stewardship councils made up mostly of local government officials.

The two most prominent national level organizations in North America are the Product Stewardship Institute (PSI) based in Boston and the Canadian Product Stewardship Council based in Vancouver. PSI works to develop and promote legislation and voluntary initiatives in the United States to support the expansion of EPR programs. They work collaboratively with producers and state and local governments and sponsor an annual conference on EPR in the United States each spring. The Canadian Product Stewardship Council (run by producers) puts on the Canadian Stewardship Conference every two years.

The Canadian Product Stewardship Council Conference is well worth attending and the next conference is planned for spring of 2022.

Producers across Canada meet and collaborate across materials and across provinces on a daily basis. The only PROs across Canada that have come together into a formal organization is called "B.C. Recycles". They share a common website and collaborate on collection events, back-haul arrangements and joint meetings with municipalities. The project interviews revealed a high level of collaboration exists among Manitoba producers but most felt that there is no need for a more formal structure at this point.

The third – and most applicable form of stewardship councils for Manitoba – are jurisdiction-wide local government councils, some of which allow non-profits, state officials (in the United States) and some businesses to join. There are currently 15 such state level councils currently operating in every corner of the United States. The California and New York State councils are the most active. The only similar local government stewardship council is – again – in British Columbia and is called the British Columbia Product Stewardship Council. Membership in British Columbia is restricted to the province's 27 Regional District governments. They have a part-time Executive Director and the council's main goals are to work together "to contribute to the success of EPR programs in British Columbia". This model could be replicated in Manitoba as the scope of EPR programs in the province continues to evolve and considers expansions.

7.4 Consistency of Program Implementation (Program Accessibility)

7.4.1 British Columbia Depot System Accessibility

The **Return-It** beverage container stewardship program in B.C. is comprised of an extensive collection network system. Currently, the collection network consists of 170 privately owned Return-It depots, including locations in northern and remote areas of the province. Nine approved stewardship programs utilize the successful Return-It depot network for collecting and managing their recyclables. From electronics and batteries to used paint and motorized yard tools, the depots have become the recycling hub of their respective communities.

An integrated transportation system uses 38 transporters to move material into 15 processing sites throughout the province. Within urban centres, dedicated transporters pick up materials from depots, retailers and other collection sites. In rural areas, Return-It utilizes transporters that provide back-hauling resulting in environmental, GHG, logistical and financial savings.

7.4.2 Ontario Electronics – EPRA Program Accessibility

The Ontario electronics EPRA program was operated by **Ontario Electronic Stewardship (OES)**, the single product steward designated in the Ontario Waste Diversion Act, from 2009 to 2020. As of

January 1, 2021, end-of-life management of information technology, telecommunications and audio visual equipment (ITT/AV) in Ontario is addressed under a new regulation – **Ontario Regulation 522/20 (Electrical and Electronic Equipment)** under the Resource Recovery and Circular Economy Act (2016). Collection requirements in the new regulation are different for large versus small producers of ITT/AV and lighting.

7.4.2.1 Collection Requirements for Large EEE Producers

Section 8 of the regulation requires every large producer of ITT/AV (produces 700 tonnes per year of end-of-life ITT/AV) and every large producer of lighting (produces at least 3.5 tonnes per year of end-of-life lighting) to establish and operate a collection system. The ITT/AV collection system must be in place as of the beginning of 2021, whereas the lighting producer system is scheduled for implementation in 2023.

Large ITT/AV producers are required to establish and operate a collection system to meet the following accessibility standards:

- In each territorial district with a population of 1,000 or more, the producer is required to establish and operate at least one electrical and electronic equipment (EEE) collection site;
- In municipalities with a population of at least 1,000 but less than 500,000, producers are required to establish at least one EEE collection site for every 15,000 people; and
- If the population is more than 500,000, producers are required to establish at least 34 EEE collection sites for the first 500,000 in population, and at least one EEE collection site for every 50,000 people above the 500,000 threshold.

7.4.2.2 Collection Requirements for Small EEE Producers

Collection requirements for small producers are similar to those of large producers except for small communities where the accessibility service standard is calculated based on the level of retail activity in a municipality. Small producers include:

- Producers responsible for between 3.5 and 700 tonnes per year of end-of-life ITT/AV; and
- Producers responsible for between 350 kg and 35 tonnes per year of end of life lighting.

In each local municipality or territorial district where one or more retail locations supply the small producer's EEE, the small producer is required to establish and operate a number of EEE collection sites at least equal to 75% of the number of retail locations where their products are sold.

- Where the population is greater than 1,000 a producer must provide at least one collection site or one collection event per year;
- In each local municipality with a population of between 5,000 and 500,000, or more, the small producer is required to establish and operate at least one EEE collection site for every 15,000 people;

- If the population is more than 500,000, at least 34 EEE collection sites for the first 500,000, and at least one EEE collection site for every 50,000 people above 500,000; and
- A producer may replace up to 25% of the total number of EEE collection sites the producer is required to provide in Ontario with the same number of public EEE collection events.

7.4.2.3 Collection from Very Small Communities

Large producers and PROs are obligated under the Ontario Regulations to collect from small communities, defined in Sections 7, 8 and 9 of the Regulation. Where more than four tonnes of EEE or more than 300 kg of lighting are accumulated at sites on crown land, communities smaller than 1,000 or reserves, as defined in the **Indian Act (Canada)**, the site operators can contact large producers or PROs and the material must be removed within a year of the notification. This provision does not apply to an EEE collection site that is located in the Far North, as defined under the **Far North Act**, 2010.

Program accessibility in the new regulation is similar to the previous legislation. EPRA had already been collecting EEE from communities less than 1,000 in population. The issue with the new Ontario EEE legislation is that there are now 14 PROs for electronics in Ontario. RPRA will need to decide how to assign collection from small communities fairly among the many PROs. This was much simpler and easier when there was only one PRO for each material under the previous legislation. The relevance to Manitoba is that EPR is easier to manage and monitor if there is only one PRO per material program.

7.4.3 Northern Europe/Scandinavian

Iceland is a Nordic Island country in the North Atlantic, covering an area of approximately 100,000 km^2 and with a population of approximately 330,000 in 2016. The population is concentrated in the greater Reykjavik area, with approximately 60% of people living there. Iceland experiences harsh weather conditions for a large part of the year and there are relatively long distances both between municipalities and between Iceland and the European market. Government policy is substantially reflected through set laws and regulations. Laws and regulations are usually preferred when a clear target or circumstances can be set, such as a ban on the use of specific substances. Iceland follows EU trends and in some cases a specific interest is taken in a given field that is of particular economic or environmental interest. An example of this is plastic pollution in the ocean. In the Icelandic waste prevention policy, a focus has been made on food waste, plastics, textiles, paper, buildings (housing) and Waste Electrical and Electronic Equipment (WEEE).

Proper engineered landfilling and incineration are expensive due to the long transport distances between waste generation and treatment sites. Waste collection and management is the responsibility of the municipality, with households required to sort waste prior to collection. Door-to-door collection for household waste and common recyclables is universal in urban areas and almost all rural areas in Iceland. There are bring-bank recycling facilities in many of the greater Reykjavík area's municipalities for paper and plastic and sometimes for clothing/textiles (for the Icelandic Red Cross). All municipalities

tend to have facilities for waste collection. In some cases this will be based on cooperation between multiple municipalities.

Residual waste is typically collected every seven to ten days and recyclables less often, every 10 to 14 days, but the collection frequency may vary between municipalities. Approaches to collections are known to differ between municipalities depending on the facilities available in their region. There is no specific food or garden waste collection in Iceland. However, individual households may compost and recycle food waste at home, and recycling centres do accept leaf and yard waste. The Iceland approach for rural municipal waste management and recycling is to apply a regional shared collection system whether by curbside (almost universal) or depot systems. The collection service frequency is reduced compared to urban areas. Food waste reduction is promoted as well as backyard composting and local leaf and yard waste composting.

7.5 Municipal Supports

7.5.1 Ontario Continuous Improvements Fund Program for the Blue Box Program

The Continuous Improvement Fund (CIF) is a partnership between the Association of Municipalities of Ontario (AMO), the City of Toronto, Stewardship Ontario (SO) and the Resource Productivity and Recovery Authority (formerly Waste Diversion Ontario – WDO). The CIF commenced operations on May 1, 2008 under a Memorandum of Agreement signed by the program partners, operating as a committee of WDO. The CIF's mandate is to improve the effectiveness and efficiency of Ontario's municipal blue box Programs. This mandate is fulfilled through the provision of funding, technical support and training to aid municipalities and program stakeholders in the identification and development of best practices and technological and market based solutions that lead to program improvements[129]. The fund provides grants and loans to Ontario municipalities to execute projects that improve the effectiveness and efficiency of municipal blue box recycling. Industry stewards provide the funding. As of September 30, 2020, the CIF has funded 774 municipal projects with a combined value of over $139.4 million.

The CIF Operations Plan is developed on an annual basis to meet the objectives set out in the Fund's current Three-Year Strategic Plan and as agreed to periodically by the program partners and approved by RPRA. The CIF's original strategic plan was developed in 2007 prior to initiation of the Fund. Over the years, the CIF's focus and priorities have changed to reflect varying directives from the Fund partners, WDO (now RPRA) and MIPC.

The CIF Operation Plan, which balances directives from the Ministry with the priorities established by CIF stakeholders to focus on efforts that support collective benefits and that emphasize the current mandate as found in the BBPP. As the Province prepares to begin transitioning the Blue Box Program in

[129] Continuous Improvement Fund, "About CIF" (April 3, 2020). Received March 1, 2021 from: https://thecif.ca/about-cif.

2023 to 100% EPR, and in accordance with CIF's priorities, the 2021 Interim Operations Plan will invest up to $1,520,000.00 to:

- Continue to improve the effectiveness and efficiency of the existing program at a collective level;
- Prepare municipalities for program transition;
- Aid in stabilizing sustainable markets for Ontario's Blue Box PPP materials; and
- Aid municipalities with day-to-day decision making and longer-term planning.

The CIF project funding approach was to issue an annual Request for Expressions of Interest (REOI) for municipalities to propose PPP Blue Box type projects on:

- Best Practices;
- Innovation;
- Emerging Technologies;
- Communication and Education;
- Project Support; and
- Centre of Excellence.

The CIF has also built on strategic partnerships initiated throughout 2020 with the **Regional Public Works Commissioners of Ontario's (RPWCO) Waste Subcommittee** and with AMO's **Municipal Resource Recovery and Research Collaborative (M3RC)**. The CIF is working with groups such as these to implement projects and support municipal Blue Box programs and transition to 100% EPR (2023 to 2025).

The Manitoba former WRARS municipal funding may look to the CIF for percent contribution of stewardship program funding models. The CIF is allocated an annual 20% of Blue Box Program stewardship obligations funds towards annual CIF funded municipal projects[130].

7.5.2 Ontario Municipal Hazardous Special Waste Program

In Ontario, there are several HHW/MHSW type programs managed by stewardship organizations. The Ontario **Orange Drop Program** is a free and safe way to dispose of household products that require special handling funded by industry, under the EPR model, for four obligated materials; pressurized cylinders, antifreeze/coolant, empty oil containers and oil filters. Through the program, Ontario residents can return any of the four materials to their local **Municipal Household Hazardous Waste (MHSW)** depot, special collection events, automotive service locations (oil containers, oil filters and antifreeze/coolant) and some Ontario Parks (pressurized cylinders). The program is run in partnership with local municipalities, retailers, and service providers.

[130] Resource Productivity and Recovery Authority, "Amendment re establishing Continuous Improvement Fund" (October 17, 2007). Received from: https://rpra.ca/wp-content/uploads/BB-Program-Amendment-CIF.pdf.

Product Care Ontario is the stewardship organization for paint, solvents, fertilizers and pesticides. Their Municipal Depot Transportation and Processing Incentive Program provides transportation incentives for nine different zones in Ontario. This information is provided on the website along with guidelines, forms, reporting and transportation protocol for municipal partners to follow. Ontario residents can drop off leftover pesticides, solvents and fertilizers for free at any one of the 95 municipal collection sites or at over 300 municipal events across Ontario. There is no limit to how many products residents can drop off at once. Municipalities work with individual producers or PROs to coordinate collection of HHW and MHSW and receive partial funding from the PRO for collection. Since municipalities run their own depots, however the MHSW producers are responsible for collection and disposal pertaining to obligated materials. In addition, in Ontario, there are three other individual industry stewardship organizations responsible for recovering additional hazardous waste products, including batteries, automotive materials and proprietary carbon dioxide cylinders.

Ontario released a new draft Hazardous and Special Products (HSP) regulation in February 2021. This will take effect July 1, 2021. The operation of the current MHSW program for all designated materials, except single-use batteries, will cease on June 30, 2021. Under a producer responsibility model for waste diversion, costs would be shifted from municipalities and taxpayers to producers. Municipalities will also have to decide if they will continue to accept obligated materials at their municipal depots. The City of Guelph, for example, is choosing to no longer accept obligated MHSW materials since these are the responsibility of its product stewards under the new IPR framework and the financial incentive offered by the PRO does not cover their program costs. Some of the proposed changes include:

- Definition of Producers and obligated material definitions;
- All Producers must register with Resource Productivity and Recovery Authority (RPRA); provide RPRA with three year sales history upon registration;
- RPRA fees (fees to be determined) based on the amount Producers supplies to the market annually;
- Producers can work with a PRO or develop their own supply chain to meet their obligation;
- Accessibility and management requirements;
- Promotion and education requirements; and
- Reporting, auditing and record keeping requirements.

7.5.3 Circular Economy Supports (Forums, Hotspots and Working Groups

The following are a selection of circular economy networks and initiatives that can support potential collaboration for circular economy growth in Manitoba.

Canada joined the **Global Alliance on Circular Economy and Resource Efficiency (GSCERE)** network to provide a global impetus to initiatives related to the circular economy transition, resource efficiency, sustainable consumption and production patterns, and inclusive and sustainable industrialization.

In September 2021, Environment Climate Change Canada (ECCC) is hosting the **World Circular Economy Forum (WCEF2021)** in Toronto. WCEF2021 will mark the first time the forum is held in North America.

The event will focus on the issues and topics that are central to economic recovery and the circular transition. WCEF2021 will identify the key actions and systemic changes needed to create the conditions for long-term success on the path to a thriving global circular economy.

Holland Circular Hotspot is a private-public platform in which the HCH foundation, (local) government authorities, knowledge institutes and companies intensively and internationally collaborate and exchange knowledge with the aim to stimulate entrepreneurship in the field of circular economy. HCH actively support parties that want to start a Circular Hotspot in their country. The **Canada Circular Hotspot** was founded in April 2019. Since that time they have held four workshops in partnership with the Consulate General of the Kingdom of the Netherlands. The workshops attracted more than 500 individuals. They have also signed an MOU with Holland Circular Hotspot for cooperation nationally and internationally with that organization and, through the Holland Circular Hotspot, with the rest of the Circular Hotspot network.

The activities of Holland Circular Hotspot are:

- Offer insights in and access to the network of Dutch circular pioneers;
- Develop and exchange knowledge on international market opportunities for circular economy;
- Create circular opportunities internationally by matching offer and demand;
- Support companies and organizations that want to contribute to internationalization of circular economy;
- Stimulate cooperation between the private sector, knowledge institutions, governments and other relevant parties;
- Provide international visibility of Dutch circular economy innovations/best practices; and
- Facilitate access to Dutch and international (financing) instruments and programmes.

The founding of HCH was one of the actions from the Dutch government programme “Nederland Circulair 2050”.

As part of the **Long Term Waste Management Strategy**, the City of Toronto is working towards an aspirational goal of zero waste and a circular economy. To drive innovation and the growth of a circular economy in Toronto, the City has established a **Circular Economy & Innovation Unit** within the **Solid Waste Management Services Division**. The Unit is involved in research and planning as well as incorporating circular economy principles into new programs, policies, procurement and processes. The overarching goal of the unit is to make Toronto the first local government in Ontario with a circular economy. The City is a member of the National Zero Waste Council (NZWC) Circular Economy Working Group and a Partner of the Ellen MacArthur Foundation. Toronto has joined New York City, Amsterdam, Glasgow and Copenhagen as a partner in the **Circular Innovation City Challenge**. They are looking for digital and data-driven solutions that can help cities reduce their carbon footprint and become more circular. Some of the City’s initiatives include:

- Co-convenor of the first **Great Lakes Circular Economy Forum**, an initiative to create a shared vision for a circular economy in the Great Lakes region;
- Development of a **Circular Economy Procurement Framework** outlining how circular economy principles and goals can be applied within the government purchasing process to drive waste reduction, economic growth and social prosperity;
- Formalization of an **Extended Producer Responsibility policy for the Addition of New Materials** to the City's Waste Diversion Programs that integrates circular economy principles;
- Implementation of five **Community Reduce and Reuse Programs** to help build a culture of waste reduction, reuse, sharing and repairing in Toronto;
- Investment in infrastructure to turn organic waste into renewable natural gas that can be used to fuel waste collection trucks; and
- Established a public **Circular Economy Working Group**. As part of its planning, the City hosted a workshop for local agencies, municipalities and small-to-medium businesses from Toronto's key economic sectors to identify priorities for a city-wide Circular Economy Roadmap Strategy.

See also the **National Zero Waste Council's** initiative **Circular Economy Leadership Coalition** in **Section 7.3.2.**

7.6 Increasing Participation

7.6.1 Mobile Apps – Promotion and Education

Using digital media, such as websites, social media, blogs and email, for promotion and education (P&E) can be a reactive and cost effective approach compared to traditional advertising campaigns. In 2016, Peel Region in Ontario transitioned from a curbside Blue Box (PPP) service to an automated wheeled cart based collection system. With the implementation of the new large carts, the Region saw a double increase in curbside recycling contamination from over 10% (prior to cart implementation) to over 20%, thus negatively impacting greater operation costs and potential program revenue[131].

To improve curbside participation, the Region launched a digital marketing campaign with two phases over an 18-month period from July 2017 through to December 2018. Each phase had a single, simple message[132]. The first phase focused on bagged recycling placed in the PPP carts and the second phase focused on food in recyclable containers found in the PPP carts. Digital online and mobile app analytics and monthly MRF in-bound material characterization audits were used as key performance metrics. An advantage of the digital analytics was the instantaneous information acquired, allowing the ability to react quickly and make adjustments where needed to the feedback. The Region saw a 50% decline in bagged recycling contamination, which yielded $55,000.00 in avoided residue disposal tipping fee costs to the PPP program and $57,000.00 in added revenues from the sale of PPP materials captured. While

[131] Continuous Improvement Fund, "Use your digital media to get your message out: Peel did!" (October 26, 2018). Retrieved February 24, 2021, from: https://thecif.ca/use-your-digital-media-to-get-your-message-out-peel-did/.

[132] Continuous Improvement Fund, "Recycling Contamination Digital Marketing Campaign" (May 2019). Retrieved February 24, 2021, from: https://thecif.ca/wp-content/uploads/2019/06/PN-882-Peel-Recycling-Contamination-Digital-Marketing-Campaign.pdf.

smaller municipalities may not have automated cart collection systems, preventing contamination in the blue box program is an ongoing P&E mainstay and cost savings measure.

7.6.2 Blue in the Loo

In 2014, Peterborough, Ontario introduced an innovative approach to target recyclables found in household bathrooms with the goal to increase blue box PPP capture rates. These include toiletry plastic containers, toilet paper overwrap and rolls and boxboard packaging. The "Blue in the Loo" campaign offered a simple solution: a miniature sized blue box to store or attach to the trash bin in bathrooms. Residents could fill the mini blue box with recyclables in the bathroom and then empty it into their larger blue box on curbside collection days[133]. The campaign was found on radio adverts with a unique jingle, bus shelters, newspapers and websites. The "Blue in the Loo" was an effective as reminder to residents to recycle their bathroom blue box PPP materials too. The mini blue box in that room was a visual reminder as well.

The promotional tool was a success and has been implemented by other municipalities, such as Quinte Waste. It also won an award at the Continuous Improvement Fund (CIF) Spring Ontario Recycler Workshop (ORW) bi-annual Ontario conference for municipalities and First Nations. Over time the concept evolved to not only include recycling, but to also promote reducing and reusing items; encouraging residents to move towards a waste-free bathroom[134].

7.6.3 Love Food Hate Waste (LFHW) Campaign

Love Food Hate Waste Campaigns (LFHW) engages Canadians to think about how households generate food waste and how by making different buying decisions they can reduce this waste of resources. The National Zero Waste Council initiated the LFHW Canada campaign in 2018 as a key deliverable of its strategy to reduce food waste across Canada. The campaign, launched in 2018, by the Council in collaboration with its campaign partners provides consumers across Canada tips and ideas to effectively prevent food waste. LFHW Canada engages Canadians to think about how households generate food waste and how by making different decisions when buying and storing food and in preparing meals, they can reduce this waste of resources. This is a national campaign with a common message with a range of partners from local and provincial governments to food retailers and other stakeholders using multiple platforms (e.g. social media, in-store promotions, bus shelters).

The LFHW campaign was originally started by the Waste and Resources Action Programme (WRAP) in the United Kingdom in 2007 – a proven behaviour change campaign that, in its first five years, helped cut avoidable food waste by 21%, saving United Kingdom consumers $23 billion CAD equivalent. The program was designed to reduce the seven million tonnes of food waste generated annually (60% of which could have been eaten). Household food waste makes up almost 50% of all food waste in the

[133] The Peterborough Examiner, "Going Blue in the Loo" (May 14, 2020). Retrieved February 24, 2021 from: https://www.thepeterboroughexaminer.com/news/peterborough-region/2014/01/04/going-blue-in-the-loo.html.

[134] Qunite Waste Solutions, "Going Blue in the Loo" (December 2, 2019). Retrieved February 24, 2021, from: https://quinterecycling.org/going-blue-in-the-loo/.

United Kingdom. The long term goal of the program is to reduce avoidable household food waste by half by 2025. Five main "lessons learned" from the UK program to date are:

- The need to raise awareness of waste;
- Partnerships are critical to success;
- The need to monitor and report on success; and
- Make the program easy to use and positive and use every communication tool possible.

LFHW in Canada has 11 major partners including five major municipalities (the City of Winnipeg is one of the seven municipal program partners). In a 2020 report surveying 1,200 Canadians, LFHW reported that 63% of the food Canadians throw away could have been eaten, costing households $1,100.00 per year. On a more postie note, 94% of Canadians interviewed are motivated to reduce avoidable food waste, 84% agree it is an important issue and 24% are wasting less food than usual. There would appear to be a good opportunity for provincial Manitoba officials to meet directly with Winnipeg staff to both understand how their existing food waste programing might be enhanced and how the program might be extended to other smaller municipalities across the province in reducing food and organic waste.

7.7 Landfill Levies

The purpose of landfill levies is generally to increase the cost of disposal and therefore make diversion (which normally carries a higher cost than disposal) a more attractive alternative. In some or most cases (and this is a best practice) the levies collected are spent in particular ways, for instance:

- The United Kingdom Landfill Tax has been used to fund community projects;
- The Irish landfill levy is used to fund the development and construction of municipal recycling infrastructure;
- The proposed New Zealand levy would be dedicated to waste diversion activities; and
- The Manitoba landfill levy was used to fund a variety of recycling and waste diversion related activities as well as public education on waste diversion.

While the levy sends a general message that disposal should be reduced, the levy needs to be sufficiently large to alter behaviour towards diversion alternatives. While research on this topic is dated (mostly carried out from mid-1990s to about 2010), it still shows some useful connections between levies and waste diversion.

New Zealand recently issued a proposal to increase their levy of $10.00 per tonne to $50.00 to $60.00 per tonne by 2023 as they concluded the value of $10.00 per tonne had not impacted the amounts of waste disposed[135].

[135] Ministry for the Environment, "Reducing waste: a more effective landfill levy summary document" (November 2019). Received from: https://www.mfe.govt.nz/publications/waste/reducing-waste-more-effective-landfill-levy-summary-document.

7.7.1 United Kingdom Landfill Levy

A 2012 European Union (EU) study of economic instruments concluded that the United Kingdom landfill levy did not have much impact on disposed waste when the levy was only £10.00 per tonne ($17.73 CAD per tonne), but quickly had a significant impact on disposed waste when it increased to £45.00 per tonne ($80.00 CAD per tonne) as shown in **Figure 10.**

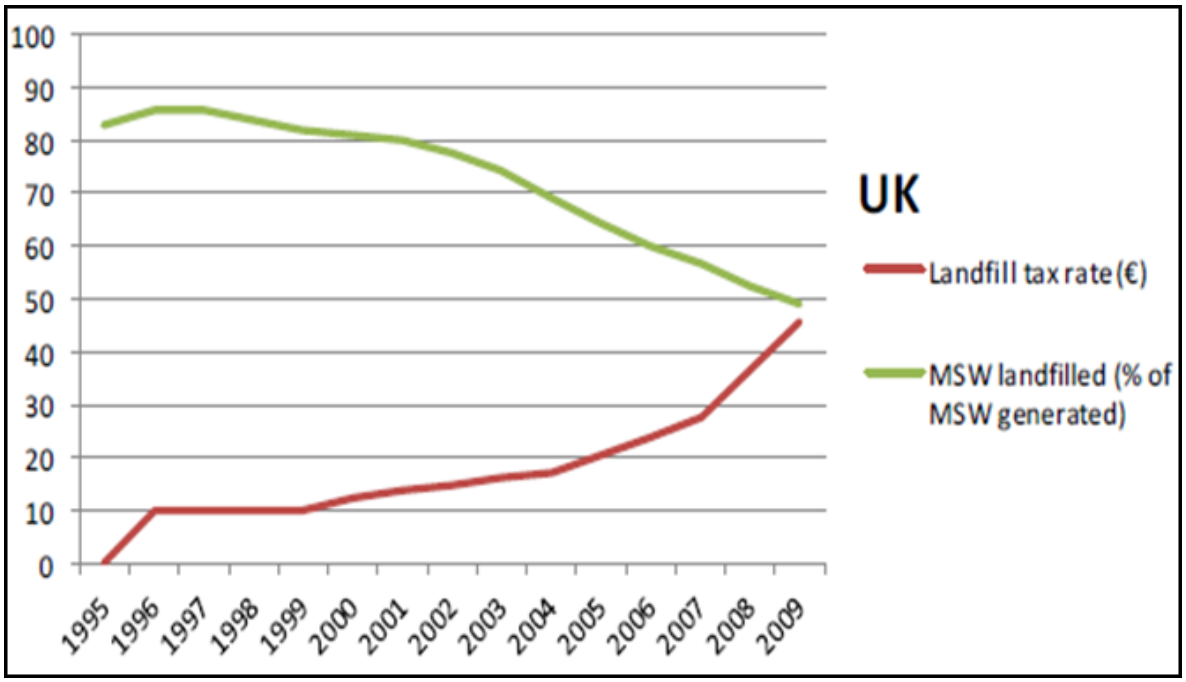

Figure 10: Impact of UK Landfill Levy on Waste Disposed, 1995 to 2008

However, many other factors were also happening at the same time in Europe:

- The EU Landfill Directive banned the disposal of 100% untreated waste in landfills, setting targets to direct waste to composting/digestion and EFW rather than landfill;
- The EU WEEE Directive required the diversion of a long list of electronic equipment from landfill; and
- The UK landfill tax is currently at £94.15 ($166.00 CAD) per tonne, increasing to £96.70 ($170.00 CAD) per tonne in April, 2021. The levy is only £3.00 ($5.30 CAD) per tonne on inert industrial waste.

7.7.2 Ireland Landfill Levy

A landfill levy of €15.00 per tonne ($23.00 CAD per tonne) in addition to tipping fees was introduced in Ireland on June 1, 2002 under the Waste Management (Landfill Levy) Regulations (2002). All levies were earmarked for an Environment Fund in support of waste minimisation and recycling initiatives. The levy increased to €65.00 per tonne ($100.00 CAD per tonne) by 2012, and was raised to €75.00 per tonne ($115.00 CAD per tonne) in 2013. It remains at that level in 2021.

Disposal to landfill has fallen sharply from over 80% of the waste managed in 2001 to 14% in 2018, with the landfill levy reported by the Irish government to be a key policy driver. The percentage of municipal waste sent for energy recovery increased from 0% in 2007 to 43% in 2018. Recycling has plateaued since 2010 and rates have begun to decrease, with a decrease from 40% to 38% between 2017 and 2018.

Ireland is in compliance with the Waste Framework Directive's municipal recycling target of 50% (due in 2020), however the current recycling trends indicate that Ireland will face significant challenges to meet the future EU recycling targets for 2025 (55%) to 2035 (65%) .

Figure 11 shows the change in waste diverted and disposed in Ireland since imposition of the landfill levy in 2002. The timing of the levy coincided with other mandatory EU requirements regarding recycling and organics management. The drop in waste managed from 2007 to 2012 is related to a collapse of the Irish economy. The figure shows that the amount of waste landfilled has decreased considerably as the amount recycled has increased (but levelled off) and the amount sent to EFW has increased considerably with construction of new EFW facilities.

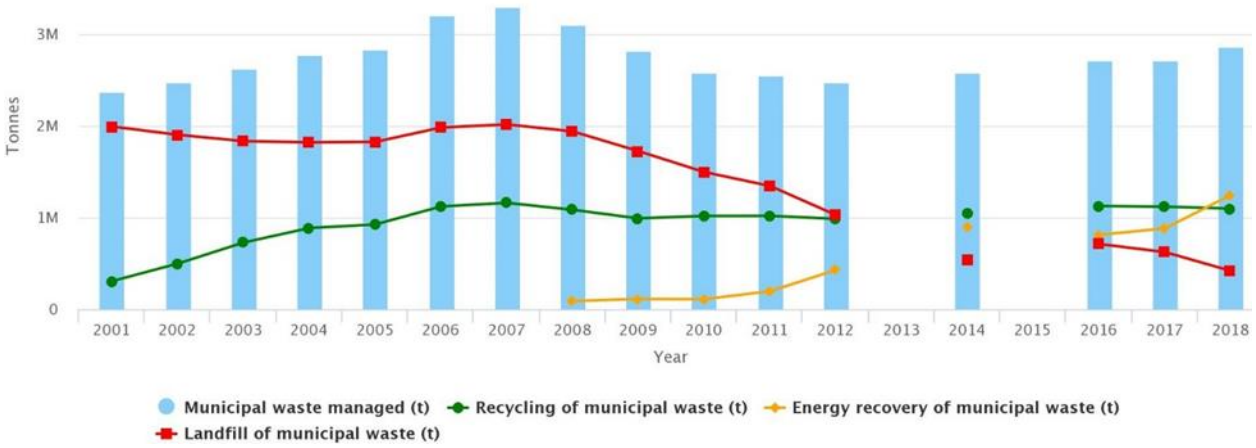

Figure 11: Waste Managed, Recycled and Sent to Energy Recovery in Ireland, 2001 to 2018

7.7.3 Québec Landfill Levy

The Québec Landfill Levy has two components – a permanent levy which was established at $10.00 per tonne in 2006, and a "temporary" additional levy of $9.50 per tonne which was introduced in October, 2010 for a five year period to support implementation of the 2011 to 2015 **Waste Management Action Plan.** The policy objectives of the levies were initially to:

- Divert useful material from landfill;
- Meet a 60% diversion objective; and
- Make diversion cost competitive with waste disposal.

Québec increased the levy from $23.51 to **$30.00** per tonne at the beginning of 2021. The purpose of the levy increase is to raise $1.2 billion to pay for the infrastructure needed to divert 70% of organic

waste from landfill by 2030 and reduce GHG by 300,000 tonnes of CO_2 equivalent. Because Québec (like Manitoba) uses mostly hydro generated electricity, GHG emissions from electricity generation are modest and waste management is a more significant opportunity to meet GHG reduction targets.

7.7.4 Metro Vancouver Landfill Levy

Metro Vancouver (MV) is a federation of 21 municipalities, one Electoral Area and one Treaty First Nation that collaboratively plans for and delivers regional-scale services. Its core services are drinking water, wastewater treatment and solid waste management. MV also regulates air quality, plans for urban growth, manages a regional parks system and provides affordable housing. The regional district is governed by a Board of Directors of elected officials from each local authority.

The MV solid waste function operates on a cost-recovery basis, with tipping fees funding over 90% of the Solid Waste Services budget, including the operation of the regional solid waste disposal system and MV zero waste planning initiatives. MV has a **Generator Levy**, which is currently (January 2021) $48.00 per tonne and is incorporated into tipping fees at MV and the City of Vancouver solid waste facilities. The generator levy is the fixed costs of the region's waste transfer station network and solid waste planning. The levy brings the current tipping fee to $129.00 per tonne (one to nine tonnes) or $151.00 per tonne for less than one tonne.

The Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017 (Tipping Fee Bylaw) sets rates and requirements at MV solid waste facilities. The by-law is typically amended or replaced on an annual basis as changes are needed. 2021 tipping fees for garbage were increased by $4.00 per tonne for all waste categories as well as an increase to the generator levy by $6.00 per tonne. MV fees based on type of load additionally include a $5.00 transaction fee as well as a charge for peak hours and non-peak hours as follows:

- Garbage: nine tonnes or more $103.00 per tonne;
- Garbage: municipal $117.00 per tonne;
- Transaction Fee: $5.00 per load;
- Peak Hours (10:00 AM to 2:00 PM weekdays): $25.00 ;
- Non-Peak Hours: $15.00;
- Used Gypsum: $200.00 per tonne, with a minimum of $15.00;
- New Gypsum: $150.00 per tonne, with a minimum of $15.00;
- Green Waste/Clean Wood: $100.00 per tonne, with a minimum of $10.00; and
- Mattresses/Box Springs: $15.00 each, maximum four units.

Commercial Waste Hauler Licensing initiated in 2017 ensures the generator levy is collected by any hauler operating in MV, even if they are not using MV waste disposal facilities. That means that any hauler delivering MV material to a private or out of region facility must remit the $48.00 per tonne levy on all tonnage being exported/migrating from MV facilities. This including WtE or facilities creating engineered fuel (RDF).

7.7.5 Relevance to Manitoba

Manitoba has had a landfill levy of $10.00 per tonne for many years. The impacts on waste reduction behaviour are generally proven to be minimal when the levy is low. Experience in other jurisdictions has shown that landfill levies of up to $40.00 to $100.00 per tonne are needed to really affect waste diversion behaviour by making diversion cost competitive with disposal. Initial consultation for this project identified a reluctance to consider a higher landfill levy because of a concern about illegal dumping as a result, but recognized that the current levy of $10.00 per tonne was essentially ineffective. Further research and consultation is needed to determine what the levy amount for Manitoba should be.

7.8 Waste Hierarchy

7.8.1 Metro Vancouver

The overriding principle goal of Metro Vancouver's **Integrated Solid Waste and Resource Management Plan (ISWRMP)** is the avoidance of waste through an aggressive waste reduction campaign and through the recovery of materials and energy from the waste that remains. In line with this principle, the ISWRMP has four goals:

- **Goal 1:** Minimize waste generation;
- **Goal 2:** Maximize reuse, recycling and material recovery;
- **Goal 3:** Recover energy from the waste stream after material recycling; and
- **Goal 4:** Dispose of all remaining waste in landfill, ***only after*** material recycling and energy recovery.

Following from their principle goals comes Metro Vancouver's **Resource Management Principles**: the 5Rs. The principles of the internationally recognized 5R hierarchy emphasize the value of waste as a resource. This hierarchy sets out the relative value of different methods or processes of waste management:

- Reduce waste at source;
- Reuse where possible;
- Recycle products at the end of their useful life;
- Recover energy or materials from the waste stream; and
- Manage residuals in an environmentally sound manner.

7.8.2 Relevance to Manitoba

In light of the anticipation of the **Rapid Organic Converter (ROC)** system for organics and other potential material streams, apply a waste hierarchy as a waste reduction and diversion policy: disposal is the lowest preference, followed by waste to energy. Diversion through recycling, reuse and reduction should always be a higher resource management preference to retain resource and material value. As well, a circular economy is supported by retaining, as much as possible, the value of resources and products in the economy rather than sending them to landfill or destruction facilities.

8.0 Waste Diversion Framework Gap Analysis

The following is a high level gap analysis based on what was heard through the review's consultations and identified in background research through annual reports and program plans. The gap analysis presents the needs identified in the current state of waste diversion and recycling in Manitoba. The overview discussion of needs is presented based on the framework review's nine objectives.

1. **Program Enhancement (new products, sectors, accessibility, and technologies)**
   Few stewards suggested there was a need for adding more materials to their recycling or diversion programs. While municipalities and the public suggested that more materials for recycling was needed, a concern raised by municipalities was how this would be financed and who would manage/operate it. Some materials suggested included large appliances (white goods), mattresses and small appliances. Organics was a material that the public supported to see diverted from landfill. Municipalities recognized that an organics program is costly and do not have funding to add this as a new diversion program. Concern was raised from Indigenous, Northern and remote communities on the transportation, resources and cost to adding more materials when some communities are already struggling to try and provide the existing recycling and diversion programs. Indigenous, Northern and remote communities communicated that they do not have the same access as southern Manitoba communities to diversion programs and that they do not have the resources to operate the many programs. PROs believe that they are supporting the northern region with the winter road and backhaul collaborative program underway. Producers and stewards feel that their programs already serve applicable sectors, i.e. residential or commercial, if applicable. Some municipalities have shown an interest in new alternative processing technologies such proposed waste-to-energy technology for processing organic wastes. They see this as a solution to organics disposal and believe it is a revenue generating approach and alternative to landfilling. Overall, perspectives differ between the stewards on one side and the municipalities and the public on the other, regarding the need for program enhancements.

2. **Program Accountability (efficiency, enforcement, improving non-financial and financial KPIs)**
   There is a difference in perspectives between the steward program organizations and the municipalities (as well as other stakeholders and the public) regarding program accountability. The stewards indicate that they are meeting their specific program plan's target or working towards them. They support the idea that industry itself should determine how to run and operate the EPR programs and set the targets, rather than the province. Municipalities and community organizations communicated that the stewards programs lack transparency and accountability outside of their steward organizations, and that funding and expectations are not clear to municipalities and operators. This is an issue they see especially regarding the MMSM PPP program. Municipalities indicate that they are not being heard by the stewards and by the province regarding this program, and that there are ongoing unresolved issues (80% EPR funding, cardboard diversion cap, newspaper funding). The WRARS funding is also not transparent to municipalities and they feel that

funds have been held back by the province. They feel that the levy revenue should go directly to the municipalities. Stewards expect continued support from the province to address freeriders and ongoing issues regarding online retail. There is a need to bridge the gaps in communication, transparency and expectations among the stewards, municipalities and the province with respect to program accountability. **Table 17** below summarizes the current KPIs reported by each stewardship program along with additional KPIs to be considered.

3. **Program Effectiveness**

   Stewardship programs are to capture designated recyclable or hazardous material and divert it from Manitoba landfills. In addition to the recycling programs, a landfill levy is applied to disposed tonnes as an incentive to divert disposed waste. The disposal rate is far from meeting the CCME waste disposal goals of 490 kg per person by 2030. In 2019 Manitoba's disposal rate was estimated to be 719 kg per capita. The 2019 Manitoba diversion rate is approximately 17% overall. Recovery and diversion targets are not robust for all programs and some programs (5/12) do not have diversion recovery targets in their program plans. Municipalities communicated that awareness and public education of the programs is confusing for both the operators (especially the smaller sized communities) and the public. Municipalities communicated that the landfill levy lacks evidence to show the effectiveness of the levy in diverting disposed tonnes from landfill as it is too low, yet they do not want to raise the levy.

4. **Circular Economy**

   Circular economy awareness was rarely mentioned by respondents during the preliminary consultations. When asked about the circular economy, several PROs responded that they see their recycling programs as already contributing to a circular economy. Consultation results did not reveal a level of awareness of circular economy initiatives or ideas. One PRO felt that their brand owner's warranties supported reduction of waste generation of electrical type products, while others mentioned that their IT products also are resold or reused. There is a need for provincial circular economy awareness, support and initiatives in order to shift waste reduction and diversion. Currently the focus is mostly focused on recycling. Consideration for other avenues such as reduction, reuse, repairability, repurpose and refurbishment, among others should be explored. There is a need for data collection or a central data centre to measure, monitor and communicate and report on the flow of materials in the province and the pathways the materials flow towards at the end of their useful life. There was no mention of current provincial supports for the private sector and municipalities to build the conditions for growth of local circular economies. A circular economy approach is typically based upon a waste hierarchy which promotes reduction and reuse as much as possible in an economy to extend the lifespan of products, their materials and resources.

5. **WRARS Funding Allocation**

   WRARS funding allocation comments were not received by the consulted stewards, except for non-obligated HHW materials that are recovered and funded by WRARS funds. In addition, the CleanFarms agricultural plastics program, pending approval by the province, was initially piloted by

WRARS funding. The municipalities however communicated several concerns regarding WRARS funding. They feel that the levy, that funds WRARS, should be returned to the municipalities. They feel that the 80/20 rebate on recycling tonnage reported by municipal recycling programs to the province is not fully rewarded to municipalities, and some of the funding is held back. There is a lack of transparency of the WRARS funding process. Municipalities mentioned that the HHW recovery and diversion is very costly and would not be possible without the WRARS funding for non-obligated HHW products. On a similar note, the funds provided by PCA for obligated HHW does not cover the cost of recovery of those products as well. While there is support for adding organics diversion programs, municipalities commented that the new added cost would need to be supported including capital infrastructure, collection services and bins, processing facilities, permitting and approvals, service contracts, P&E campaigns, monitoring and reporting. Note that an organics landfill ban was not considered as an effective approach by the municipalities, as the bans would have to be implemented, enforced and monitored at their landfills by them and not the stewards; again a municipal burden for an EPR framework.

6. **Barriers and Opportunities**

Current and emerging opportunities and barriers facing waste diversion and recycling in Manitoba include the national shift towards 100% EPR and the harmonization of stewards programs which aligns with the CCME Canada-wide Action Plan for Extended Producer Responsibility. Other provinces have more robust accessibility and recovery targets and higher expectations of their stewardship program performance. Manitoba lags in diversion in comparison. Manitoba's disposal rate is among the highest among provinces in Canada. Manitoba's WRAP Act has not been updated and lacks nimbleness to add more designated materials to stewardship programs. There is a lack of effective communication between the stewards and the municipalities and the province. The public does not feel that they have adequate communication and information to effectively recycle and participate in diversion programs. Municipalities and tax payers are carrying the majority of the burden of operation of the stewards program.

7. **National and International Targets**

Manitoba has not met waste diversion and recovery targets being set nationally and internationally. Manitoba currently has a 17% diversion rate. Harmonization of EPR goals by the Canadian Council of Ministers of the Environment (CCME) is supported by Manitoba's shift to 100% EPR for PPP in the near future. The Canada-wide Strategy on Zero Plastic Waste (commitment to the international Ocean Plastics Charter) is proposing to bans for six plastic items in the near future. To date, Manitoba has reduced plastic bags by 50% under the MMSM and Retail Council. Plastic waste has a high awareness by the public. Reduction of plastic waste is a high priority that the public would like to see in their waste management leadership.

8. **GHG Targets**

The province has committed to a climate change strategy and diverting 100,000 tonnes of organics from landfill, equivalent to 59,000 tonnes of eCO_2. This initial target will be achieved in 2021. The

Manitoba composts program provides funding for compost facilities. Moving forward, GHG targets for the waste management sector are best met by household organics diversion programs, such as the current pilot roll-out in Winnipeg. With up to 30% to 40% of landfill material comprised of organics, this is a large opportunity for the province to expand GHG targets and save valuable landfill space. Consultation feedback showed support for organics diversion from the municipalities, including the north, and the public, however they indicated that their challenges and concerns would be the funding for collection and processing of new expanded organics programs such as food waste.

9. **Partnerships and Synergies**

Consultation revealed a difference in perspective between the existing partnerships between the municipalities and the stewardship program organizations. On one hand, the PROs indicate that they work with municipalities in supporting them with their EPR programs. On the other hand, the municipalities indicated that there is lack of transparency with the PROs, unrealistic expectations, and lack of funding support, resources and insufficient P&E. While the MARR forum is supporting in bridging synergies, there is a need for more communication, advisory channels and a central organization to bridge the multiple PROs and municipalities throughout the province. This partnership should also include the Manitoba government.

Table 17: Summary of Manitoba Stewardship Program KPIs, Gaps, and Alternative Approaches

Program	Non-Financial KPIs Currently Reported	Additional KPIs to be Considered	Financial KPIs Currently Reported	Additional Financial KPIs to be Considered
Call2Recycle	Public Awareness: 77% vs 79% target Participation: 90% of population has drop-off location within 15 km (target 91%) Recovery Rate: 19% Percent Processed: 100% GHG: Not reported	Awareness of Program (through polling - % of population aware of program. Actual Participation – ask people if they participated in last 12 months Accessibility – reported as participation - 90% of population has drop-off location within 15 km (target 91%) Rural and remote community program description	Financial statements Steward fees Expenses	$/kg for overall program costs $/cap for overall program costs $ in reserve fund Months of operating costs in reserve fund
Canadian Battery Association (CBA)	Public Awareness: measured in B.C. at 79%. Assume similar in Manitoba. Participation: 61% measured in B.C. Assume similar in Manitoba. Recovery Rate: 5.44 g/cap Recovery Rate: 99.8% vs 90% target Overall Accessibility: 96.7% 88 Return Collection Facilities	Could ask for Manitoba specific survey to measure public awareness and participation in Manitoba, although program appears to have very high performance, so this may not be required. Program achieves 99.6% recovery – additional KPIs not considered necessary	Program is self-financing with no EHF – no need to report financials Existing KPI – value of LABs ($5)	Since CBA does not charge the public, no need for financial KPIs
Canadian Beverage Container Recycling Association (CBCRA)	Public Awareness: 89% Participation: reported through website and social media engagement and events Recovery Rate: 68% vs 75% target GHG: 27,714 tonnes of eCO_2 saved based on beverage containers recycled	Actual Participation – ask people if they participated in last 12 months through polling or survey Net tonnes diverted in kg/cap Trends – year-over-year growth	$8.8 million container recycling fees Detailed breakdown of program expenses by activity	$/cap $/kg recovered or collected

Program	Non-Financial KPIs Currently Reported	Additional KPIs to be Considered	Financial KPIs Currently Reported	Additional Financial KPIs to be Considered
Canadian Wireless Telecommunications Association (CWTA)	Public Awareness: 28% from national survey with Manitobans. Also report number of database searches. Participation: 55% reuse or recycle old device, 15% return or trade-in to carrier, 8% recycle and 6% return to a retailer Recovery Rate: not reported. Reports units collected and distributed (numbers equate to a 16% recovery rate) Percent Processed: 13% recycled and 87% refurbished and reused GHG: not reported	Awareness of mail-back program Participation rate through mail-back program Accessibility (distance or travel time to drop-off sites) Trends – year-over-year growth	Financials are not reported as they are internal to its industry members.	Industry pays for the program therefore financials do not need to be public
CleanFarms	Recovery Rate: 65% nationally (not reported provincially) Percent Processed: 9% of national total for pesticide and fertilizer containers, 21% of national total for unwanted and old pesticides, and 24% of national total for unwanted and old livestock/equine medications GHG: not reported	Number of drop-off locations	Not mandated to report financials because industry pays for the cost of the program	Industry pays for the program therefore financials do not need to be public
Electronic Products Recycling Association (EPRA)	Public Awareness: 77% Participation: not reported (difficult due to durables vs consumables and varying lifespans) Tonnes Processed: 3,050 tonnes GHG: not reported Accessibility: 94%	Methodology should be developed to report on units recovered or recovery rate	Program Cost: $1,158 per tonne Revenue: EHF $3.1 million, interest $182,000 Reports detailed expenses Contingency Reserve: $3.2 million	$/cap

Program	Non-Financial KPIs Currently Reported	Additional KPIs to be Considered	Financial KPIs Currently Reported	Additional Financial KPIs to be Considered
Health Products Stewardship Association (HPSA)	Accessibility: 83.5% vs 90% target Public Awareness: 53% Participation: 28% Recovery Rate: no target rate. Collected 18,478 kg Percent Processed: not reported GHG: not reported	No additional KPIs needed	Financials are not reported because program is paid for by industry	No financial KPIs needed as public is not paying for program
Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)	Public Awareness: not reported. Only 5% of materials collected are from the municipal channel. Reported number of website visitors from Manitoba Accessibility: 85% of target 104 collection locations vs 123 target Recovery Rate: 34% of target 463 collection totals vs 1,368 target 1.52 kg Percent Processed: 100% GHG: not reported	No additional KPIs needed – Already report units collected.	Financials are not reported because program is paid for by industry	No financial KPIs needed as public is not paying for program
Manitoba Association for Resource Recovery Corporation (MARRC)	Detailed reporting of amounts collected and recovery rates	No additional KPIs needed.	Financial statements included	$/kg or $/cap for overall program
Multi Material Stewardship Manitoba (MMSM)	Recovery Rate: 80.3%. No recovery target. 56.5 kg/cap recovered Accessibility: 95% Participation: 93% Public Awareness: 45%	Material specific recovery rate for: • Plastic; • Paper; • Metal; and • Glass. Greater breakdown by material over time	Net Cost: $37.6 million Producer Cost: $24 million $552/tonne net cost $31/cap P&E Cost: $0.74/cap	No additional financial KPIs needed

Program	Non-Financial KPIs Currently Reported	Additional KPIs to be Considered	Financial KPIs Currently Reported	Additional Financial KPIs to be Considered
Product Care Association (PCA)	Public Awareness: 60% for paint recycling program and 58% for HHW program Target of 25 full service sites exceeded Litres collected and litres sold, and recovery rate for: Paint (5%) Paint aerosol (9.1%) Flammable liquids including gasoline (10.1%) Toxics incl. pesticides (4.7%) Corrosives 12.8%) Physically hazardous (7.2%)	Accessibility is a current KPI. Report includes number of sites. Need an easy to understand KPI for accessibility	Annual financial statements included	Could require $/kg for paint program to compare to other paint programs.
Tire Stewardship Manitoba (TSM)	90% target. Achieving 100%. Public Awareness: 65% Recovery Rate: 86% 13kg/cap collected No recovery target CATRA will provide GHG impact at future time Accessibility: 100% 1,567 collection sites 143 communities and First Nations registered with TSM Processed Tire Markets: 15% crumb rubber 71% tire derived aggregate 14% cut products	No additional KPIs needed.	Total Cost: $317/tonne ($271/tonne operating costs; $38/tonne admin costs and $8/tonne stewardship programs) Annual Expenses: $5.6 million Stabilization Reserve: $4.9 million Net operating surplus	No additional KPIs needed

9.0 Recommendations

Findings from the Current State Analysis in **Sections 3.0** and **4.0 (4.1 to 4.3)** as well as Phase 1 stakeholder consultation (as summarized in **Sections 4.4 and 4.5**) were used to inform the focus of the Jurisdictional Scan. The scan focused on the jurisdictions and topics relevant to the gaps identified in Manitoba's waste diversion and recycling framework. It was intended to identify opportunities to mitigate acknowledged waste diversion and recycling challenges and needs, as well as provide ideas for approaches and lessons learned from other successful jurisdictions. Following the jurisdictional scan, the three virtual interactive engagement workshop sessions with stakeholders occurred in late March 2021 (**Section 5.0**). As discussed in **Section 5.1**, "areas for exploration" were developed from the gap analysis and provided for discussion during the stakeholder engagement workshops. Outcomes and feedback were compiled and summarized under separate cover (**Appendix D**). Based on the Current State Analysis and consultation, Policy Landscape and Best Practices Jurisdictional Scan and virtual engagement workshops, the final considerations and recommendations are presented below.

9.1 Recommendations for Next Steps

Based on the information reviewed in this study, it is recommended that a comprehensive Waste Diversion and Recycling Strategy (WDARS) be developed to guide future decision making related to solid waste management in the province of Manitoba. This strategy should be established prior to provincial implementation of any specific changes to the current legislation and/or diversion programs. A detailed strategy is the recommended first step to:

1. Reflect direction provided by the Premier of Manitoba to the Ministry of Conservation and Climate (Ministry's mandate letter, March 2020, **Appendix E**);
2. Gather additional input through stakeholder engagement; and
3. Develop sustainability principles to provide guidance for waste generated in the Province.

Future amendments of the Act and alteration or creation of new diversion programs would be a reflection of these Guiding Principles, which may include Circular Economy principles as a means to advance environmental priorities, create innovation and stimulate economic growth. The strategy would include waste diversion goals, and determine the targeted materials and activities required to reach those goals.

For managing solid waste in the province, this translates into the following initiatives:

- Establish a strategic direction based on Guiding Principles, and identify specific goals;
- Develop the Strategy and Act to reflect the mandate provided to WDR by the Premier of Manitoba;
- Develop the strategy and Act on a fundamental foundation of Circular Economy, or similar, framework (zero waste, resource recovery, waste hierarchy), to guide future decision making and a clear provincial direction;

- Develop WRAP Act revisions and the strategy simultaneously, with the goal of ensuring the WRAP Act aligns with the strategy and is not a barrier to fulfillment of the strategy's actions and recommendations;
- Ensure stakeholder and public engagement to establish the guiding principles set out at the start of the strategy development. Once the guiding principles are established, proposed strategic tasks will be developed (current state, gap analysis, options);
- Confirm practical targets are set, based on actual data collected and lessons learned from other jurisdictions, as well as alignment with National Targets; and
- Leverage British Columbia and Ontario's substantial past experience within the municipal associations to negotiate and review PRO programs and implications (legal and otherwise), as they may be able to support Manitoba in negotiations and shared lessons learned.

Next steps for a gap analysis will be specific to the guiding principles. Anticipated gaps include provincial waste generation data and waste characterization audits representative of the various regions of the province. Baseline data is needed to assess and track which particular materials continue to be disposed in Manitoba landfills, and what their sources are, such as residential, ICI or CR&D. This information is a starting point, and sets the baseline for developing a provincial strategy. It is critical in understanding the current state and bridging the gap to where the province would like to go. It allows for the establishment of goals and targets as determined by the various generators and materials; it provides the baseline for measuring, monitoring, reporting and communication of the province's progress.

9.1.1 Short Term Areas of Focus

- Consultation on 100% EPR for PPP, through collaboration with a technical advisory committee;
- Review funding allocation for new WRARS, to clearly establish where funding will be allocated. Focus on re-allocating funds to not-for-profit organizations who support waste reduction and recycling efforts, as per the Provincial Mandate letter;
- Develop a detailed internal staffing and resources allocation plan, to ensure that staff and expertise are available to support the activities laid out in the long term action plan;
- Consultation and strategy on eliminating the use of Plastic Bags as per the Provincial Mandate Letter;
- Introduction of enhanced reporting requirements and Provincial data collection to support the measurement and impact assessment of waste reduction strategies on GHG emissions; and
- Undertake baseline data collection through waste characterization studies, to provide insight and data into waste material going to landfill. This data will provide insight into areas for improvement in current PRO programs, as well as confirm additional material streams to be managed through EPR programs in the future.

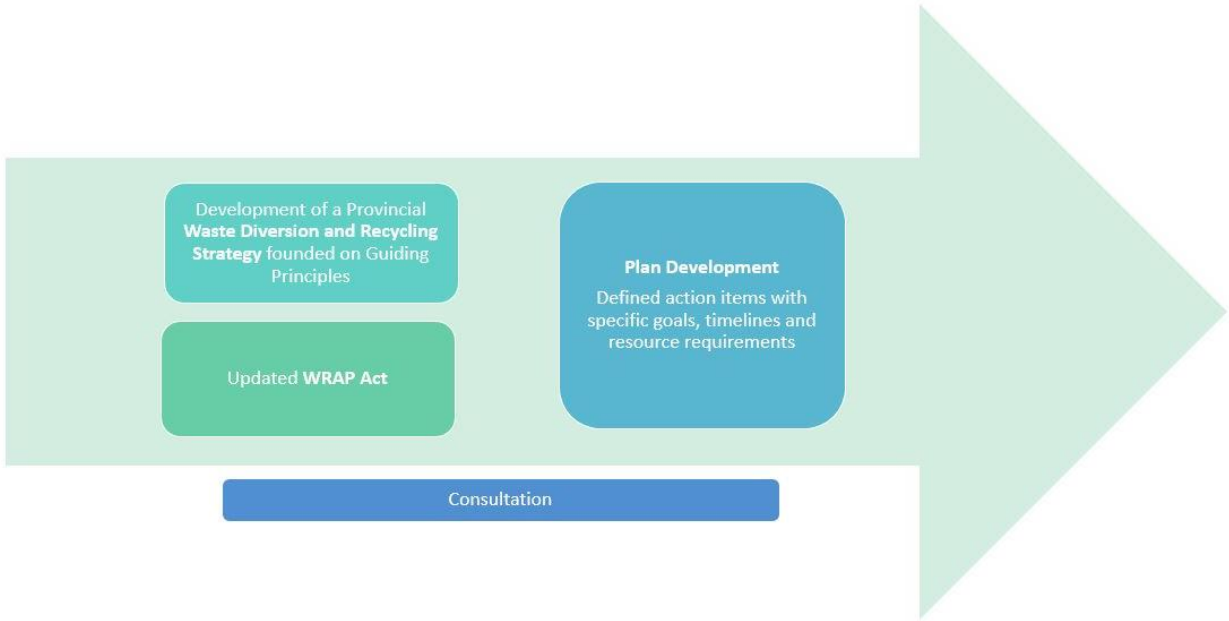

Figure 12: Recommendations for Next Steps

9.2 Recommended Actions, Policy Tools and Levers

Once a provincial waste diversion and recycling strategy is in place, then the specific tools and levers to support the strategy's goals can be implemented. The following are recommended options which reflect the gaps identified throughout the project. The province should align these recommendations with the guiding principles developed in the future strategy. These recommendations reflect changes that would enhance the current programming, and could be leveraged to deliver future programming and achieve targets. The Best Practices Jurisdictional Scan (**Section 7.0**) provides insight into how many of these items have been implemented elsewhere. The specific approaches undertaken by Manitoba to achieve identified outcomes will require tailoring, and consultation to ultimately develop a 'Made in Manitoba' solution. The jurisdictions reviewed should be looked to for lessons learned, and in fact representatives of those jurisdictions should be interviewed by Manitoba staff, so that Manitoba can benefit from the investment already made and the lessons learned in many of these areas.

The recommendations were developed based on:

- The project's nine objectives;
- Current state program evaluation and stakeholder consultation feedback;
- Current policy landscape drivers and national context;
- Jurisdictional scan of best practices and lessons learned; and
- Virtual engagement sessions' feedback with key stakeholders.

Recommendations have been aligned with project objectives, and each take into consideration:

- WRAP Act and Regulations;
- Stewardship Programs;
- WRARS – Landfill levy and diversion funding; and
- Overlap of the above.

Recommendations were developed with consideration to the following high level impacts to Manitoba:

- Benefits to waste diversion and recycling (environmental, financial, social);
- Tools and mechanisms required to implement the recommendation; and
- Anticipated challenges with the implementation of the recommendation or barriers to overcome, and how to mitigate them.

This table lists the recommended actions, tools and levers identified in response to the gap analysis. Additional descriptions for each recommendation is provided in the following section.

Table 18: Gap Analysis Recommended Actions, Tools and Levers

Program Enhancement	•Add new Stewardship Materials •Expand Diversion programs to service the ICI Sector •Expand Diversion programs to service the CR&D Sector
Program Accountability	•Increase Program Accountability through Ipdated KPIs and Targets •Increase Enforcement Measures •Introduce Enhanced Data Reporting Requirements
Program Effectiveness	•Implement 100% EPR for PPP •Update Material Recovery Targets •Increase Accessibility to Waste Diversion •Landfill Levy Updates
Support for Circular Economy	•Add the Waste Hierarchy to the WRAP Act •Introduce Circular Economy Policy Levers
WRARS Funding Allocations	•Re-Design the Funding Allocation System
Other Considerations	•Introduce Organics Diversion Programs to Reduce Waste to Landfill and GHG Emissions •Consult on Landfill Bans as a Tool to Incentivise Waste Diversion •Align Provincial Targets with National Targets •Coordinate with AB and SK who are currently starting consultation on 100% EPR for PPP •Look to lessons learned from work already completed by ON, BC, and QC

9.2.1 Recommendations for Program Enhancements

9.2.1.1 Add New Stewardship Materials

Increase waste diversion and recycling by adding new products to stewardship type EPR programs. Examples identified in this study include small appliances, OTR tires, large appliances (white goods), mattresses, textiles. Start with products that currently are collected (or programs are being developed) in other jurisdictions to learn from their experience and regulations (**Section 7.0**). New programs should be designed to be Full EPR programs funded by the producers of the designated materials or consumers of the materials; rather than by municipalities.

Best Practice Examples

Jurisdictions which have implemented EPR or stewardship programs for new stewardship materials include: small appliances (B.C.), OTR oversized tires (Alberta, Saskatchewan and Ontario)), white goods and large appliances (B.C.), mattresses (Metro Vancouver landfill ban, California, Rhode Island and Connecticut in the United States), textiles (France).

Potential Benefits

- *Increased waste diversion*: Adding additional materials under the stewardship programs will further incentivize waste diversion and reduce materials disposed in landfill, increasing the lifespan of existing landfills and improving environmental outcomes.
- *Job creation*: Recycling, reuse and remanufacturing are shown to create more jobs relative to landfill disposal or waste-to-energy processing.
- *Cost Reduction*: **Adding materials to the current programs will allow PROs to collect and process more material, which is now occasionally being processed as 'free-riders' with no associated fee collected to pay for collection and processing. These costs are now partially paid for by the Province.**

Considerations

- *Local opportunities for material processing*: Adding items which cannot be processed readily is not beneficial, and would require ample time for the market to respond with processing capacity. Under full EPR, the responsibility is/will be with producers to establish sufficient processing capacity as well as develop markets for materials that are added to a Manitoba collection program.
- *Consultation with current PROs*: Consultation is recommended to determine the extent to which management of the material is currently an issue (e.g. mattresses, appliances) whether the proposed material could be added to an existing program, or would require development of a new program and the time required to develop that program.
- *Impacts on Diversion Targets or other secondary benefits*: It is recommended that materials are evaluated or ranked, prior to creating a stewardship program, to determine what the greatest benefit and need is with respect to the provincial strategy's goals. Large bulky items such as white

goods, mattresses and box springs use up a lot of landfill space and are heavy, thus contributing to the provincial disposal landfilling rate. Most appliances contain metal and electronics. Scrap metal has a viable end market, even though the price of scrap metal market fluctuates as per most commodity markets. Electronics should be diverted from disposal due the environmental risk of leachates into the environment and water, the reuse of the metals as a resource in both small and large appliances. We heard from electronics PRO that small appliances are already showing up in the EPR materials they currently collect and process them without problem.

Manitoba Context

Manitoba's size means that opportunities for some regionalized processing (subject to an economic assessment of the viability given lack of scale) and coordinated material hauling should be considered to reduce costs. For example, mattress recycling programs typically requires dismantling by manual workers. While Mother Earth has brought Manitoba experiences into this social enterprise program, this simplified processing activity and creation of local jobs can be developed throughout the province rather than just in the Winnipeg area. Likewise, the dismantling of ODS from refrigeration units is a skill and practice that would be required before recovery of these particular white goods can proceed. This activity can be provided across the province as well.

Risks

Added financial and logistical burden to Municipalities: There is a risk that additional burden would fall to municipalities if responsibility is not held by a PRO.

Barriers

- *Potential for inadequate processing capacity:* Materials will require an end market for recycling, so it is recommended that both processing capability and capacity are confirmed prior to adding materials to the stewardship list.
- *Lack of capacity within municipalities:* Adding materials may require additional infrastructure for storage, registration in more stewardship programs, or increased reporting for those municipalities interested in participating in the program. These requirements should be taken into consideration, and the appropriate role of municipalities (as well as compensation) in development or expansion of programs.

9.2.1.2 Expand Diversion Programs to the ICI sector

The ICI sector contributes up to 40% or more of the MSW disposed annually. While tackling this sector is essential to reaching Manitoba's disposal target, many jurisdictions have not had much success tackling the ICI sector in particular. Adding the ICI to existing and new diversion programs is essential to achieving Manitoba's disposal targets. Currently, most diversion applies to the residential sector with little regulation for the ICI sector. Some materials such as beverage containers and PPP from the ICI sector could be added to existing Manitoba stewardship programs, although the ICI collection system is

different, therefore considerable coordination and consultation would be required. However, higher volumes into MRFs would improve the economics of processing. Organics are produced in large volumes in some ICI sector groups, particularly hospitals, restaurants and food processing facilities.

Best Practice Examples

Jurisdictions which have implemented EPR or stewardship programs for ICI PPP materials include B.C. who is currently in consultation for adding PPP to the ICI sector. Jurisdictions which have addressed organics from the ICI sector include Nova Scotia and Ontario, as well as Québec (although Ontario and Québec are still transitioning into full implementation). Examples relevant to Manitoba are approaches used in Metro Vancouver and Halifax, Nova Scotia.

Potential Benefits

- *Increased waste diversion*: ICI waste makes up 40% or more of disposed MSW. Diverting more of this waste will reduce materials disposed in landfill, increasing the lifespan of existing landfills and improving environmental outcomes. A detailed assessment of the diversion potential would need to be carried out for organics from the ICI sector in particular.
- *Job creation*. Recycling (including organics processing), reuse and remanufacturing are shown to create more jobs relative to landfill disposal or waste-to-energy processing.

Considerations

- *Local opportunities for material processing*. Larger volumes of for instance PPP from ICI generators would improve the economics of existing MRFs in the province. Large volumes of organics from ICI establishments such as restaurants and food processing operations would considerably improve the economics of organics processing.
- *Impacts on diversion targets or other secondary benefits*. Diverting ICI materials from disposal would help Manitoba to reach their landfill disposal targets, as these materials are heavy. Larger supplies of recycled materials could support development of new local industries. Reduced organics to disposal from the ICI sector would contribute to GHG reduction.
- *Long term goal*: This recommendation is considered to be a long term goal, and could be introduced incrementally over time. This is a challenging undertaking, and should be considered for future action.

Manitoba Context

Measures related to ICI waste diversion are best suited to large, urban, densely populated areas such as City of Winnipeg in particular.

Risks

- *Limited experience on ICI approaches from other jurisdictions*: Tackling diversion by the ICI sector has been a challenge for municipalities and provinces across Canada for a very long time, with a number

of measures implemented with varying levels of success. While there are some limited success stories (OCC bans, organics bans in Nova Scotia and others), Manitoba needs to carefully evaluate the experience in other jurisdictions and likely start with a pilot program in City of Winnipeg to mitigate the risk.

- *Vulnerability to disruptions in processing capacity:* Metro Vancouver was challenged when there was a lack of organics processing capacity following an organics ban, some organics facilities were overloaded and odour problems occurred. A risk assessment concluded that multiple processing sites are needed to secure the diversion system success. This may not be possible in Manitoba due to lack of scale, therefore a good risk mitigation strategy needs to be part of implementation planning.

Barriers

- *Disruption to existing private sector hauling system:* ICI waste hauling is carried out by private sector haulers. Implementing any ICI policies or programs would significantly disrupt the existing routes designed by haulers to optimize travel times and payloads. Significant consultation would be required prior to implementing any ICI policies or programs.
- *Higher costs to ICI generators:* Generally diversion systems cost more than disposal only systems for ICI generators, not only in the haulage contracts required, but also in space and staff time needed to source separate materials subject to new regulations or policies (recyclables, organics etc.)

9.2.1.3 Establish Diversion Programs in the CR&D sector

The CR&D sector contributes 15% to 20% or more of the MSW disposed annually. The amount varies significantly by year depending on economic activity. CR&D materials include wood, drywall, metal and miscellaneous rubble. Adding the CR&D sector to existing and new diversion programs is essential to achieving Manitoba's disposal targets. Currently, most diversion applies to the residential sector with little regulation for the CR&D sector which services residential and ICI accounts and building sites.

Best Practice Examples

Most jurisdictions have not addressed CR&D materials at the provincial level, aside from broad landfill bans. Metro Vancouver is a successful regional example of establishing processing capacity for wood and drywall and then systematically banning these materials from disposal. In Ontario, the construction industry falls under the IC&I sector in the provincial waste legislation. Ontario requires the IC&I sector to develop waste management plans based on size of the waste generator. This means that smaller businesses are exempt.

Potential Benefits

- *Increased waste diversion*: CR&D waste makes up 15% to 20% or more of disposed MSW, depending on economic conditions which drive construction and demolition activity. Diverting more of this

waste will reduce materials disposed in landfill, increasing the lifespan of existing landfills and improving environmental outcomes.

- *Job creation*: Reuse and de-construction to salvage materials such as cabinets and wood flooring create local economies and jobs. Salvaging wood for various markets would increase local employment also. CR&D processing produces a number of materials which can be sold into various local markets thus creating local circular economy benefits.

Considerations

- *Local opportunities for material processing*: See above
- *Impacts on diversion targets or other secondary benefits*: Diverting CR&D materials from disposal would help Manitoba to reach their landfill disposal targets, as these materials are heavy.
- *Some success with CR&D diversion approaches in other jurisdictions:* Metro Vancouver is the best example of a jurisdiction which has encouraged the diversion of CR&D waste, with wood waste bans supported by wood waste processing; drywall bans supported by drywall processing, and others.

Manitoba Context

Manitoba's size, population density and population distribution mean that both of these measures are best suited to large, urban, densely populated areas such as City of Winnipeg in particular.

Risks

- *Vulnerability to disruptions in processing capacity:* Metro Vancouver was challenged when the single drywall processing operation was temporarily shut down with no processing option available. A risk assessment concluded that multiple processing sites are needed to secure the diversion system success. This may not be possible in Manitoba due to lack of scale, therefore a good risk mitigation strategy needs to be part of implementation planning.
- *Lack of scale*: Manitoba is a small market generating relatively modest amounts of CR&D waste for a company considering establishing CR&D processing.

Barriers

- *Disruption to existing private sector hauling system:* CR&D waste hauling is carried out by private sector haulers. Implementing any CR&D policies or programs would significantly disrupt the existing routes designed by haulers to optimize travel times and payloads. Significant consultation would be required prior to implementing any CR&D policies or programs.
- *Higher costs to ICI and CR&D waste generators:* Generally diversion systems cost more than disposal only systems for CR&D generators, not only in the haulage contracts required, but also in space and staff time needed to source separate materials subject to new regulations or policies (wood, brick, scrap metal, etc.)

9.2.2 Recommendations to Enhance Program Accountability

9.2.2.1 Increase Program Accountability

KPIs are a standard industry and government tool to track progress on programs of all descriptions and how performance from one year to another. KPIs are an easy way to benchmark program performance against other similar programs. Increased stewardship program accountability and efficiency including improvement to financial and non-financial performance indicators should be addressed in the coming years. Manitoba should evaluate approaches and KPIs used in other jurisdictions for best practices on metrics and KPIs (**Table 17**) lists current KPIs and KPIs from other jurisdictions for consideration).

Program performance KPIs should include, at a minimum, actual diversion (or recovery) against specific stretch targets set out in the regulation based on amount of product sold (and reported as a KPI) into the province annually with expected increased performance over time. For materials such as electronics, tires and others with long lifespans, a rolling average should be considered for the denominator. For short life products like PPP, current year sales are the appropriate denominator for the recovery calculation. Financial KPIs should include overall program cost per capita and budget contribution to overall program costs, operating costs, collection, transportation, processing, P&E and R&D each year and the enhancement of accessibility and P&E plans.

Best Practices

KPIs vary by program material, but recovery/collection rate, accessibility, awareness and cost are general KPIs applied to all programs. Alberta (government run programs for tires, paint, oil and electronics), B.C. (industry run programs for all materials) and Ontario (industry run programs for all materials) all provide good examples of KPIs which Manitoba could consider

Potential Benefits

- *Transparency:* Where good KPIs are reported, the public and regulators can see program performance and how it varies by year, as well as how Manitoba compares to other provinces.
- *Continuous Improvement:* For any business process, measurement is important to successful program operation. Good KPIs guide measurement of appropriate business process parameters.
- *Year on year performance comparison:* Easy year on year comparison is facilitated by clear, easy to measure KPIs which capture key performance information

Considerations

- *Industry standard KPIs should be used:* to facilitate performance comparison, KPIs should be those used by other similar programs.
- *Measurement of KPIs should not be a significant burden:* KPIs identified and used should be developed from information and data that is measurable and relatively easy to measure.

Manitoba Context

Manitoba is a small province with a small number of staff in each PRO. For this reason, KPIs requested should be reasonable and not impose a significant burden on the organization.

Risks

- *New factors may arise which requires new KPIs:* Sometimes the KPIs traditionally used do not sufficiently capture changes in the marketplace. This has been the case for both electronics and PPP where the composition is changing rapidly and new KPIs (not yet identified) need to be developed to reflect program performance.

Barriers

- *Finding the data in order to develop the KPI:* where data is not reported consistently to a PRO, it is challenging to calculate the KPI. In some cases, the data needed is not available.

9.2.2.2 Increase Enforcement Measures

Enact increased enforcement by the regulator by clearly communicating expectations to PROs for a new provincial accountability action plan. Initially, PROs can develop their own voluntary accountability action plan, to be approved in their next Program Plan (2023), or the province will develop one for all programs, by consulting with industry stakeholders and outsourcing the plan development with EPR policy experts.

Potential Benefits

- *Identify and minimize free riders:* Especially under a full EPR program regime, producers look to the regulator agency to minimize "free-riders" – i.e. producers that are obligated under an EPR program but are either unaware of that obligation or choose to ignore it. Obligated producers that "play by the rules" may be able to help identify free-riders, but it is the regulatory authority's responsibility to ensure that it is clear to all involved that free ridership is not tolerated in Manitoba by identifying free riders and imposing heavy fines (like in Ontario).
- *Measurement against program targets:* Without enforcement, program targets may rarely be achieved. If targets are not achieved, the anticipated environmental outcomes will be diminished. Therefore, progress towards targets must be reviewed annually and discussions held with PROs who are not meeting targets with a mitigation plan requested on how targets will be achieved
- *Level playing field and fairness:* Producers who are "playing by the rules" clearly see that non-compliance is dealt with.

Considerations

- *Enforcement is time and resource consuming for the regulator:* Especially with the launch of a new EPR program (or expanded set of obligated materials), enforcement may require significant new and

sustained resources such as additional staff members and budgets for legal proceedings where free riders and non-compliant organizations are identified.

Manitoba Context

- *Manitoba EPR experience:* EPR programs have been in place in Manitoba for some time. Regulatory staff are aware of the time and resources required to enforce either new or expanded EPR program changes. Any enforcement measures or increased enforcement needs careful consideration of the budget and staff time implications.

Risks

- Weak enforcement can lead to poor program performance against targets.
- Strong enforcement is expensive and time consuming.

Barriers

- *Effective enforcement requires dedicated and experienced enforcement staff*: EPR program oversight can include complicated and persistent enforcement measures. This is feasible for a large province like Ontario (population over 14.7 million compared to Manitoba's population of 1.37 million[136]).

9.2.2.3 Introduce Data Reporting

The province should introduce an effective data reporting platform and process to assess and communicate the performance of all of the stewardship programs annually to the public, so that the Manitoba public fully understand the performance of the stewardship programs, and how they perform against targets.

Best Practices

The Ontario Municipal Datacall is an example of a comprehensive data reporting system which is summarized for public reporting. While it may be too onerous for Manitoba, the concept could be explored and delivered at a scale more suitable to the population size in Manitoba. A look at the information required through the Ontario system would also be beneficial.

Potential Benefits

- Public understands relative performance of stewardship programs against target and how each is contributing to the Provincial diversion goal.
- Stewardship programs across the country can see "at a glance" how Manitoba programs are performing.

[136] https://worldpopulationreview.com/canadian-provinces

Considerations

Maintenance of the data reporting system can be staff intensive so the reporting platform needs to be designed so that stewardship programs report through a portal which requires minimal Manitoba staff input

Manitoba Context

Manitoba is a small province with limited staff resources therefore any systems used must not require extensive provincial staff time involvement.

Risks

Verification of data reported by PROs and others: this can be minimized by requiring an external auditor to sign off on the data reported.

Barriers

No significant barriers noted. PROs likely maintain all of the data which would be required in the data management system.

9.2.3 Recommendations to Improve Program Effectiveness

9.2.3.1 Implement Full 100% EPR for PPP

The PPP program operated by MMSM should move towards developing a 100% EPR program for the province. MMSM will need to launch a consultation process with all stakeholders, including producers, municipalities and service providers, partners as well as the public. Based on lessons learned in other provinces, this consultation process should be a thought out multi-stage consultation; new PPP program changes may take some years to implement - i.e. as current collection and processing contracts come to term. MMSM, producers, the province and other involved parties should also consult with neighbouring and other provinces (AB, SK, ON & B.C.) in their EPR program developments to find synergies. Ideally, EPR program work more efficiently when there is harmonization across jurisdictions since the products the EPR programs are responsible for are manufactured by the same producers across the jurisdictions, i.e. a newspaper sold in Manitoba has the same material properties as a newspaper sold in Nova Scotia. EPR programs are well established in Manitoba, so materials that have been (or are being) added elsewhere (e.g. “packaging-like” PPP that is already in place in Québec and planned for both Ontario and B.C.) could be added in the next stage of PPP program approvals in Manitoba.

Best Practice Examples

BC is the example of a province moving to 100% EPR for PPP most relevant to Manitoba at this time. The province transitioned to full EPR for PPP in 2014, therefore there are a number of years of experience to draw from and lessons learned that can inform Manitoba deliberations

Potential Benefits

- *Increased waste diversion*: The main benefit to 100% EPR for PPP is that it makes producers fully responsible for all costs and aspects of Manitoba's EPR program for PPP and will allow the province to determine materials that could be added to the program (e.g. both BC and Ontario are planning to add a range of obligated single-use plastics into their PPP programs).
- *Performance against targets:* Full producer responsibility allows the province to set targets (including material specific targets) and allows producer to determine the best way to achieve those targets. The province can also determine the consequences of not meeting targets over time.
- *Cost savings to municipalities:* Under full EPR for PPP, Manitoba municipalities will no longer be required to cover 20% of the cost of PPP recycling. In addition, for those municipalities who decide to hand over all PPP activities to the PRO, PPP recycling is off the property tax base completely.

Considerations

Role of Manitoba municipalities in future recycling programs: Depending on the model of 100% EPR chosen by Manitoba, the role of municipalities in recycling could diminish. Based on experience in BC, and what is planned for Ontario, municipalities are likely to no longer be involved in material processing; whether they are still involved in material collection will depend on the specific form of recycling plan that is developed by the PRO and approved by the province.

Manitoba Context

Current system performance: The PPP program is one of the best performing PPP programs in Canada in terms of PPP materials recovered per capita. That is a significant achievement given the comparatively low population density of the province.

Risks

Municipal expectations regarding 100% EPR for PPP: Some Manitoba municipalities anticipate that 100% producer responsibility for PPP simply means that producers will pay 100% of current and future recycling costs. That is not likely to be on offer from existing producers.

Barriers

Inability for the main interests to achieve consensus on a way forward for PPP: While 100% EPR for PPP appears to be in the common interest of producers, the province, municipalities and the waste service industry there are countless details to be worked out; producers are generally satisfied with how the current system works.

9.2.3.2 Update Material Recovery Targets

Recycling or material recovery targets should be set in the regulation for each material, with a timeline (years) for achieving a particular material recovery target, and the target getting progressively higher each few years after the first target date.

Best Practice

The Ontario Blue Box draft regulation has material specific targets with rates and dates, increasing over time to higher values. For some materials (e.g. non-recyclable plastics), the targets start off relatively low but producers are given a few years to find technologies to recycle the materials and meet progressively higher targets over time as technologies develop. The targets provide sufficient time for producers to find new technologies to address challenging materials. For materials where recycling is mature (e.g. cardboard) targets are set very high – at 90%.

Potential Benefits

- *Increased waste diversion*: Higher material recovery targets mean more material diverted from landfill
- *Economies of scale*: With larger amounts diverted, processing technologies may reach scale. Markets are also more interested and pay higher prices for larger amounts of material

Considerations

Practicality of reaching high targets in Manitoba: Targets need to be reasonable for the market in which the regulation is written. The practicality of reaching high targets for some materials need to take local conditions into account.

Manitoba Context

Manitoba is a small province which presents challenges in terms of economies of scale for high diversion but relatively small volume systems.

Risks

Not achieving target: The main risk is not achieving the target, or investing large amounts of money in achieving a small increment of diversion.

Barriers

- *Technological challenges:* One of the most significant barriers to achieving high diversion values is a lack of technology which can process collected material to meet the target
- *Lack of public involvement:* If the public do not participate at sufficient levels, it will not be possible to achieve the high targets.

9.2.3.3 Increase Accessibility to Waste Diversion Opportunities

Increasing waste diversion program accessibility across Manitoba by mandating specified accessibly targets based on best practice standards will achieve higher performance as demonstrated in other provinces (e.g. Policy Landscape Scan **Sections 7.4** and **7.2.3**). As also discussed in the Recommendations for Accountability below (**Section 9.2.2**), program targets must move toward more robust performance over time. Accessibility in the northern and smaller communities is an ongoing issue that is unresolved.

The current backhaul program should be expanded to network all these communities. This can be achieved by creating network hubs, or regional collection sites by neighbouring communities. Facilitation, resources, infrastructure, commitment and funding to support this potential improvement is needed. Producers need to be held accountable for providing the financial support to make collection in these areas possible.

Best Practice Examples

Both Ontario and Québec have stringent accessibility requirements for their electronics programs based on population density and community size. Given Manitoba's remote and northern communities (currently partially serviced by the backhaul program where viable), accessibility is a challenge for many communities.

Potential Benefits

- *Fairness*: The major benefit to higher accessibility is that smaller and more remote communities believe they are being services fairly.
- *Very small incremental increased waste diversion*: Increased consumer (and in some cases – e.g. e-waste and MHSW) commercial accessibility to drop-off locations enhances the opportunity to both recycle more materials and become more aware of waste reduction potential opportunities - e.g. the Love Food Hate Waste campaign profiled in Policy Landscape Scan **Section 7.6.3**. While the amounts of material diverted are very small, this measure is more about fairness than diverting large amounts of material from disposal.
- *Higher program efficiencies*: For programs run by PROs in Manitoba, the existing backhaul program improves program effectiveness (e.g. higher recovery from joint special collection events) and efficiencies (e.g. less wasted space in backhaul transport).

Considerations

Fostering greater collaboration: The only logical way to increase accessibility for small and remote communities is for all collaboration among all parties involved. Collaboration among Manitoba PROs to cost effectively transport collected materials; opportunities exist to enhance greater collaboration.

Manitoba Context

Manitoba has one large urban area – City of Winnipeg, a few medium sized communities (e.g. Brandon, Steinbach, Thompson, Portage La Prairie, etc.) and numerous small communities widely separated by geography, and as well as very small communities in remote and sometimes inaccessible locations. This presents a significant challenge and accessibility in particular needs to be practical and not cost prohibitive. Provinces such as Yukon, northern B.C., Newfoundland/Labrador and others face similar challenges.

Risks

Increased program costs: Greater accessibility means higher program costs (i.e. more locations to service).

Barriers

- *Incompatibility of co-transporting some materials:* Some natural collaborative backhaul opportunities are already in place (e.g. beverage containers with PPP from remote areas). Some materials (e.g. hazardous wastes) need to be managed separately.
- *Need for significant consumer education/information and engagement:* Successful drop-off programs require local "champions" to ensure high community participation in special collection events. Some consumers are still confused about what materials can/cannot be recycled in their local programs.

9.2.3.4 Landfill Levies

A landfill levy of $10.00 per tonne has been in place in Manitoba for many years. Landfill levies are effective at raising funds but also at raising the price of disposal to a point at which diversion becomes more economically attractive. Landfill levies are in place in many jurisdictions, mostly outside Canada, except for Québec. In the EU, landfill levies are very high as a disincentive to dispose of waste, and an economic incentive to divert rather than dispose of waste. Research from the UK has indicated that a levy of less than $40.00 per tonne is not effective at changing waste disposal behaviour. Consultation for this project indicated that this levy was not acceptable to Manitoba municipalities.

Best Practice Examples

The UK and Ireland have had landfill levies and landfill taxes for many years. Funds raised by the UK program are used for community projects, whereas fund raised by the Irish program are directed to building municipal waste diversion infrastructure. While the amount of waste landfilled in both these countries has gone down significantly over the years, a number of other policies and factors are happening at the same time (e.g. EU Landfill Directive; EU Packaging Directive; EU Waste Directive, etc.). These directives are no longer applicable in the UK since the UK left the EU at the end of 2020.

Potential Benefits

- *Potential for increased waste diversion*: Landfill levies increase the cost of disposal and in theory should lead to reduced waste disposed, if the levy is sufficiently high.
- *Source of funding*: Landfill levies can raise significant amounts of money depending on the levy amount.

Considerations

- *Appropriate use of levy funds:* This money needs to be carefully managed to ensure that it is directed to waste related activities.

- *Enforcement of levy:* Systems are already in place in Manitoba for collection of the levy therefore enforcement is not considered an issue.

Manitoba Context

Manitoba has had a levy of $10.00 per tonne in place for many years. Consultation for this project indicated resistance to raising the levy to a value of even $20.00 or $25.00 per tonne. A value of at least $40.00 per tonne is needed to change behaviour

Risks

- *Waste moves elsewhere:* In most jurisdictions with landfill levies, there is a concern that the amount of the levy will raise the cost of disposal to a point where waste will move elsewhere. This is not a concern for Manitoba as there are no disposal options in other provinces within a reasonable distance of existing Manitoba landfills
- *Illegal Dumping:* There is a risk that illegal dumping may increase with increased landfill tipping rates.

Barriers

Amount of levy is unacceptable: The amount of the levy needs considerable consultation. While a levy of $10.00 per tonne is generally acceptable, it is not sufficient to change waste disposal behaviour. While a higher levy might change disposal behaviour, there was resistance to a higher levy during consultation for this project.

9.2.4 Recommendations to Support Development of a Circular Economy

9.2.4.1 Addition of the Waste Hierarchy to the WRAP Act

A provincial waste hierarchy framework supports the foundation and conditions for the eventual transition to a circular economy. It is recommended that the waste hierarchy and circular economy aspirations be built into the updated and modernized WRAP Act. Other jurisdictions, , have successfully developed legislation, for example Ontario's Resource Recovery and Circular Economy Act, 2016 , which integrates the waste hierarchy into decision making with regards to waste diversion and management for the province.

9.2.4.2 Introduce Circular Economy Policy Levers

The Ellen MacArthur Foundation has identified and described ten policy levers[137] for supporting the integration of Circular Economy principles. While these levers have been formulated in the context of urban policy and city governments, these are still pertinent for the provincial experience. The levers fall into five categories, as shown below:

[137] https://www.ellenmacarthurfoundation.org/assets/downloads/CE-in-Cities_Policy-Levers_Mar19.pdf

1. **Vision – to provide an overarching direction for stakeholders and policymakers:**
   - Develop Roadmaps and strategies to define goals, indicators, metrics, monitor progress and integrate ideas into broader policy frameworks.
2. **Engagement – to initiate and sustain cross-sectoral engagement with multiple stakeholders:**
   - Convening and partnering: facilitate, and spur collaboration between public, private and civic leaders. This may involve bringing together stakeholders to catalyze collaboration, e.g. through CE networks or commitments; identify regulatory barriers; transfer knowledge; and define locally appropriate interventions through participation mechanisms.
   - Awareness raising: communicate and share knowledge on circular economy best practices, initiatives, and market opportunities.
   - Capacity building: training and advisory support governments can provide to individuals, companies, and organisations. This may relate to practical skills, and support for community initiatives and businesses.
3. **Urban Management – to influence the use and procurement of assets and services:**
   - Asset management: increasing utilization of assets such as buildings and transport stock, and supporting information exchange to facilitate material recirculation.
   - Public procurement: to stimulate the circular design, provision, management and servicing of goods and support the adoption of novel, circular business models.
   - Urban planning: how elements of urban environments are defined, designed and used.
4. **Economic Incentives – to support innovation, market access and circular economy positive behaviors:**
   - Financial support: financial mechanisms such as grants, subsidies, direct and indirect investments, and public-private partnerships that encourage innovation, deployment, and uptake of circular economy initiatives.
   - Fiscal measures: taxes, rebates, fees, discounts, fines, or charges.
5. **Regulation – to shape markets, influence behavior and remove barriers:**
   - Legislation and regulation: legal and regulatory powers held by the province to bound and direct the transition towards a circular economy. This lever should reinforce and underpin all other policy levers, and may include introducing new laws and regulations such as targets or bans, and reviewing and updating existing ones to avoid unintentional constraints.

Best Practices

- 'Love Your Clothes' – A WRAP campaign raising awareness of the value of clothes and encourage people to make the most of the clothes that they already have.
- 'Plastic Free Places ' highlights businesses in Australia that directly reduce their usage of SUP items focusing on straws, coffee cups/lids, takeaways containers, food ware.
- 'Love Food, Hate Waste' aims to raise awareness of the need to reduce food waste and supports the public to take action. Demonstrating the easy lifestyle changes needed and the reasons for doing it.

- Flemish Construction Confederation and Circular Flanders in collaboration with multiple construction companies have set up an online sharing platform to connect construction sites with companies to share equipment, materials, resources and facilities. Called Werflink, the aim is to create a more circular construction sector.
- Construction of the new town hall in Venlo, Netherlands, used cradle-to-cradle design principles to eliminate waste and to consider the interactions it would have with the local area.
- Industrial symbiosis workshops lead by the City of Cape Town and GreenCap alongside an online database to match businesses in the network with synergies in resource exchange. There have been more than 4,000 potential synergies between the 486 companies in the network.
- Circular Flanders have developed a circular procurement framework to support small to large centers in setting up circular purchasing projects. They have developed a step-by-step breakdown on the process along with a supporting ambition chart. This framework has been used throughout Europe on multiple different types of projects, both public and private, and covers the whole value chain. Projects supported have ranged from Brussels Airport, in building roads according to a circular model, to developing a circular coffee bar for the Flemish government's Facility Services Agency.
- Metro Vancouver's mattress landfill ban came into place in 2012 as mattresses were defined as recyclable.
- Scotland plans to ban all non-household biodegradable waste from entering landfill by 2025 including measures aiming to reduce food waste by 1/3 and recycled 70% of all waste by 2025.
- Wisconsin's landfill and incineration ban on recyclables (Comprehensive list of materials banned from Wisconsin landfills and incinerators (badgerlanddisposal.com))
- Right to repair EU eco-design legislation includes fridges, washing machines and dishwashers to be more easily repairable and longer lasting. Manufacturers will need to ensure faulty parts are replaceable using commonly available tools and without damaging the product or invalidating guarantees.

Potential Benefits

- Achievement of provincial landfill disposal targets: Municipalities will have support to address diversion of heavy materials (organics, CR&D materials). This will contribute to achieving provincial disposal targets.
- Achievement of provincial GHG targets by reducing the GHG impacts of product and services using circular economy principles in their design, manufacture, procurement, reuse and extension of lifespan and untimely end of life management.
- Supports Minister's mandate to with colleagues, the Minister of Municipal Relations and Economic Development and Training, working with the private sector and municipalities to support the growth of a local circular economy, driving innovation and green products while reducing waste sent to landfills.

Considerations

As products contribute 45% of global emissions, the circular economy is necessary to achieve net-zero emissions. Applying circular economy strategies to the five key materials (cement, aluminium, steel, plastics and food) can eliminate almost half of the remaining emissions from the production of these goods. The other 55% of GHG emissions is attributed to energy.

Manitoba Context

The province has already initiated a high level assessment of circular economy in Manitoba and to identify next steps. This could be an opportunity to link the framework modernization to that assessment. They have completed a circularity review for the province, and had workshops with a large group of municipalities to gather ideas and identify gaps and interest.

Risks

Circular Economy frameworks require measurement, data, monitoring and reporting. Manitoba would have to enhance data collection and monitoring to coincide with such a framework.

Barriers

Circular Economy crosses multi- sectors and government departments to be effective. There will be a need for effective collaboration across departments and across multi-sectors to support the shift towards a circular economy in Manitoba. Currently there is no organization or body to lead the province in this direction.

9.2.5 Recommendations to Improve Effective Allocation of Funding

9.2.5.1 Re-Design Current Funding From Province to Municipalities and Others

Manitoba traditionally allocated funds to municipalities, various organics diversion activities, MARR, non-designated HHW management and pilot projects using revenues from the WRARS program. As Manitoba reviews the funding structure, future available provincial funding should drive behavior changes to reduce waste and increase waste diversion and recycling and focus on programs that support more diverted materials and contribute the most to reducing environmental risk. These include HHW (environmental pollution), organics (GHG emission from landfill reductions), CR&D (large contribution to landfill space and has potential for local markets and reuse). As HHW should be fully funded through an expanded list of designated HHW materials, and PPP will be fully taken over by producers, funding should focus on other key materials and activities.

Should rebates to municipalities continue (now may be the time to consult on a different model, particularly if 100% EPR of PPP is implemented and no longer a municipal responsibility), the province should consider the diversion activities municipalities achieved annually for diverted materials other than PPP (as PPP will be 100% funded or managed by its producers). Any funding provided to

municipalities should not be spent on landfill or disposal activities, but needs to be specifically earmarked for diversion and recycling activities only, and more specifically on materials not already recovered by stewardship programs. The province recognizes that the barriers of northern and remote communities. A portion of the annual funding should be directed to these communities in development and establishing fundamental waste diversion and recycling services, to its residents, that are currently cost prohibitive to get established.

Funding should also go towards programs that can pilot into new EPR program such as mattresses/box springs, textiles/clothing and white goods/large appliances. Funding should go towards programs that do not typically lend to EPR frameworks such as organics (source separated organics or household food waste) and CR&D waste. Of note is the GHG impact of organic waste, with is also a mandate under the Made in Manitoba Climate and Green Plan to divert organics waste to landfill by 100,000 tonnes.

Best Practice

The Continuous Improvement Fund (CIF) based in Ontario provides funding to municipalities annually to support recycling initiatives, pilots, projects, waste characterization audits, P&E and related activities. Each year there is a RFP stage whereby the CIF accept proposal from municipal for proposed project and funding. The CIF staff evaluates proposal and awards funding based on an evaluation process. At the end of the completed project, the municipalities must prepare a project report for the CIF which is made public on the CIF website and contributes to its growing library of continuous improvement reports available to all. The CIF also hosts two annual municipal recycling learnings and case studies. This is free to attend.

Potential Benefits

- *Motivation to municipalities to divert CCME Phase 2 materials (Including CR&D materials) and organics:* With some materials covered in stewardship programs, municipalities can focus on diverting materials not covered by stewardship programs.
- *Achievement of provincial landfill disposal targets:* Municipalities will have support to address diversion of heavy materials (organics, CR&D materials). This will contribute to achieving provincial disposal targets.

Considerations

Development of a fair mechanism to disburse funding to municipalities: Previously some of the WRARS funding was allocated to municipalities based on PPP diverted. While this was not fair, it was a simple mechanism for allocation of funding because MMSM had the information needed. The new approach needs an updated funding formula which is fair particularly to small municipalities. Significant consultation will be required to develop a funding formula and tracking mechanism that all parties will consider fair.

Manitoba Context

Small and remote communities in Manitoba probably need this funding the most. A fair way to distribute funds needs to be identified.

Risks

Tracking how the funding is expended will be a challenge and require a good, transparent but simple reporting and tracking mechanism.

Barriers

Perception of fairness in how the provincial funding is allocated to municipalities and other organizations. This can be mitigated by establishing a review committee.

9.3 Other Considerations

9.3.1 Introduce Province Wide Organics Diversion

In order for Manitoba to meet long term future GHG emissions reduction targets, as well as reduce overall waste disposed in landfill, organics diversion for food waste as well as leaf and yard waste must be supported. Of all material sent to landfill, organics contribute the most to GHG emissions. By implementing food waste recovery programs and enhanced LYW programs, food waste reduction and awareness program, and more backyard composting, GHG emissions generated from solid waste can be most significantly reduced.

Potential Benefits

- *Increased waste diversion*: Organic waste remains the highest fraction of municipal solid waste still disposed in landfill in many jurisdictions. Diverting this material would have a significant impact on waste volumes.
- *Decreased GHG Emissions*: Organic waste generates the highest rate of GHG emissions of any waste stream when landfilled. Diverting this material will reduce GHG emissions and support potential future GHG reduction targets.

Considerations

- *Regional Approach*: For large scale organics processing facilities to be financially viable, consistent feedstock will be required. The quantities and consistency may be best achieved through a regional approach to organics processing, where material is transported and processed at a limited number of central locations.
- *Processing capacity*: Processing capacity for organics waste needs to be in place before municipal collection programs can be introduced.

Manitoba Context

Smaller organics processing approaches may be appropriate in the remote areas of Manitoba. These may include on-farm windrow composting facilities, or alternative batch processing technologies. Transport costs and GHG emissions should be balanced against GHG emissions from landfilling, and local considerations including vector attraction should be taken into consideration.

It is recommended that the development of organics processing be considered at both a Provincial and Municipal level, with feasibility investigation undertaken to quantify:

- Feedstock availability and characterization;
- Current processing capacity within the Province;
- Estimated capital and O&M costs for processing infrastructure; and
- Evaluation of the level of interest from the Province and Municipal Governments.

It is understood that some of this is already underway, and that these are particular issues related to a potential organics diversion program, that do not fall under the EPR approach taken to manage other material streams within the Province.

Any future organics diversion programming should be addressed as part of a Provincial Waste Diversion Strategy.

9.3.1.2 Landfill Bans as a Tool to Incentivize Waste Diversion

Establish landfill bans on materials that are already designated in stewardship programs (batteries; lead acid batteries; beverage containers; cell phones; pesticide containers; electrical and electronic waste; expired and unused medications; thermostats containing mercury; used oil, filters and antifreeze; PPP; HHW; tires), and over time establish landfill bans on organics, CR&D materials and Phase 2 CCME EPR materials (furniture, mattresses, textiles, carpet and large and small appliances) as new stewardship programs are established and processing options become widely available. While PROs were in favour of and asked for landfill bans for materials in stewardship programs during project consultation, municipalities who run landfills were not in favour of having to enforce landfill bans.

Best Practice Examples

Many jurisdictions have landfill bans on a range of materials. Metro Vancouver has a landfill ban on all materials for which stewardship/EPR programs are available (PPP, electronics, appliances, etc.). In addition they have a landfill ban on organics (processing options and collection systems are available), wood and drywall. For many years Nova Scotia has a landfill ban on all materials for which stewardship/EPR programs are available, as well as on organics.

Potential Benefits

- *Increased waste diversion*: Landfill bans will send a clear message that banned materials have other processing options and will result in most of the banned materials being diverted

- *Public education*: Landfill bans raise awareness that other options are available aside from material disposal

Considerations

- *Contribution to disposal targets*: Landfill bans will contribute towards reaching disposal targets by diverting significant amounts of material over time
- *Processing capacity*: Processing capacity for each of the banned materials needs to be in place at reasonably convenient locations before the ban can be implemented.

Manitoba Context

Landfill bans may not be practical at all Manitoba landfills because of the large number of landfills. It may be prudent to only impose landfill bans at larger landfills close to urban areas.

Risks

Illegal dumping: Where bans are in place or additional levies are charged on banned materials, some generators may choose to illegally dump loads. This is generally more of an issue for small loads rather than large companies.

Barriers

- *Potential for inadequate processing capacity:* Materials will require an end market for recycling, so it is recommended that both processing capability and capacity are established and functioning before a landfill ban is imposed.
- *Enforcement of landfill bans:* Enforcement of landfill bans is not possible at un-staffed sites, and is time consuming at staffed sites.

9.3.2 Align Provincial Strategy Targets with National Targets

Canada has national waste related targets in three main areas dealing with plastics and EPR: an international (non-binding) target through the Oceans Plastics Charter to "significantly reduce the unnecessary use of plastics and single use plastics" (see Policy Landscape); a plan to ban harmful single use plastics as early as 2021 (plastic bags, straws, cutlery, plates, stir sticks and six-pack rings) through the Canadian Environmental Protection Act (see Policy Landscape **Section 6.1.1**); and programs through CCME (i.e. in collaboration with the provinces) to establish EPR programs for Phase 1 and2 materials (See Policy Landscape **Section 6.2**) and through its Zero Plastic Waste Strategy (see Policy Landscape **Section 6.1.2**). Although not yet in place, it can also be anticipated that Environment and Climate Change Canada will be setting national targets in the future for recycled content for plastics packaging.

In addition, the Canadian Council of Ministers of the Environment set an overall (non-binding) national waste reduction goal of 50% over a decade ago. Manitoba's diversion rate is currently 17%. The province will need to develop a provincial waste reduction and recycling strategy or action plan to achieve greater

waste diversion and reduction performance over the short, medium and long term. The current disposal rate is 719 kg per capita. The strategy, or action plan, and consultation thereof, would clearly set out where the province wants to go with respect to waste diversion and recycling, and how they would get there by assessing potential options, evaluating options, and developing a planning and implementation plan to guide them over the next 20-30 years.

9.3.2.1 Potential Benefits

- *Increased waste diversion*: It is often said that you can't manage what you don't measure. Setting recovery and other targets as well as KPIs – whether at the national, provincial or municipal levels – and measuring performance against those targets are critical elements towards achieving desired environmental outcomes.
- *Continuous environmental improvement*: Setting realistic targets, reporting on progress towards targets, identifying actions that can improve performance over time, then setting higher future targets are central to outcomes-based EPR program planning. If done rigorously, it leads to a program of continuous environmental improvement.

9.3.2.2 Considerations

Continuous improvement requires regular reporting: Manitoba's current EPR regime requires that PROs submit revised program plans about every five years for provincial review and approval. Both PROs and the provincial government support this kind of "review and revise" approach to EPR program improvements.

9.3.2.3 Manitoba Context

- *Single use plastics reduction:* Manitoba is the only province that has set (and reportedly achieved) a target for the reduction in the use of plastic carry out bags (50% reduction). There is an opportunity to both increase the bag reduction target (recognizing there is a federal proposal to ban take out plastic single use bags) and to expand province-wide actions on a wider range of single use plastics/other items (e.g. food take out containers, hot and cold drink cups, etc.)
- Manitoba's mandate is to be the cleanest and greenest province in Canada. To achieve this aspiration, the province will need to achieve greater diversion performance and define what the cleanest and greenest means and develop a provincial action plan to achieve it.

9.3.2.4 Risks

Complexity and time requirements: Setting targets, reporting against targets and continuous improvement towards future targets are all time and resource intensive.

9.3.2.5 Barriers

Competing targets: As noted above, different levels of government, different PROs and different producers commonly set different targets for a common set of materials. This is difficult to balance and bring to consensus.

9.3.2.6 Explore Opportunities for Partnership Synergies

- The Manitoba government and its partners must work together to achieve waste reduction targets and promote synergy amongst various players. The various players include industry, stewards, municipalities, NGOs, Indigenous communities, and the public. Everyone must play a role in its diversion and reduction. Creating forums, networks, innovation hubs, conferences, P&E educational campaigns and ongoing consultations can bridge the synergies and connects players that can partner together. The province can help support these connections by supporting ongoing regular forums for engagement and cross representation of perspectives.
- It is recommended that the Province participate actively in MARR events as a networking opportunity, with the option to add specific time or meetings to planned events to allow for open communication and outreach with stakeholders.
- The Province of AB and SK are both in early stages of consultation on 100% EPR for PPP, and working with them to explore options and lessons learned could be of benefit.
- There is an opportunity to learn from what B.C., ON and QC have already done to develop, research and test different EPR models, as well as from their negotiations with PROs. These provinces have significant legal and financial capacity within their municipal organizations, and it is recommended that the Province of Manitoba communicate with them to understand the challenges, barriers and lessons learned that they have encountered through the development of their programs.

9.4 Recommendations and Next Steps for Modernizing the WRAP Act[138]

The following seven sub-sections present recommended considerations specific to modernizing and updating the WRAP Act legislation and its regulations in Manitoba. They include:

[138] None of the information and recommendations provided in this section shall be construed as legal advice.

The final **subsection 9.4.7** is a commentary on next steps suggested for Manitoba.

9.4.1 Enhanced Targets – WRAP Act

Right now, the regulations under the *WRAP Act* impose accessibility targets for a number of materials (namely, Used Oil, Hazardous Materials and Electrical and Electronic Equipment), but no collection or management targets other than for beverage containers which have a 75% recovery target. The Minister, however, approves recovery targets for materials when approving PRO's program plans.

Uniform collection and recycling targets set at the level of a regulation are a crucial part of EPR programs in that they help assess whether the program is successful and help determine ways it could be improved. It has been observed that higher targets incentivize producers to innovate their collection and management practices.[139] Higher targets could also help address the stagnant recycling performance and economic inefficiencies of product stewardship observed in provinces such as Ontario and Québec.[140]

[139] Benabides, P. & Hargreave, P. "In Our Opinion: How EPR can target innovation", Resource Recycling. Retrieved from: https://resource-recycling.com/recycling/2020/12/08/in-our-opinion-how-epr-can-target-innovation/ .

[140] Valiante, U. "Review of the Environmental Law Center (Alberta) Society's report *Extended Producer Responsibility: Designing the Regulatory Framework".* Retrieved from: https://recycle.ab.ca/wp-content/uploads/2020/08/290720-Usman-ELC-EPR-Critique.pdf .

Setting performance targets at the level of a regulation for specific materials (e.g., PET), rather than broad categories of materials (e.g., plastic), also ensures that poor performing materials are identified and addressed. This creates a level playing field as poorly performing materials are not allowed to piggyback on the success of better performing materials. Producer fees can also better reflect the cost of collection and management of *their* packaging or products no matter their choice of PRO.

Manitoba now has a process-based approach to targets, which means that producers set targets as part of the plans they submit to the Minister for approval following consultations with stakeholders. The Minister then approves those plans. A better approach might be outcome-based, with the regulations to the *WRAP Act* setting enforceable targets that are uniform across producers rather than based on program plans. This reduces government oversight of PROs to ensure that they are complying with their government-approved plans. It also allows PROs the flexibility of measures to meet targets and innovate on approaches to the recovery of materials. Moreover, should a material category such as PPP have multiple PROs, there would be a level playing field in the assessment of producers' performance across PROs. Producers of similar materials would meet similar targets and pay similar fees despite their choice of PROs.

9.4.2 Performance Measurement – WRAP Act

Further to levelling the playing field among stewardship programs, the *WRAP Act* and/or the regulations should set out specific and uniform performance measurement approaches for the collection and management of materials obligated under the regulations. This would increase the transparency and accuracy of program or producer[141] evaluations, reduce municipal costs, and facilitate the enforcement of non-performing or poorly performing programs and/or producers.

For example, Europe has moved the calculation of recycling targets based on the weight of municipal waste that enters recycling, removing any losses of materials due to sorting or other preliminary operations. The European Waste Directive now also requires Member States to establish "adequate" monitoring and enforcement frameworks to ensure that those responsible under the EPR framework carry out their obligations, use financial means properly and report reliable data.[142]

9.4.3 Enforcement through the WRAP Act

A proper oversight, compliance and enforcement regime helps to ensure the success of EPR schemes. Enforcement also provides comfort to compliant producers that free riders, or those who fail to comply with EPR schemes in other ways (such as by disposing or incinerating rather than recycling materials at end-of-life) will be identified and held accountable.

[141] None of the information and recommendations provided in this section shall be construed as legal advice.
2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32018L0851.

There are a number of ways that EPR legislation can strengthen enforcement measures. The first and most important is having adequate definitions for words such as "recyclable" or "reusable", among other important terms used within the scheme of EPR laws. In Europe, many authorities have been hesitant to enforce EPR schemes because of the uncertainty around the interpretation of these words.[143]

Quantifiable and measurable targets also assist in the enforcement of EPR schemes, and in holding producers accountable for their outcomes. Targets provide clarity and certainty to producers' obligations with respect to each material, ensuring that penalties or fines can be imposed if targets are not met.

The legislative scheme should also consider who bears the legal liability for compliance. In B.C., for example, when producers join a PRO, the PRO effectively takes over producers' EPR obligations. This might mean that in B.C. producers may not have the legal liability for achieving material-specific recovery targets set in the approved PRO plan as these liabilities transfer to PROs when PROs assume operations on behalf of producers. On the other hand, Ontario has chosen a policy of individual producer responsibility. Although Ontario producers can sign up with PROs to discharge their obligations, they retain responsibility for ensuring that the PROs meet all their regulatory requirements.

In terms of enforcement measures, the best EPR schemes involve progressive compliance tools, allowing for escalated enforcement measures for violations. These graduated measures include notices, inspections, audits, compliance orders, administrative penalties and, lastly, prosecutions. The *WRAP Act* currently provides for inspections as well as fines or imprisonment to be imposed for contraventions of the Act upon prosecution but not for the other, less intrusive enforcement measures.

Manitoba can make significant progress toward enforcement by including administrative monetary penalties (AMPs) among the provisions of its EPR law. AMPs can be imposed without the necessity of bringing court cases and have been found to be a quick, clear and tangible way of addressing contraventions of regulatory schemes. They can be imposed by an administrative body rather than by a court.[144] They are primarily intended to maintain compliance or to regulate conduct.[145] At the same time, the Act could provide for the imposition of criminal sanctions such as fines or imprisonment to regulate conduct in more egregious cases.[146]

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[143] Benabides, P. & Hargreave, P. "In Our Opinion: How EPR can target innovation", Resource Recycling. Retrieved from: https://resource-recycling.com/recycling/2020/12/08/in-our-opinion-how-epr-can-target-innovation/ .

[143] Valiante, U. "Review of the Envi
Environmental Law Center (Alberta) Society's
report *Extended Produ*
cer Responsibility: D esigning the Regulatory Framework". Retrieved from: https://recycle.ab.ca/wp-content/uploads/2020/08/290720-Usman-ELC-EPR-Critique.pdf . //resource-recycling.com/recycling/2020/12/08/in-our-opinion-how-epr-can-target-innovation/ .

9.4.4 Harmonization – WRAP Act and EPR Legislation

Rather than requiring stewardship programs to demonstrate harmonization with the programs of other provinces when plans are submitted for approval to the Minister, harmonized requirements for stewardship programs should be provided in either the Act or regulations. This facilitates a level playing field among programs and assists in the enforcement of program requirements. The Canadian Stewardship Services Alliance has remarked that a level playing field is necessary to ensure that all EPR actors, including producers, program operators and service providers, comply with regulatory requirements.[147]

Furthermore, the harmonization of EPR programs increases their likelihood of success in the harmonized provinces. When multiple jurisdictions have EPR programs for the same products, producers find it less challenging to comply with EPR schemes, and this in itself might to a degree mitigate the problem of free-ridership.

Producers can also achieve economies of scale when EPR programs are aligned. The more EPR systems are aligned across jurisdictions, the easier the programs are to run, and lessons can be shared across provinces regarding improvements to programs. Data across EPR programs of different provinces can be compared and an assessment can be made on which programs are performing better and the reasons for their success can be determined. Due to different regulatory schemes and methods of implementation in different provinces, it is currently challenging to compare the performance of provincial (much less international) EPR programs.

9.4.5 Enhancement of Ministerial Institutional Capacity

As previously observed, proper compliance and enforcement measures ensure a level playing field among actors as well as increase the likelihood of the success of EPR programs. Where proper auditing and reporting practices exist that are backed up by penalties, it is less likely that producers will be able to underreport designated materials placed in the market and over report collection and management numbers thus skewing perceptions regarding the success of EPR programs.

Adequate and appropriate staffing is very important in ensuring oversight of waste management data and systems. Significant resources must also be expended in ensuring the registration of non-compliant or smaller producers and in identifying free riders. Registries with built-in data security measures must be assembled to collect sensitive business information. A graduated system of enforcement must be deployed where non-compliance exists or persists. All of these activities require significant institutional capacity and pose legitimate concerns regarding governments' oversight and evaluation of stewardship programs given ministries' limited institutional capacity (funding, staff, technology, etc.). Additionally, running EPR systems through a government department means that, instead of being administratively funded by industry, the oversight of EPR programs is funded by taxpayers.

For this reason, some jurisdictions, such as Ontario, have chosen to create a body independent of government and funded by the EPR system to act as a clearinghouse of information from producers and to evaluate producer performance. Such bodies have also been observed to assist in the identification of free riders, a growing issue particularly with the rise of online sales.[148]

The regulations to the *WRAP Act* currently require program plans to include provisions for "the payment of salaries and other costs of government for the administration and enforcement of [the] regulation and of the Act" in relation to the specific product categories.[149] Through the use of these provisions, Manitoba could increase its institutional capacity and cover its cost of oversight and enforcement of EPR programs. In Manitoba, it might also be preferable to undertake these functions in-house given the size of Manitoba's population as compared to Ontario's, which may not warrant having an independent body with significant administrative complexity to oversee the collection and management of materials in Manitoba.

Given the many benefits of increased institutional capacity, including enhanced oversight, enforcement and producer compliance with EPR programs, it is recommended that Manitoba assess the ways it could increase its institutional capacity to provide effective oversight of EPR programs, or alternatively consider whether it might be better served by assembling an independent body to provide such oversight and enforcement functions.

9.4.6 Introduction of a Data Clearinghouse

As previously observed, having a data registry is key to collecting data about EPR systems and to ensuring that all obligated producers are registered and reporting accurate data. Thus, data registries are key to reducing free-ridership within EPR programs as free-ridership creates inequalities in the EPR system. Free riders can be companies that register but underreport their obligations, thus not properly contributing to the costs of an EPR system. They can be companies that do not register or report their obligations. They can also be companies that exploit legal loopholes that permit them to escape registration and reporting obligations.[150]

In each of these scenarios, inequalities are created between freeriders and other producers in EPR system, and compliant producers are prone to losing faith in the EPR system or even encouraged to follow suit in free riding practices. These days, free-ridership is increasingly recognized as a problem with EPR systems given the rise of online sales.[151] A registry can be helpful in identifying obligated

[148] Organization for Economic Cooperation and Development, "Extended Producer Responsibility and the Impact of Online Sales" (2018). Retrieved from: https://www.oecd.org/environment/waste/policy-highlights-extended-producer-responsibility-and-the-impact-of-online-sales.pdf .

[149] See, for example, the Electrical and Electronic Equipment Stewardship Regulation, M.R. 17/2010 at s. 4(2)(h).

[150] Benabides, P. & Hargreave, P. "In Our Opinion: How EPR can target innovation", Resource Recycling. Retrieved from: https://resource-recycling.com/recycling/2020/12/08/in-our-opinion-how-epr-can-target-innovation/ .

[151] Organization for Economic Cooperation and Development, "Extended Producer Responsibility and the Impact of Online Sales" (2018). Retrieved from: https://www.oecd.org/environment/waste/policy-highlights-extended-producer-responsibility-and-the-impact-of-online-sales.pdf .

materials, observing and auditing producer behaviour to ensure accurate reporting, and also in protecting sensitive business information. The registry can also serve to more accurately calculate recycling rates and determine the success of EPR programs. The registry will also need enforcement powers to ensure compliance with all reporting requirements (see section on Enforcement). All of these entail substantial oversight functions that may be best administered by a data clearinghouse organization, rather than government.

Typically, the functions of organizations charged with oversight of the registry go well beyond oversight. In Québec, RÉCYC-QUÉBEC is the agency that administers the EPR system. In addition to registration, monitoring and some enforcement functions, RÉCYC-QUÉBEC also administers financial support programs for research and development on waste management as well as educational programs. [152] It also publishes a price index for recycled materials on a monthly survey of sorting centres. All these other tasks ensure the continued improvement and success of EPR programs.

9.4.7 Next Steps for Updates to the WRAP Act

As compared to a number of other provinces' legislative regimes for EPR programs, Manitoba's is a bit dated with the *WRAP Act* coming into force in 1990 and the current regulations establishing stewardship programs being as dated as 1997.[153] Thus, the *WRAP Act* is significantly more dated than B.C.'s Recycling Regulation, which was introduced in 2004, and Ontario's *Resource Recovery and Circular Economy Act, 2016* (the "*RRCEA*"), which was introduced in 2016. As a result, the *WRAP Act* has yet to incorporate a lot of the lessons learned and reflected in these other jurisdictions' EPR regimes.

The structure of the *WRAP Act* is such that, each time that Manitoba decides to add new materials to the list of materials obligated under its EPR system, it must enact a new regulation to do so. This is similar to Ontario's system, where a new regulation has to be enacted under the *RRCEA* each time that a new material is obligated under that act. This is different from the B.C. framework where materials are added in the schedules to the B.C. Recycling Regulation enacted under the B.C. *Environmental Management Act*. The B.C. Recycling Regulation seems to provide a more flexible approach to adding materials to the list of obligated ones under B.C.'s EPR regime. A similar approach might allow Manitoba to quickly add materials to its EPR system in order to more quickly respond to market changes.

The downsides of that approach, however, should also be considered when assessing the future of the *WRAP Act*. Firstly, having a law separate from the provincial environmental statute sets a specific tone and purpose for EPR regimes that might affect their treatment and enforceability. Secondly, should Manitoba chose to move away from program plan approvals by the Minister, it might require detailed regulations that set out targets for accessibility, collection and management of each materials category. B.C. does not need to have detailed regulations setting out these targets given that its Ministry of Environment continues to approve program plans.

[152] *Act respecting the Société québecoise de récupération et de recyclage*, CQLR, c S-22.01, art 18.
[153] As in the case of the Used Oil, Oil Filters and Containers Stewardship Regulation, M.R. 86/97.

Given the stark differences in the targets to be set, formulas to be generated or producers who may be obligated for different material categories (e.g., tires vs. PPP), it might also be worthwhile to have separate regulations setting different standards for different material categories. However, this might not be so necessary should Manitoba chose to continue with its current approach of having stewardship program plans approved by the Minister, rather than having uniform standards set by regulation. Any legislative changes to the *WRAP Act* or the regulations would have to pass through Manitoba's Legislative Assembly and approved by the Lieutenant Governor in Council of Manitoba (the entity currently responsible for making regulations under the *WRAP Act*).

Although this section provides an overview of the legislative and policy considerations that the Province of Manitoba should consider in improving the *WRAP Act*, the section is not intended to provide legal advice regarding Manitoba's next steps. As such, Manitoba should undertake a separate and in-depth analysis using the results of the consultation generated from this project as well as the legislative frameworks of other jurisdictions, while at the same time consulting legal counsel to determine the feasibility of replicating legislative elements present in other jurisdictions' laws in Manitoba.

This in-depth review will provide Manitoba with a clearer picture of the choices before it for implementing an EPR program that incorporates the best practices of other jurisdictions but is suitable to Manitoba's legal system. Following which, Manitoba can launch a stakeholder engagement process involving municipalities, producers, circular economy, indigenous and environmental NGO groups. In workshops with these sectors, it can place the choices generated from this internal policy and legal analysis to those stakeholders to obtain their feedback on the feasibility of certain policy or legislative choices for Manitoba.

At the same time as it engages those stakeholders, Manitoba can follow the lead of Ontario and Alberta in generating a discussion paper along with a public survey to obtain public feedback on its proposals.[154] Manitoba should also consider the framework for managing regulatory requirements and enhancing regulatory accountability under the *Regulatory Accountability Act*[155] and Part 6.1 of *The Statutes and Regulations Act*[156] in order to ensure a legally compliant legislative amendment process.

9.5 Conclusions

In conclusion, the province of Manitoba has the opportunity to modernize its provincial framework for waste diversion and recycling. Modernization of the frame work may begin with **re-writing the WRAP Act or, updating the Act** by adding more regulation and schedules in order to add more material and create nimbleness. In addition, a **provincial policy action plan and implementation timeline** will need to

[154] Recycling Council of Alberta, "Alberta Environment and Parks Announces Launch of EPR Engagement Plans" (2021). Retrieved from: https://recycle.ab.ca/news/alberta-environment-and-parks-announces-launch-of-epr-engagement-plans/ .
[155] C.C.S.M. c. R65.
[156] C.C.S.M. c. S207.

be developed in **consultation with all stakeholders**. A **Circular Economy and waste hierarchy** could be used as the base for establishing **guiding principles** of the provincial action plan or strategy.

The next steps will involve development of **discussion papers** for consultation on where the province should go**. Defining potential options and actions items with specific goals and timelines** would follow. In addition, **feasibility studies and research on specific policy tools** may need to be developed to better inform Manitoba throughout this process and **policy and strategy development**.

Appendix A

Stakeholder Consultation Interviews and Questionnaire List

List of Stakeholder Consultations

The following Manitoba stakeholders were consulted in preparation of this framework review.

- **Producer Responsibility Organizations**
  - Call2Recycle (Video Call)
  - Canadian Battery Association (CBA) (Video Call)
  - Canadian Beverage Container Recycling Association (CBCRA) (Video Call)
  - Canadian Wireless Telecommunications Association (CWTA) (Video Call)
  - CleanFarms Inc. (Video Call)
  - Electronic Products Recycling Association (EPRA) (Video Call)
  - Health Products Stewardship Association (HPSA) (Video Call)
  - Heating, Refrigeration And Air Conditioning Institute of Canada (HRACI) (Video Call)
  - Manitoba Association for Resource Recovery Corporation (MARRC) (Video Call)
  - Multi-Material Stewardship Manitoba (MMSM) and MMSM Board Members (Video Call)
  - Product Care Association (PCA) (Video Call)
  - Tire Stewardship Manitoba (TSM) (Video Call)
- **Municipalities**
  - Association of Manitoba Municipalities (AMM) (Video Call)
  - City of Brandon (Emailed Survey)
  - City of Flin Flon (Emailed Survey)
  - City of Morden (Emailed Survey)
  - City of Portage la Prairie (Emailed Survey)
  - City of Steinbach (Emailed Survey)
  - City of Thompson (Emailed Survey)
  - City of Winnipeg (Emailed Survey and Video Call)
  - Crane River Community Council (Emailed Survey)
  - Rural Municipality of Alonsa (Emailed Survey)
  - Rural Municipality of Argyle (Emailed Survey)
  - Rural Municipality of Armstrong (Emailed Survey)
  - Rural Municipality of De Salaberry (Emailed Survey)
  - Rural Municipality of Ethelbert (Emailed Survey)
  - Rural Municipality of Grahamdale (Emailed Survey)
  - Rural Municipality of Harrison Park (Emailed Survey)
  - Rural Municipality of Louise (Emailed Survey)
  - Rural Municipality of Piney (Emailed Survey)
  - Rural Municipality of Riding Mountain West (Emailed Survey)
  - Rural Municipality of Rockwood (Emailed Survey)
  - Rural Municipality of St, Andrews (Emailed Survey)
  - Rural Municipality of Stanley (Emailed Survey)

- Town of Dauphin (Emailed Survey)
- Town of Lac du Bonnet (Emailed Survey)
- Town of Minnedosa (Emailed Survey)
- Town of Souris (Emailed Survey)
- Village of Dunnottar (Emailed Survey)
- Waterhen Community Council (Emailed Survey)
- Winnipeg Metro Region (Video Call)

- **Private Sector, Non-Government and Industry Organizations**
  - Bell (Video Call)
  - Green Action Centre (Video Call)
  - Manitoba Association of Regional Recyclers (MARR) (Video Call)
  - Manitoba Eco-Network (Emailed Survey)
  - Mother Earth Recycling (Video Call)
  - Natural Resource Institute (Video Call)
  - Winpak (packaging manufacturer) (Emailed Survey)
- **Federal Government, Indigenous Organizations, Initiatives and Communities**
  - Centre for Indigenous Environmental Resources (Video Call)
  - Green Action Centre/Pathfinders (Video Call)
  - Indigenous Services Canada (ISC) (Video Call)
  - Randy Webber, Consultant (Video Call)

The following stakeholders were contacted. No response was received from:

- **Private Sector, Non-Government and Industry Organizations**
  - Consumer Association of Canada – Manitoba Chapter (Emailed Survey)
  - Keystone Agriculture Producers (Emailed Survey)
- **Service Providers**
  - Green for Life Environmental (GFL) (Emailed Survey)
  - Miller Environmental (Emailed Survey)
  - Waste Connections (Emailed Survey)
- **Federal Government, Indigenous Organizations, Initiatives and Communities**
  - St. Thersea Point First Nation (Emailed Survey)
  - Berens River Chief and Council (BRCC) (Emailed Survey)
  - Southeast Resource Development Council (SERDC) (Emailed Survey)
  - Wasagamack First Nation (Phone)
  - Garden Hill First Nation (Phone)
  - Brokenhead Ojibway Nation (Phone)

Producer Responsibility Organization (PRO)
Interview Questions

Q #	Topic	Question
1	KPIs	What KPIs (in addition to those you report) would be of benefit to the program's success and or improvement?
2	Public Awareness and Participation	How is program public awareness and participation measured and reported? What are the KPIs used?
3	Recovery Rates	Does the program plan require a recovery rate or diversion rate? What are the program's targets? Is contamination an issue?
4	Program Funding	Does industry cover 100% of the program costs? When was the funding formula last reviewed or updated? How effective is it for future expansion?
5	Municipal Costs	If applicable, are municipal costs for recovery of program's materials compensated? How is the amount determined?
6	Enhancement and Expansion	What other materials, new sectors and or processing technologies should be added to the program? What are the challenges?
7	EPR Regulatory Framework	Compared to other provincial jurisdictions that rely on the EPR model, what are some of the strengths and weaknesses of Manitoba's regulatory framework and overall approach to EPR?
8	Opportunities	Can you identify positive aspects (strengths) of EPR programming in Manitoba?
9	Barriers	Can you identify any barriers negatively impacting the effectiveness of EPR programming in Manitoba?
10	Government	How can the Manitoba government and the waste diversion and recycling sector support each other to achieve better waste diversion?
11	Stewardship/ PROs/ Industry	How can other stewardship organizations and the waste diversion and recycling sector support each other to achieve better waste diversion?
12	Municipal	What can be done to support Manitoba municipalities in diverting more designated materials from landfills?
13	Remote, Northern and Indigenous Communities	What can be done to make Manitoba's EPR programs more accessible to remote, northern and Indigenous communities? How can remote, northern and Indigenous communities and the waste diversion and recycling sector support each other to achieve better waste diversion?
14	Other Stakeholders	How can other waste diversion and recycling stakeholders and the waste diversion and recycling sector support each other to achieve better waste diversion?
15	Program Improvements	Looking ahead, what features can be added to the current and future EPR programs of Manitoba to improve them?
16	Participation	What can be done to support Manitobans to divert more designated materials from landfills?

Municipality Interview Questions

Q #	Topic	Question
1	MB Support	How can the Manitoba government better support waste diversion and collection of designated materials in municipalities?
2		What can be done to make Manitoba's EPR programs more accessible to municipalities?
3		How can municipalities and the waste diversion and recycling sector support each other to achieve better waste diversion?
4		Are there any challenges with service provider contracts and the EPR programs?
5		Does the WRARS levy act as a disincentive to landfill and promote waste diversion?
6	Program Improvements	Looking ahead, what features can be added to the current and future EPR programs of Manitoba to improve them?
7		What materials would you like to see added to the current programming?
8	Participation	What can be done to support municipalities to divert more designated materials from landfills?
9		Do you think that the incentives provided by stewardship programs (e.g. tires), improve participation?
10		Who currently manages the waste diversion program in communities?

Private Sector, Non-Government and Industry Organizations
Interview Questions

Q #	Topic	Question
1	EPR Regulatory Framework	Compared to other provincial jurisdictions that rely on the EPR model, what are some of the strengths and weaknesses of Manitoba's regulatory framework and overall approach to EPR?
2	Opportunities	Can you identify some positive aspects (strengths) of EPR programming in Manitoba? What are the opportunities for your specific programming?
3	Barriers	Can you identify any barriers negatively impacting the effectiveness of EPR programming in Manitoba? What are the barriers for your specific programming?
4	Municipal	What can be done to support Manitoba municipalities in diverting more designated materials from landfills?
5	Program Improvements	Looking ahead, what features can be added to the current and future EPR programs of Manitoba to improve them?
6	Participation	What can be done to support Manitobans to divert more designated materials from landfills?

Federal Government, Indigenous Organizations, Initiatives and Communities
Interview Questions

Q #	Topic	Question
1	MB Support	How can the Manitoba government better support waste diversion and collection of designated materials in First Nation communities?
2		How is the current backhaul program serving the needs of individual communities?
3		What can be done to make Manitoba's EPR programs more accessible to remote, northern and Indigenous communities?
4		How can remote, northern and Indigenous communities and the waste diversion and recycling sector support each other to achieve better waste diversion?
5	Program Improvements	Looking ahead, what features can be added to the current and future EPR programs of Manitoba to improve them?
6		What materials would you like to see added to the current programming?
7	Participation	What can be done to support First Nations communities to divert more designated materials from landfills?
8		Do you think that the incentives provided by stewardship programs (e.g. tires), improve participation?
9		Who currently manages the waste diversion program in communities?

Service Provider
Interview Questions

Q #	Question
1	How effective is the landfill levy in diverting waste?
2	Are there materials you see currently in the waste disposal stream that you think would be well suited to diversion through a regulated extended producer responsibility program (EPR)?
3	What is the best way to collect any materials not currently regulated as an EPR program (or regulated but not yet collected)?
4	What do you think are the main barriers to collecting/diverting additional materials?
5	Are there materials currently in an EPR program that you think are not well suited to being regulated through an EPR program?
6	Do you have any other comments related to potential future expansions of product definitions, products, or product categories for waste diversion through existing or new EPR programs?
7	How can the government and / or stewardship organizations support municipalities in enhancing their waste diversion?
8	How can the government and / or stewardship organizations support the ICI Sector in enhancing their waste diversion?

Appendix B

Public Consultation Survey Results Report

Recycling in Manitoba

Survey Results

March 3, 2021

Landmark Planning & Design Inc.

DILLON CONSULTING

Manitoba

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INTRODUCTION

As part of a team of consultants, Landmark Planning & Design was retained by the Province of Manitoba to survey Manitobians about their experience and views on recycling, composting and waste diversion in Manitoba.

Over the last few decades, the Government of Manitoba has made specific efforts to improve waste management practices within the province. However, as waste materials evolve, so does the policy landscape and the technologies available to manage current and emerging waste streams. Manitoba's waste diversion and recycling framework needs to keep pace with this change. This is an opportune time to reflect on current practices and to explore opportunities for strengthening waste management systems in order to divert even more waste from landfills. This project reviewed the current waste diversion and recycling framework in Manitoba to identify its strengths and gaps and recommend options to modernize and improve the current framework. Any changes to the legislative and programming framework would affect the way municipalities deliver waste management and recycling programming. To ensure that the recommendations are informed and forward-looking, stakeholders including municipalities were consulted.

METHODOLOGY

- As part of a team of consultants, Landmark Planning & Design was retained by the Province of Manitoba to survey Manitobans about their experience and views on recycling in Manitoba.
- The survey was conducted between January 21st and February 10th, 2021. The survey was conducted using an online questionnaire. A total of 1624 people visited the survey which saw 1052 registered contributors.
- The survey was designed by Landmark Planning & Design, in collaboration with Dillon Consulting and the Province of Manitoba.
- Responses will be used to help develop a set of recommendations for improving waste diversion and recycling programming in Manitoba.

KEY FINDINGS

- 71% of respondents indicated that they always recycle.
- In regards to barriers to recycling/recycling more, the majority of respondents noted uncertainty about what can be recycled (53%) and hesitancy regarding how to prepare / clean items to be recycled (41%).
- Further commentary was encouraged regarding barriers to recycling (or recycling more). Of the 26% providing additional feedback, the top reasons for those not recycling were a lack of options for recycling programs in Manitoba (26%), lack of convenience for specific materials (i.e. not provided at their place of residence) (19%), and a lack of confidence that what is being collected actually

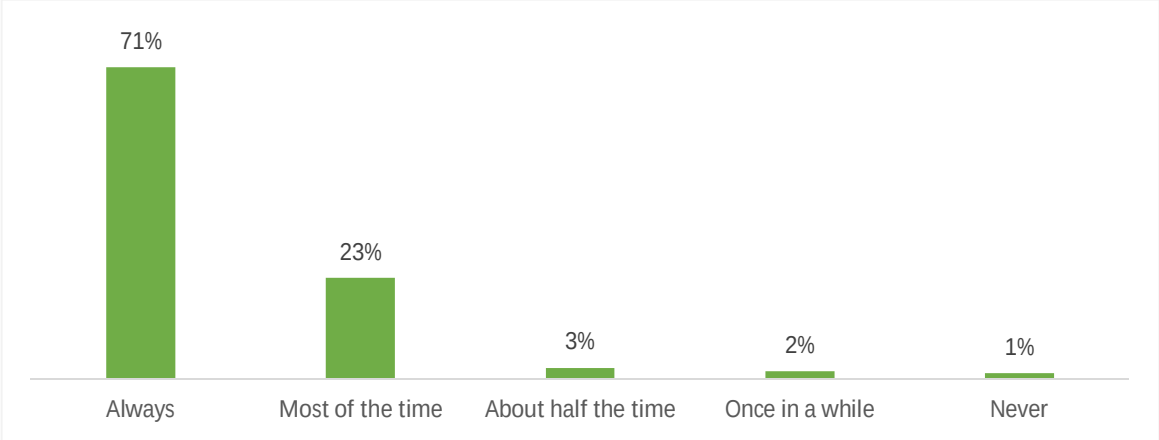
gets recycled in Manitoba (17%). There is a strong sentiment from respondents who don't recycle that most of what is put into blue bins ends up in the landfill.

- In many cases, the core reason that respondents don't recycle a specific item is related to a lack of awareness of specific recycling programs in their communities, followed closely by a lack of information, and simply not having that item to recycle in their possession.
- When asked what other materials should be included in the Province's recycling programme, the top materials provided by respondents were plastics (specifically soft plastics like grocery bags, black plastics like coffee cup lids, and other larger plastic items like toys or agricultural materials), compost (specifically from household waste streams), glass (including beverage containers and broken glass) and Styrofoam (specifically food packaging). Many respondents also indicated there should be a collectible deposit for glass and/or plastic containers, similar to other provinces to further divert waste from landfills.
- Respondents were split on whether they compost or not (roughly 49.6% say they compost and 50.4% say they do not. For those that do compost, the vast majority do so because it diverts waste and is good for the environment and because the use it in their gardens. For those that don't a wide range of reasons were provided, with the most being a lack of education on how to compost, nuisances (including smells and pests), and limitations due to living arrangements (either lack of space or not being allowed because they live in apartments or condominium housing).
- Roughly 41% of respondents indicated they were either very satisfied or satisfied with the waste diversion and recycling programming available in their community.
- Roughly 34% of respondents indicated they were either dissatisfied or very dissatisfied.

SURVEY RESULTS

General Questions

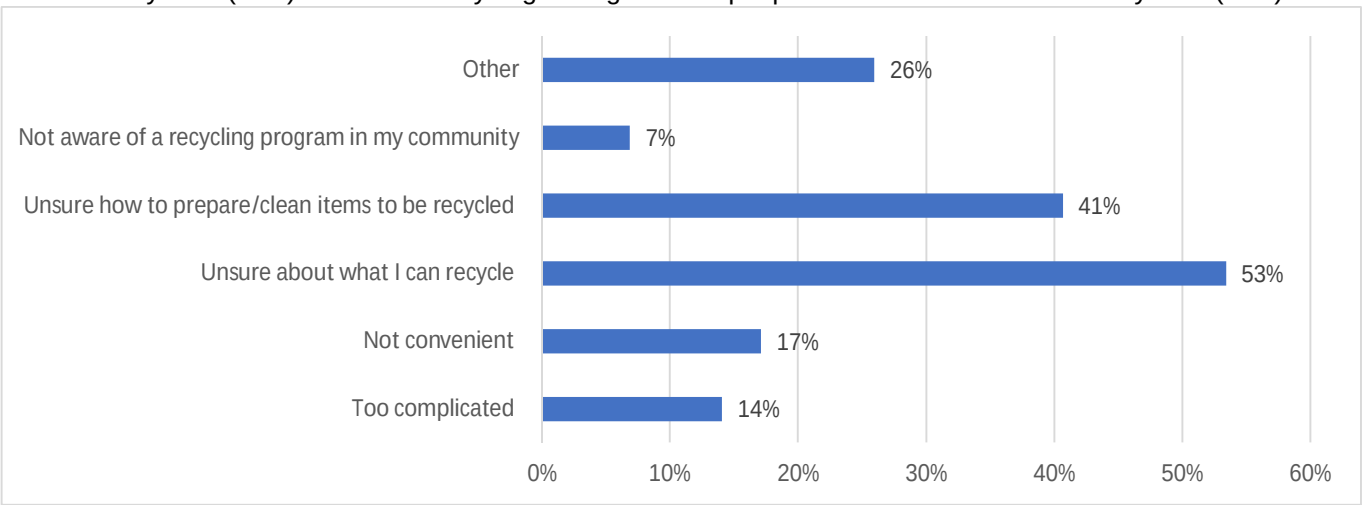
How often do you recycle?



Base: n=1052

What things discourage or prevent you and others in your household from recycling or recycling more? Select all that apply.

In regards to barriers to recycling/recycling more, the majority of respondents noted uncertainty about what can be recycled (53%) and hesitancy regarding how to prepare / clean items to be recycled (41%).



Base: 1052 submissions

Many respondents indicated there were other issues that discouraged them or members of their household from recycling or recycling more (26%).

Respondents were encouraged to provide comments explaining their choice. Roughly 254 comments were logged for this question. Answers were coded and ten key themes emerged. The following table provides a breakdown of these responses in descending magnitude.

Theme	Percentage of Respondents
Lack of options	26%
Not discouraged	24%
Convenience	19%
Lack of confidence	17%
Unsure what can be recycled	6%
Lack of incentives	4%
Waste of water	2%
Awareness	2%
Contamination	1%
Covid-19	<1%

A large majority of respondents indicated there is a distinct lack of options for recycling in Manitoba. Comments indicated other provinces have additional programs that allow them to recycle more items, or more strict control over the items that are allowed to be sold in store, thereby encouraging recycling as a whole.

"It's discouraging to hear/read that recycled items are sometimes/often landfilled because of contamination or because there isn't a buyer (market) for the recyclables."

"There are items that should be recycled, but cannot be and consequently end up in the garbage."

A significant number of respondents indicated that they are not discouraged from recycling, and that they recycle all that they can (60).

Additional comments were also received reiterating that recycling was not convenient for the respondent (47), which causes them to be further discouraged. These comments range from rural respondents who have to travel to recycle, to those who live in apartment buildings where recycling is shared in bins that can often be full.

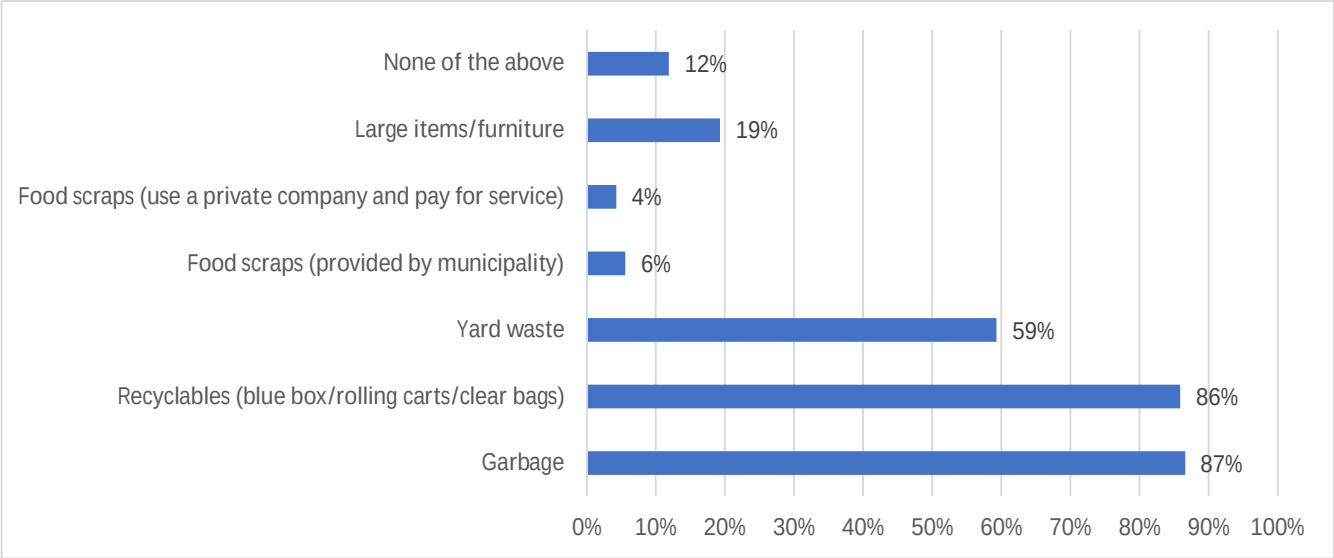
Another large portion of respondents (43) indicated they have a lack of confidence in the recycling system in Manitoba, which discourages them from recycling or recycling more. Specifically, many respondents noted that much of what we recycle often ends up in the landfill anyway.

"We question whether our recycling is being recycled and worry it is ending up in landfill despite our efforts to recycle."

"I lack confidence the items I am recycling will be recycled -- there are next to no provincial recycling plants that produce recycled goods and our reliance on willing 'buyers' elsewhere does not mean items are recycled, rather than dumped."

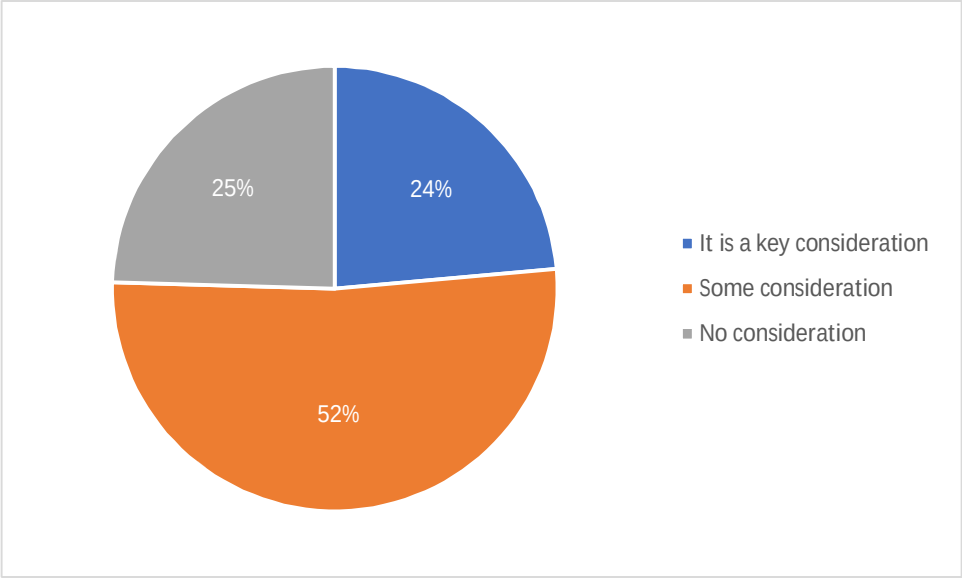
"Most of it ends up in the garbage anyway. I just cut out the middle-man."

Does your community have curbside collection of the following? Select all that apply.



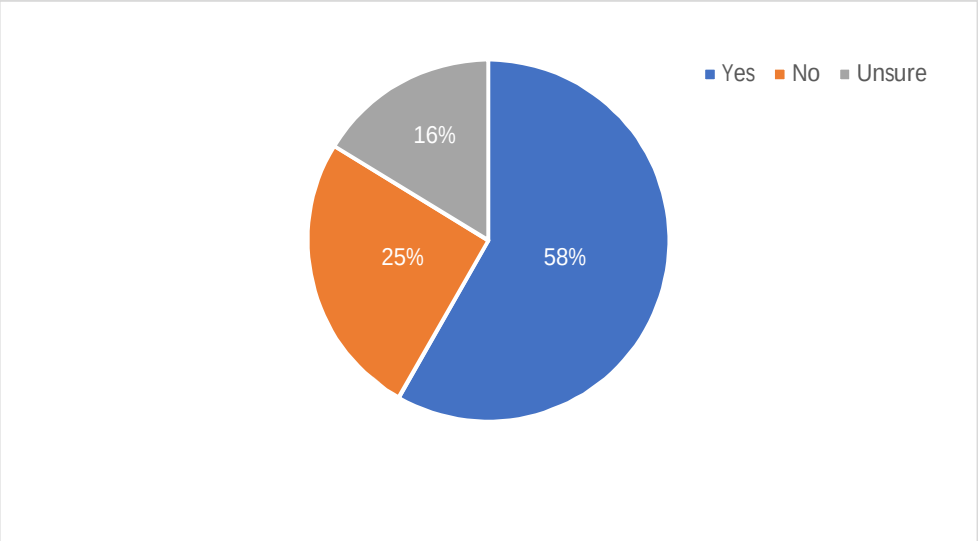
Base: 1052 submissions (2871 selections)

When buying a product, how much do you consider the ability of the product and its packaging to be recycled or repurposed?



Base: 1051 submissions

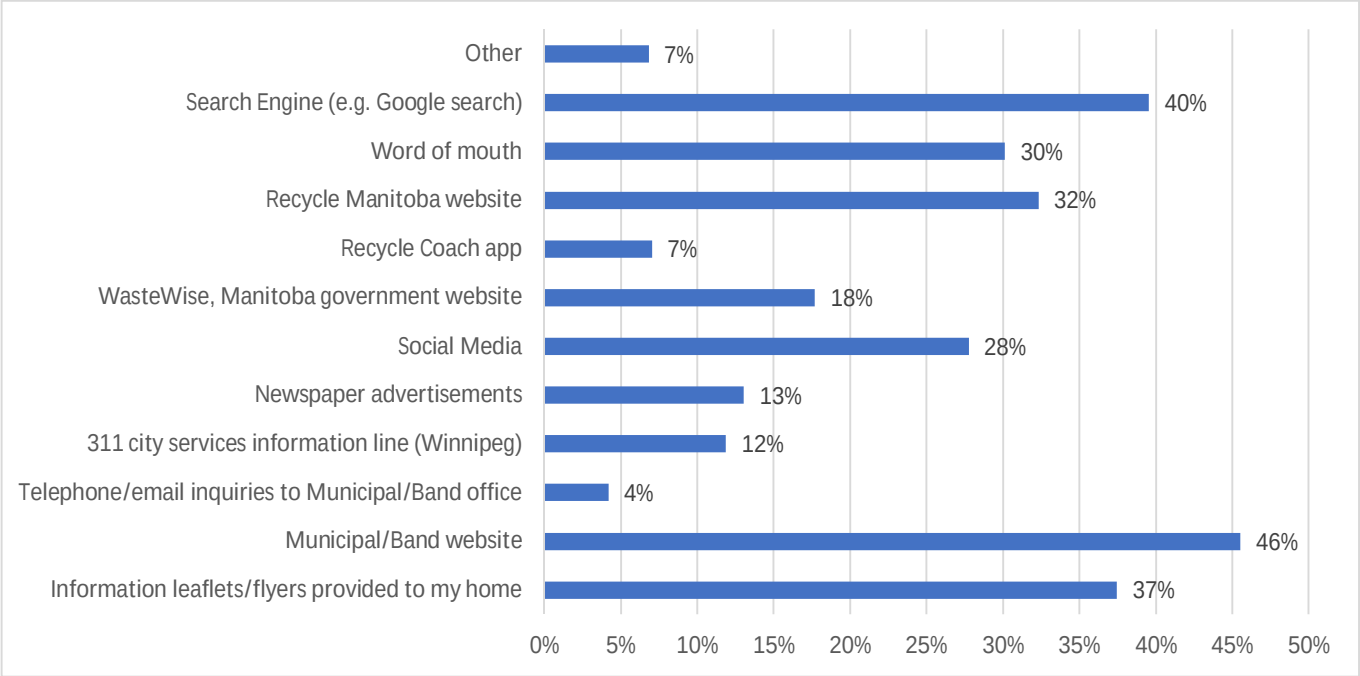
Environmental handling fees (EHFs) are often added to the purchase price of products. EHFs are not a tax or a refundable deposit, these fees are used to cover the direct costs associated with the collection, recycling and/or safe disposal of products once they reach the end of their useful life. In general, are you supportive of the customer paying environmental handling fees on the purchase of products?



Base: 1052 submissions

How do you access information on recycling and waste diversion programs in your community? Select all that apply.

The highest reported method for accessing information on recycling and waste diversion include municipal websites (46%), following closely by search engines (e.g. Google) (40%), and information leaflets/flyers provided to respondents homes (37%).



Base: 1052 submissions

For the 7% of respondents that selected 'Other', additional sources of information on recycling and waste diversion programs include:

- Websites like the City of Winnipeg, Brady Landfill, Miller Environmental, Urban Mine
- Television commercials
- Billboards
- Recyclepedia from SimplyRecycle.ca
- Winnipeg Public Library Green Choices Info Guide
- NGOs like the Green Action Centre or the Manitoba Eco Network
- University Sustainability Office
- Cottager newsletters
- Word of mouth from friends and family members who work in the industry
- Direct advertising on garbage / recycle bins throughout the city
- Conversations with staff at transfer stations or landfills

Recyclable Products and Materials

There are a number of industry-funded stewardship programs operating in Manitoba. These programs provide recycling and safe disposal options for a wide-range of everyday products and materials. Are you aware that the following items can be recycled or safely disposed of?

Product or Material	Yes	No	Unsure
Tires	70%	20%	10%

Packaging and Printed-Paper Materials	95%	1%	2%
Beverage Containers	96%	2%	3%
Electrical and Electronic Waste	85%	8%	7%
Cell Phones	76%	14%	10%
Paint, Fluorescent Lightbulbs, Household Hazardous Waste	74%	16%	10%
Batteries	83%	11%	6%
Used oil, Filters, and Antifreeze	38%	36%	26%
Expired and Unused Medications	57%	30%	13%
Mercury Containing Thermostats	29%	45%	26%
Automotive Lead Acid Batteries	65%	22%	14%

Where have you seen advertisements or notices for programs to recycle the following products or materials? Select all that apply.

Product or Material	Website or App	Poster / Flyer	Newspaper	TV / Radio	Social Media	None
Tires	13%	8%	7%	10%	8%	54%
Packaging and Printed-Paper Materials	19%	21%	13%	24%	17%	6%
Beverage Containers	18%	22%	12%	27%	17%	5%
Electrical and Electronic Waste	19%	12%	9%	22%	13%	24%
Cell Phones	17%	12%	5%	14%	11%	42%
Paint, Fluorescent Lightbulbs, Household Hazardous Waste	18%	13%	9%	14%	8%	37%
Batteries	16%	18%	7%	13%	11%	35%
Used oil, Filters, and Antifreeze	14%	12%	8%	13%	7%	46%
Commercial and Agricultural Pesticide and Fertilizer Containers	8%	6%	5%	6%	3%	72%
Expired and Unused Medications	11%	11%	5%	14%	5%	54%
Mercury Containing Thermostats	6%	3%	2%	3%	2%	85%
Automotive Lead Acid Batteries	12%	10%	6%	8%	5%	57%

Do you recycle the following materials?

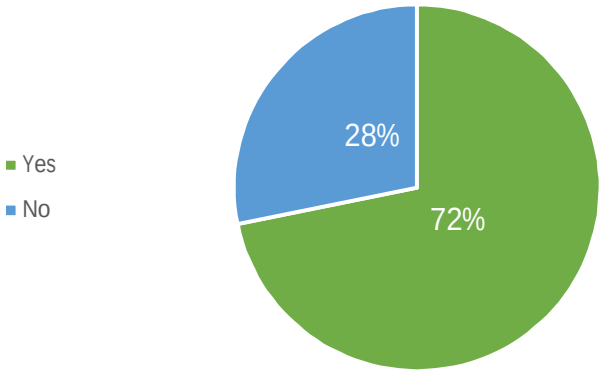
Product or Material	Yes	No
Tires	72%	28%
Packaging and Printed-Paper Materials	98%	2%
Beverage Containers	99%	1%
Electrical and Electronic Waste	79%	21%
Cell Phones	46%	54%
Paint, Fluorescent Lightbulbs, Household Hazardous Waste	62%	38%
Batteries	71%	29%
Used oil, Filters, and Antifreeze	71%	29%
Commercial and Agricultural Pesticide and Fertilizer Containers	11%	89%
Expired and Unused Medications	49%	51%
Mercury Containing Thermostats	13%	87%

Automotive Lead Acid Batteries	63%	37%

Base: 1038 submissions

Tires

Do you recycle tires (e.g. automotive, off-road or bicycle)?



Of those that indicated they recycle tires, 72% indicated they leave their tires with a service provided with the remaining 28% take them to a collection/depot site.

The top three reasons respondents indicated as to why they do not recycle tires included not having tires to recycle (65%), not being aware of a program in their community (38%), and a lack of information (18%).

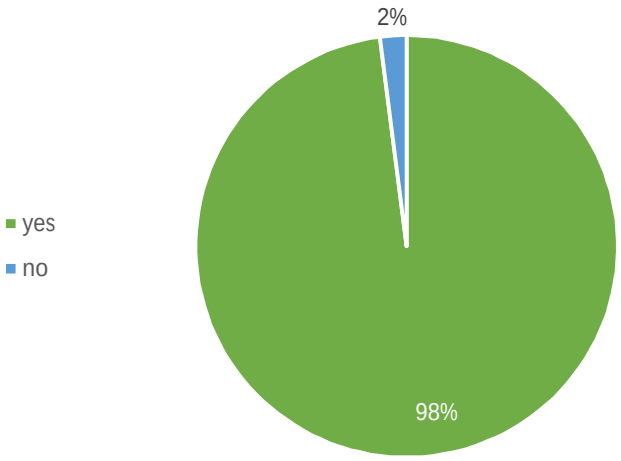
Over half of respondents (52%) indicated they only recycle tires once every few years, with 37% indicating they only recycle tires less than every few years or never.

Respondents recycle their tires at a depot or collection site typically travel 11-30 minutes (52%) with 5 to 10 minutes coming in second with 29%.

For those who recycle tires, the convenience of the location and hours of operation for said facilities are somewhat convenient (40%) followed by very convenient (33%).

Blue Box Materials (Packaging and Printed Paper Products)

Do you recycle packaging and printed paper commonly known as blue box materials (e.g. paper and plastic packaging, glass and metal cans and jars, carboard boxes)?



Of the vast majority of respondents who indicated that they recycle blue box materials (98%), roughly 85% of those have curbside pickup, and the remaining 15% drop their materials off at a depot or collection site.

The top reason for not recycling beverage containers was lack of convenience (48%) and not being aware of a program (48%).

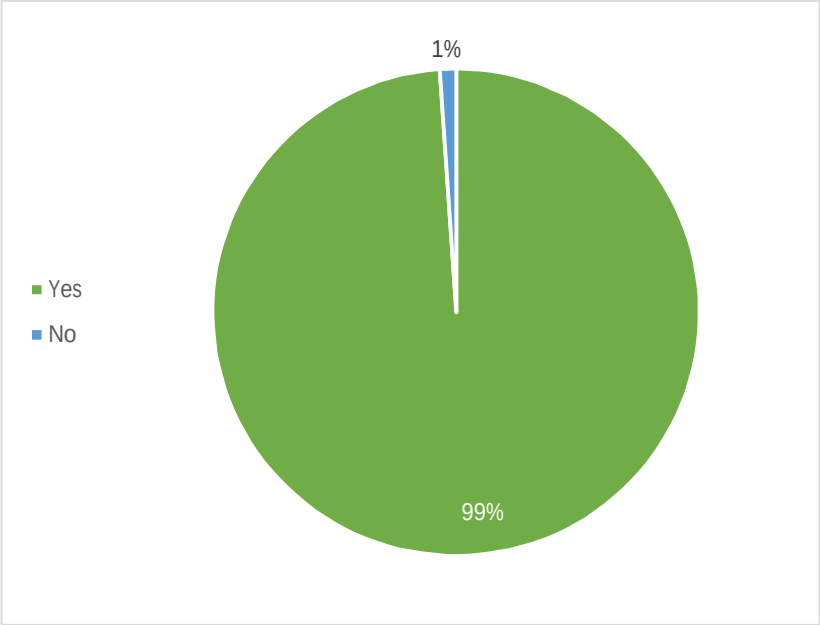
When asked how often respondents clean out containers before recycling them, 53% indicated that they always clean out containers, 32% indicating they clean them out very often, 12% indicating they do it sometimes and only 4% said they either rarely or never clean containers before recycling them.

Of the 154 respondents who travel to a depot or collection site to recycle their blue box materials, 50% only had to travel 10 minutes or less, with a larger portion of respondents (40%) travelling 11 to 30 minutes. Respondents that are travelling are usually going weekly (49%) or monthly (34%) to recycle blue box materials.

There was a wide range of convenience for travelling to recycle blue box materials, with the largest proportion indicating it was somewhat convenient at 34%, with some feeling they were extremely convenient and very convenient at 25% and 24% respectively.

Beverage Containers

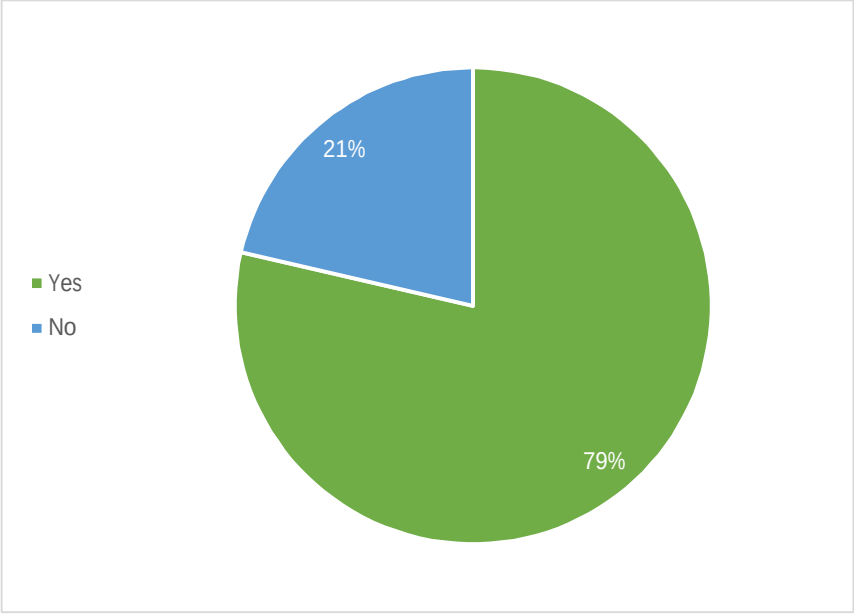
When away from home or at a public event, do you typically recycle beverage containers when a collection bin is available (e.g. plastic and glass bottles, aluminum cans)?



Of those that indicated they do not recycle beverage containers (13), ten respondents said it wasn't convenient and three respondents indicated they couldn't be bothered.

Electronic Waste

Do you recycle electronic waste (e.g. televisions, computers)?



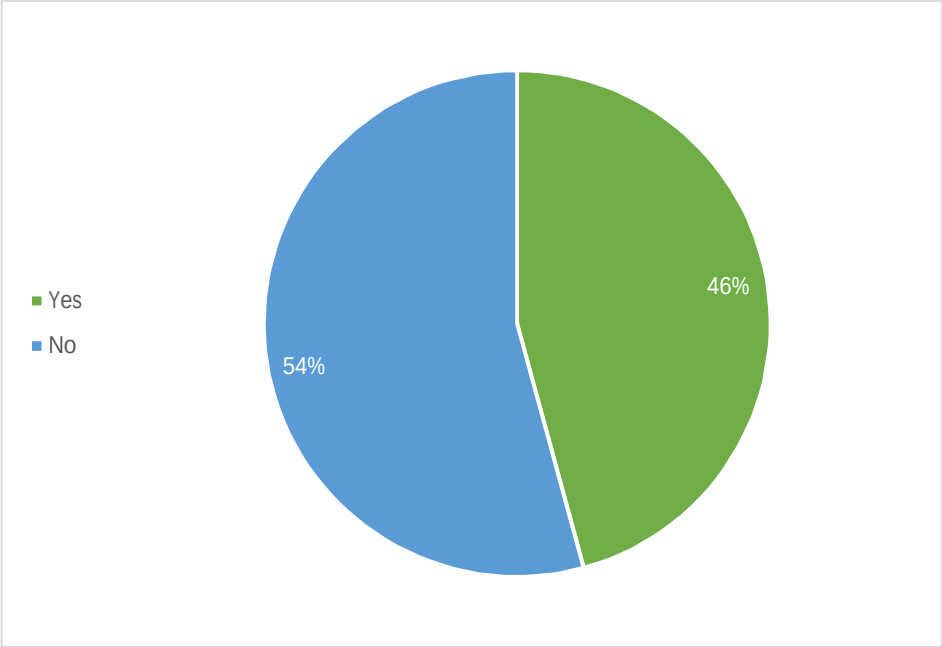
The top three reasons respondents reported for not recycling e-waste include not being aware of a program in their community (57%), lack of information (38%), and not having electronics to recycle, (31%).

Of the 816 respondents who indicated they recycle e-waste, 39% indicated they recycle e-waste once every few years, with an additional 37% indicating they do about once a year. A smaller proportion recycles e-waste several times at year (14%) with even less indicating they do so less than every few years or never (11%).

For those that recycle e-waste a drop-off location, 53% of respondents say they were 11 to 30 minutes from home, with the next largest proportion being 28% being 5 to 10 minutes away. 37% of respondents indicated the location of drop-off locations for e-waste to be somewhat convenient, with another 29% indicating they are very convenient.

Cell Phones

Do you recycle cell phones?



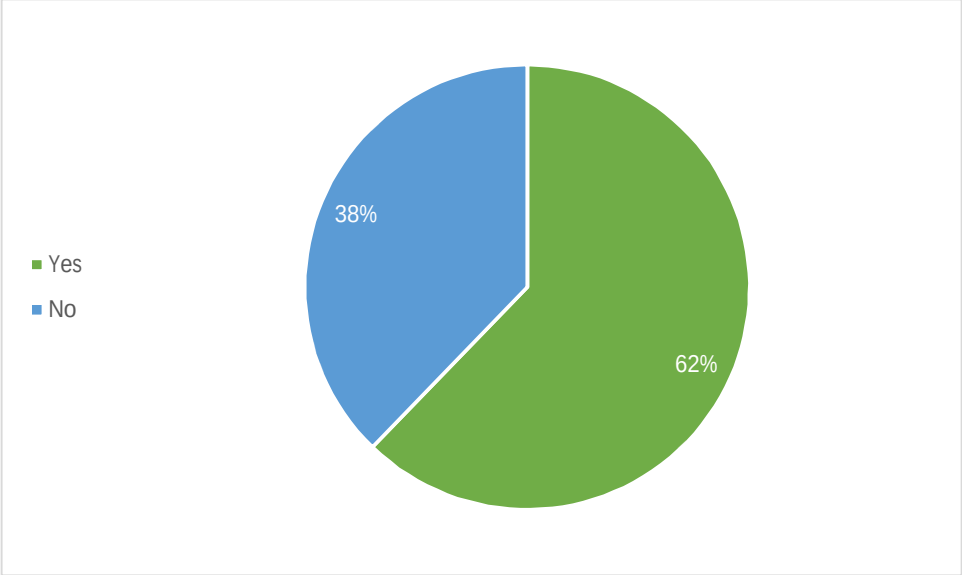
The top three reasons respondents reported they do not recycle cell phones were not being aware of a program in their community (44%), not having cell phones to recycle (40%) and a lack of information (32%).

For those that do recycle cell phones, current travel times to a drop-off location range from 11 to 30 minutes (48%) to 5 to 10 minutes (27%) and less than 5 minutes (11%). Drop off locations are also considered somewhat convenient (38%) and very convenient (34%).

Of those that indicated they recycle their cell phones, most are only recycling them once every few years (67%) with another 30% indicating they only recycle a cell phone less than every few years.

Paint, Fluorescent Lightbulbs and Hazardous Waste

Do you recycle paint, fluorescent lightbulbs and household hazardous waste?



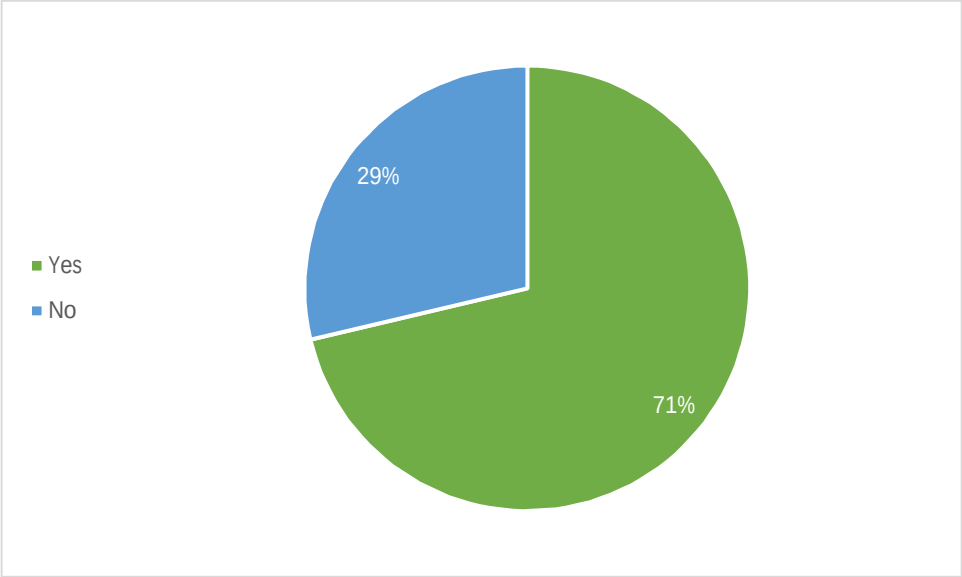
The top three reasons respondents indicated they do not recycle paint, fluorescent lightbulbs and household hazardous waste were that respondents were not aware of a program in their community (56%) followed by not having items to recycle (39%) and a lack of information (38%).

For those that do recycle paint, fluorescent lightbulbs and hazardous waste and take it to a drop off location, current travel times range from 11 to 30 minutes (58%), to 5 to 10 minutes (23%) and more than 30 minutes (13%). Drop off locations are considered somewhat convenient (38%), very convenient (31%) or not so convenient (15%).

Of those that indicated they do recycle the items, most participants are doing so once a year (43%) or every few years (35%).

Batteries

Do you recycle batteries?



For the 71% of respondents who indicated they recycle batteries, they are taken to a depot or collection site.

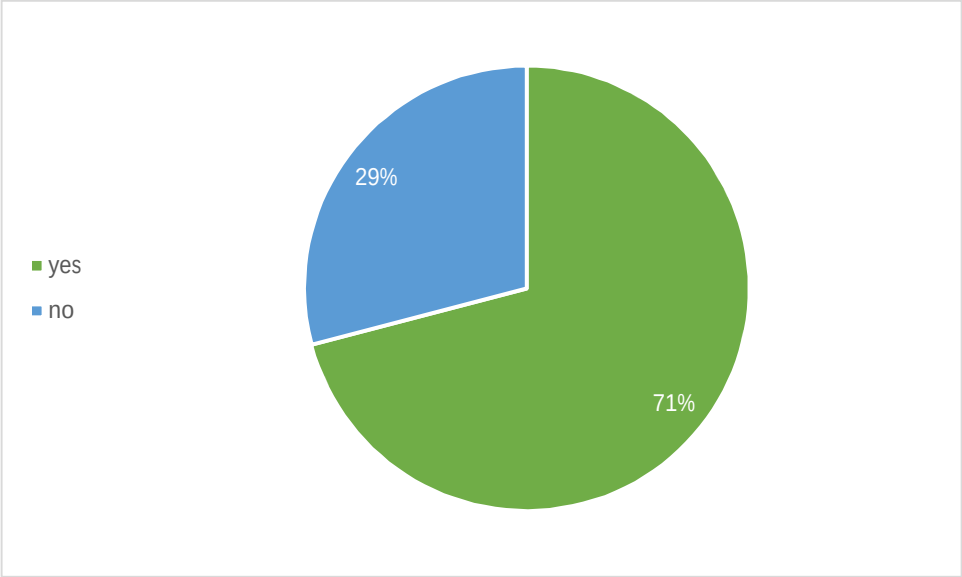
The top three reasons respondents do not recycle batteries were that respondents were not aware of a program to recycle batteries in their community (59%), followed by a lack of information (34%) and recycling being inconvenient (31%).

For those that indicated they do recycle batteries, 46% indicate their distance to a drop off location is between 11 and 30 minutes, 28% indicate it is between 5 and 10 minutes, and 15% say less than 5 minutes. 35% of respondents indicate the location to recycle batteries is somewhat convenient, and 33% indicate they are very convenient.

A high proportion of respondents (43%) indicate they recycle batteries about once a year, with 33% indicating they recycle batteries several times a year, and 19% doing it once every few years.

Used Oil, Oil Filters and Antifreeze

Do you recycle oil, oil filters and antifreeze?



Of the 71% of respondents who do recycle their used oil, oil filters and antifreeze, 39% take them to a depot or collection site and 61% leave them with a service provider.

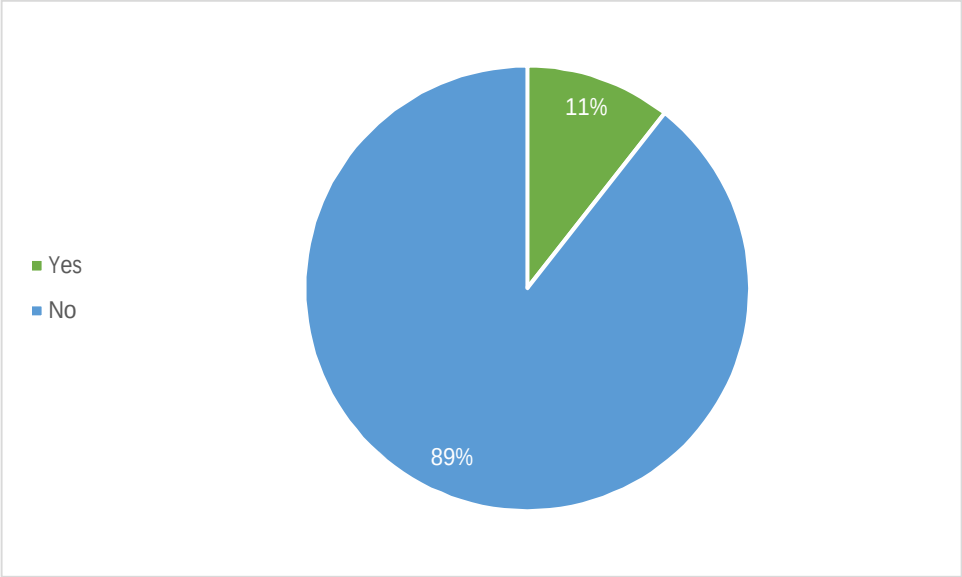
The top three reasons respondents do not recycle used oil, oil filters or antifreeze were that they do not have the items to recycle (67%), followed by not aware there was a program for those items in their community (32%) and lack of information (22%).

For those that indicated they take their oil, oil filters and antifreeze to a depot or collection site, 54% indicate it's between 11 and 30 minutes away, 28% say its between 5 and 10 minutes away and 9% indicate its either less than 5 minutes or more than 30 minutes away. 40% of respondents feel the distance is somewhat convenient, with 31% indicating it's very convenient.

When asked how frequently respondents recycle these products, 52% indicate they do so about once a year, with 23% doing so several times a year and 21% once every few years.

Agricultural Pesticide and Fertilizer Containers

Do you recycle agricultural pesticide and fertilizer containers?



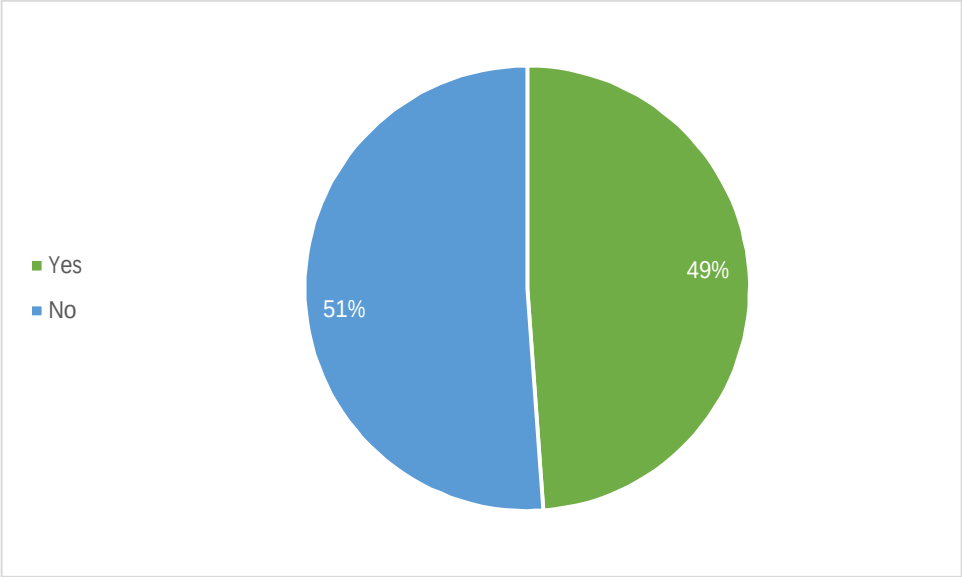
The overwhelming reason why participants reported they do not recycle agricultural containers was that they do not have containers to recycle (93%), with not being aware of any programs (9%) and lack of information (5%) also being reasons.

For those that do recycle these products, 55% of respondents are within 11 to 30 minutes of a drop off location, with a further 26%^ within 5 to 10 minutes and 10% more than 30 minutes. 37% of respondents reported drop off locations are very convenient, with another 35% saying they are somewhat convenient and 15% saying they are extremely convenient.

For those that recycle agricultural containers, 35% do it about once a year, 31% once every few years and 21% less than every few years.

Expired Medications

Do you return unused or expired medications to your pharmacy?



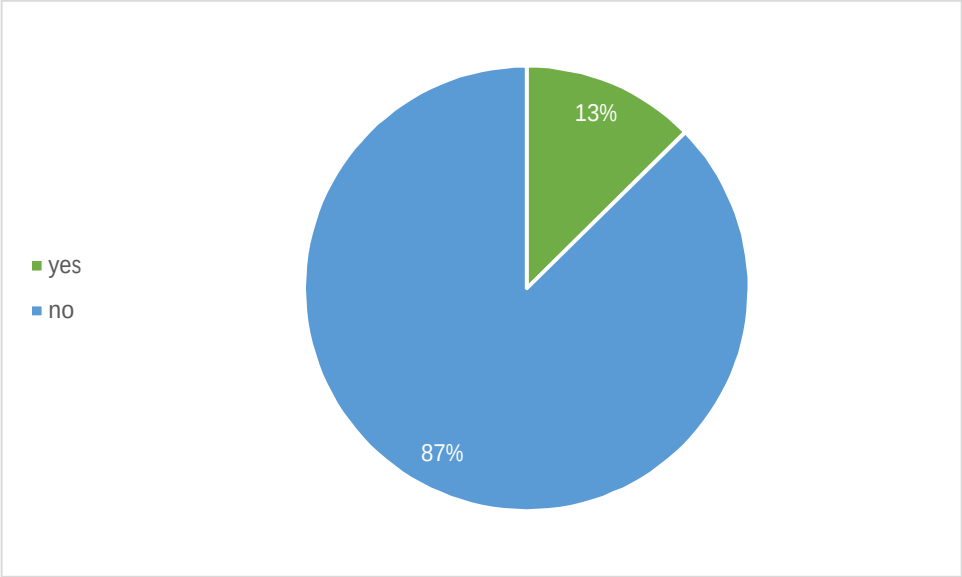
The top three reasons respondents reported they do not recycle expired medications include not having expired medications to recycle (50%), not being aware of a program in their community (40%) and lack of information (26%).

For those that do recycle expired medications, 42% indicated drop off locations are less than 5 to 10 minutes away, 36% say they are less than 5 minutes away and 17% say they are 11 to 30 minutes away. 49% of respondents indicate these locations are very convenient, with 35% indicating extremely convenient and 15% saying they are somewhat convenient.

For those who do recycle expired medications, 42% indicate they do so once every few years, 34% say they do so about once a year and 15% less than every few years.

Mercury Containing Thermostats

Do you recycle mercury containing thermostats?



Of those who recycle mercury containing thermostats, 48% take them to a depot or collection site, with the remaining 52% leave them with a service provider.

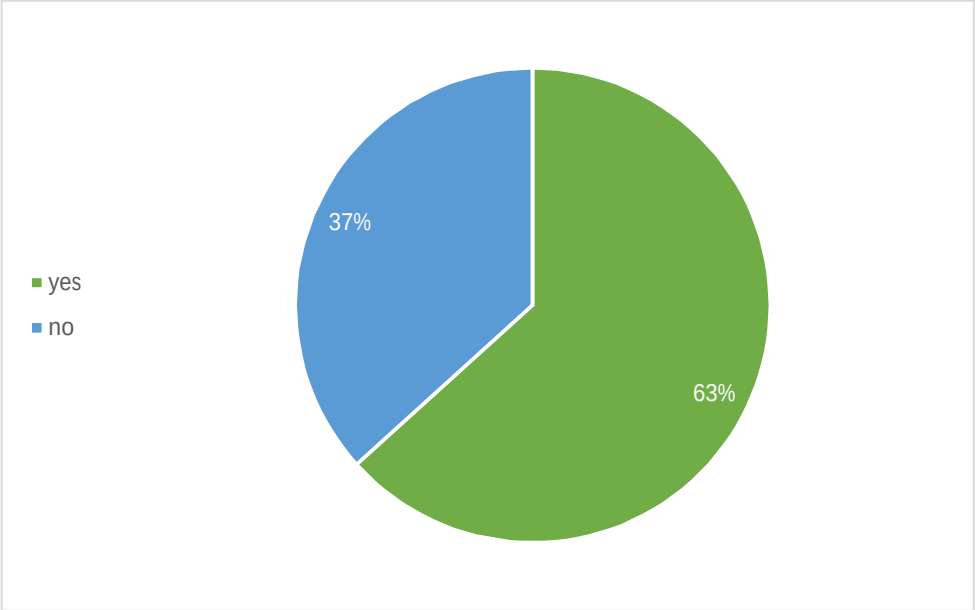
The highest reason respondents indicated as to why they do not recycle mercury containing thermostats was that they do not have thermostats to recycle (87%), followed by not being aware of a program in their community (18%), and lack of information (11%).

When asked about travel times to a drop off location for mercury containing thermostats, 56% of respondents indicated it takes them 11 to 30 minutes, with 24% travelling 5 to 10 minutes and 16% travelling more than 30 minutes. 33% of respondents indicated these locations are very convenient, with 27% indicating they are somewhat convenient and 17% indicating they are extremely convenient.

When asked how frequently respondents recycle mercury containing thermostats, 59% indicated they do so less than every few years, 35% indicate they do so once every few years, and 6% say they do so once a year.

Automotive (Lead Acid) Batteries

Do you recycle automotive (lead acid) batteries?



Of those that do recycle lead acid batteries, 29% indicated they take them to a depot or collection site, with the remaining 71% indicating they leave them with service providers.

The top three reasons why respondents do not recycle lead acid batteries included not having batteries to recycle (87%), not aware of any program in their community (18%), and lack of information (10%).

For those recycle lead acid batteries, 50% of respondents were recycling them once every few years, with 24% less than every few years, and 21% about once a year. Only 4% indicated they recycle batteries several times a year.

For those that do recycle lead acid batteries, current drop off times are 11 to 30 minutes for roughly half of respondents, at 53%, with 24% at the 5 to 10 minutes mark and 14% at more than 30 minutes. Most find these locations for drop offs to be somewhat convenient and very convenient at 36% and 34% respectively.

Other Recyclable Materials

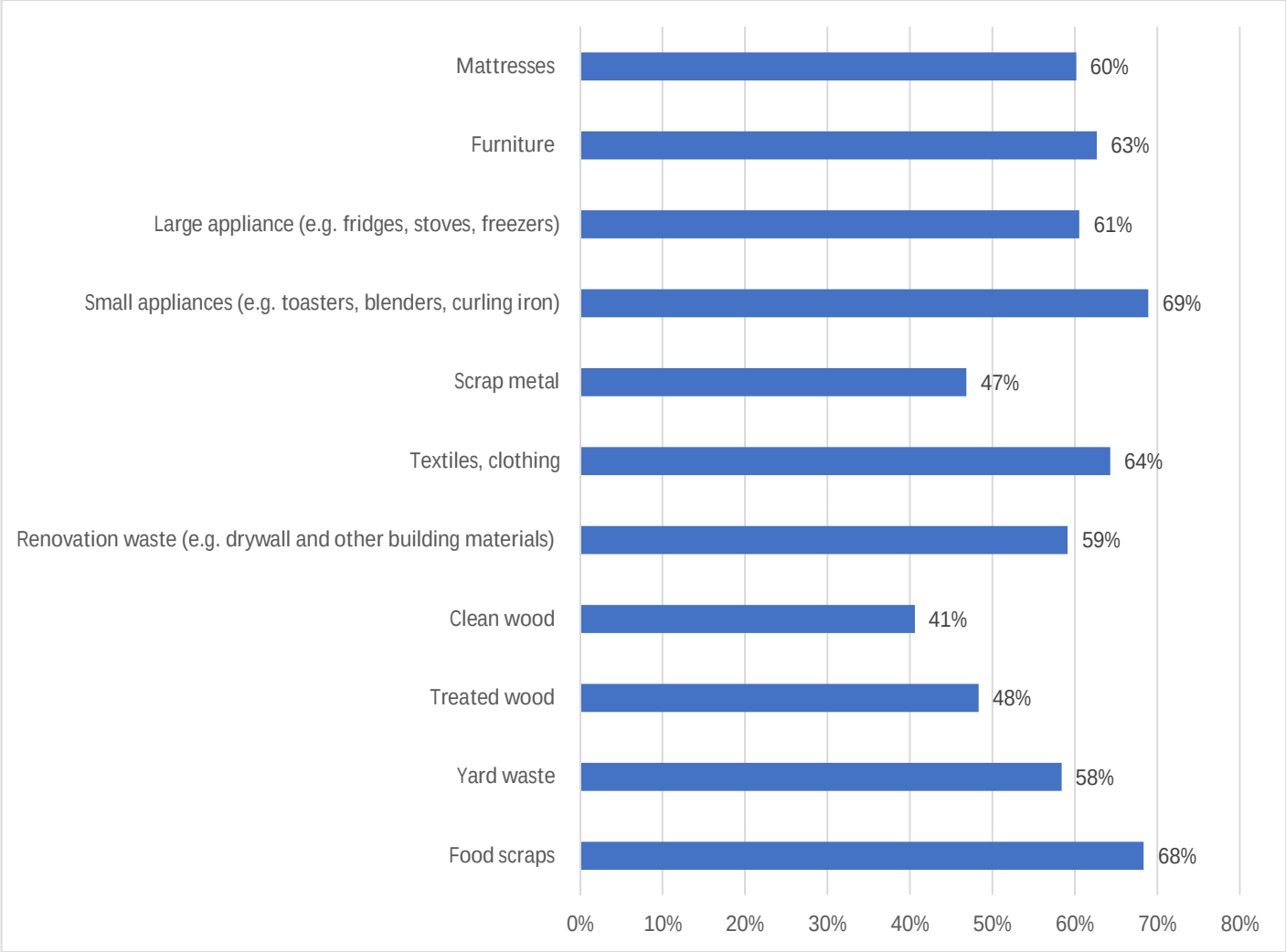
To the best of your knowledge, are there recycling or disposal options (other than the landfill) for the following materials in your community?

Product or Material	Yes	No	Unsure
Food Scraps	21%	60%	19%
Small Appliances	38%	25%	38%
Textiles, Clothing	39%	27%	34%
Yard Waste	77%	14%	8%
Scrap Metal	60%	14%	8%

Mattresses	31%	31%	39%
Renovation Waste (e.g. building materials)	20%	37%	44%
Clean wood	38%	25%	37%
Large Appliances	56%	17%	27%
Furniture	29%	32%	39%
Treated Wood	14%	35%	50%

Base: 1038 submissions

Are you interested in recycling or disposal options (other than the landfill) for any of the following materials? Select all that apply.



Base: 1052 submissions

Are there any additional materials / products that should be considered for recycling and waste diversion in your community?

Approximately 349 unique comments were received for this question. Several items emerged from the responses, as well as many other items, including:

Plastics: There was broad support for more plastics to be recycled within Manitoba. Some are readily available or recycling, however, several common types of plastic material are not recyclable. Types of plastics suggested including:

- Plastic wrap
- #1 clam shell containers
- Dark (black) plastics
- Plastic bags
- #6 plastics
- Soft plastics with LDPE
- Coffee Cups (with wax plastic linings)
- Vehicle components
- Children's toys
- Single use plastics (especially with regard to impending federal regulations)
- Agricultural twine or grain bags
- Chemical fluid containers (windshield washer containers)
- K-Cups

Compost: A large number of respondents indicated a desire to see composting implemented both in Winnipeg and in rural municipalities, specifically food scraps/waste from households.

Glass: Many comments indicate glass products, especially broken glass or glass bottles, should be recyclable or at the very least, able to be returned for a deposit amount, similar to other provinces. Other sources of glass mentioned include:

- Light Bulbs including fluorescent light bulbs
- Broken Glass
- Mirrors
- Automotive glass

Others:

- Styrofoam (including food packaging)
- Used cooking oil
- Construction materials
- Pet waste
- Scrap metal including bikes, tools and home goods
- Aerosol containers
- Makeup
- Ink Cartridges
- Clean or treated wood

- Shingles and roofing products
- Expired child safety equipment (car seats and strollers)
- Generally any item that has a recycling logo on it but cannot currently be recycled in Manitoba
- Mattresses (including textile, metal and wood components)
- Cooking oil

Does your household backyard compost or participate in community compost sites?

Of the 1038 respondents, answers were split down the middle with 49.6% of respondents participating in some for of household composting, and 50.4% not participating.

Why?

There were approximately 417 responses for this question. Participants provided several reasons as to why they compost, both practical and ideological in nature.

For practical reasons, the vast majority of respondents indicated they compost for one of two reasons:

1. Reduce the amount of household waste and thus divert that waste from entering the landfill; and
2. To provide nutrients for the purposes of gardening and other yard-related improvements.

Ideologically, many respondents indicated that composting is "the right thing to do" and is generally better for the environment than sending all waste to a landfill.

Why not?

There were approximately 437 responses to this question. Participants provided a wide range of reasons as to why they do not compost or participate in a composting program. Reasons include:

Lack of information on how to compost: Many respondents indicated they do not know how to compost and have not ever thought to try it. Responses indicate there is generally enough advertising telling people to compost, but not enough education on how to compost, or what you do with compost once you've created it. Others reported trying to compost but getting the proper ratios of brown / green waste incorrect which resulted in no compost being created.

Lack of awareness of community sites: Several respondents indicated they have a desire to compost but do not know where a local community compost site is located.

Smell: Many discussed that compost can produce an unwanted smell which can be a nuisance to property owners and nearby neighbours.

Pests: Many respondents indicated that compost can attract pests including mice and other rodents which can become a nuisance to their households. Others who live rurally indicated that leaving food waste outside can attract wild animals.

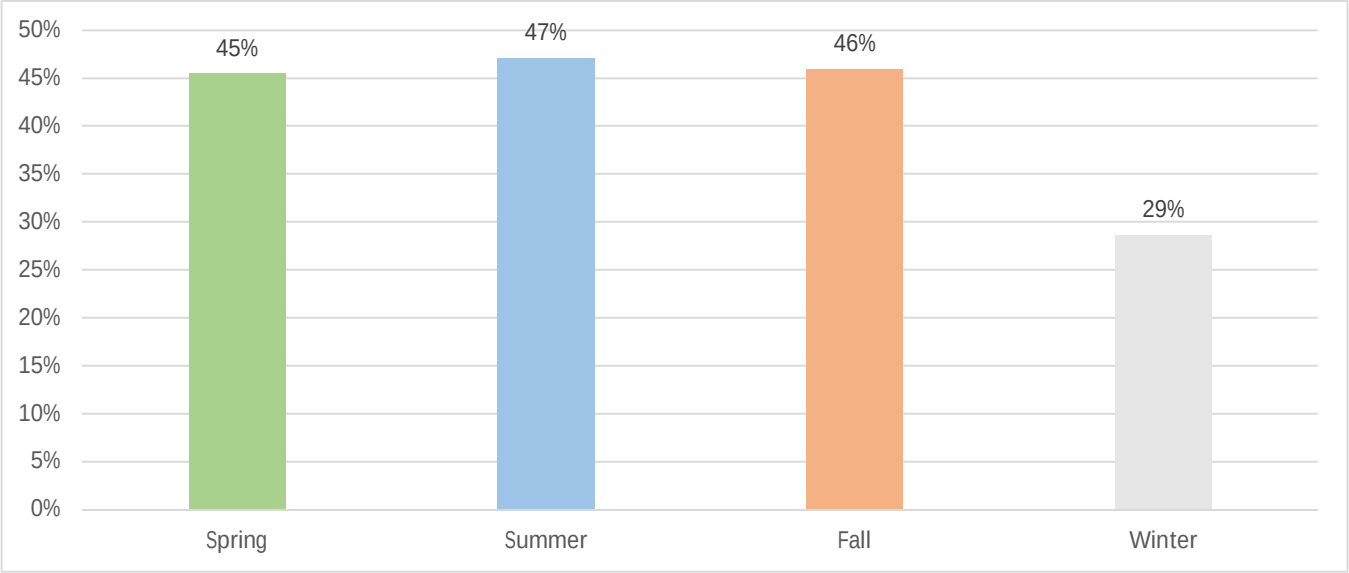
Lack of space: Many respondents indicated they live in multi-family housing (apartments or condominiums) and therefore have room to compost – either for smaller collection bins or larger composting bins.

Not allowed: Several residents indicated that because of their place of residence (typically condominiums) they are not allowed to compost.

No use: Many respondents indicated they do not have gardens or a place to use compost if they created it.

Extra Work: Several respondents indicated they are not interested in the extra work it requires to prepare and process compost and would rather just put it in the garbage and forget about it.

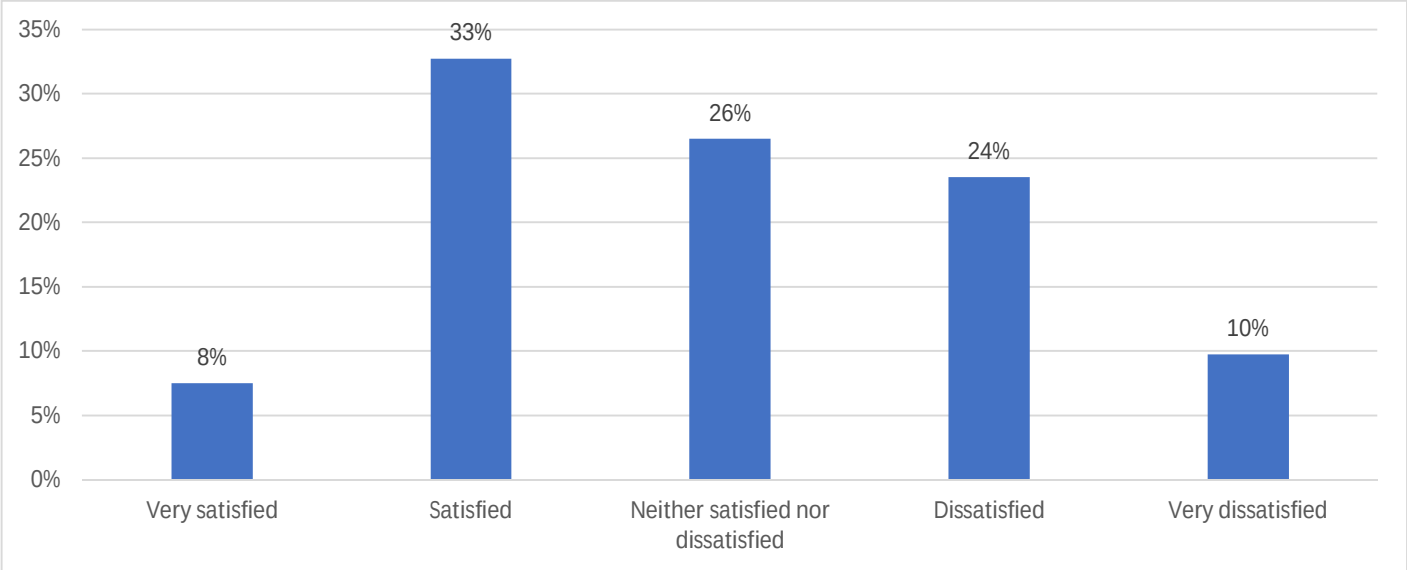
During which seasons does your household backyard compost or participate in community compost sites? Select all that apply.



Base: 1052 submissions

Additional Feedback

Overall, how satisfied are you with the waste diversion and recycling programming available in your community?



Base: 1052 submissions

Do you have any additional feedback related to the current recycling and waste diversion programs, including specific barriers and recommendations for improvement?

There were over 600 responses provided for this question. Responses varied greatly in their general theme and content including both negative and positive feedback concerning recycling, composting, waste diversion, communication and education, potential program changes or improvements, implications for home owners and ratepayers, and many other issues relating to the specific barriers or recommendations for improvement.

For a full set of the provided responses in their raw format, see the raw data provided at the back of this report.

Socio-Demographics

In what region of Manitoba do you live?

Northern Manitoba	39	4%
Central Manitoba	89	8%
Eastern Manitoba	112	11%
Interlake Manitoba	54	5%
Parkland Manitoba	35	3%
Western Manitoba	101	10%
Winnipeg	621	59%

Base: 1051 submissions

Approximately 41% of respondents indicated they were from outside Winnipeg with the remaining 59% living inside Winnipeg.

What type of community do you live in?

Suburban community	172	16%
City or Urban community	584	56%
Rural community	292	28%
Remote (fly-in or seasonal access road)	2	<1%

Base: 1050 submissions

Approximately 72% of respondents live in urban or suburban communities in Manitoba, with 28% living in rural areas.

What type of home does your household reside in?

A single family dwelling (stand-alone house)	927	88%
Multi-family dwelling (townhouse, apartment, condominium, etc.)	125	12%

Base: 1052 submissions

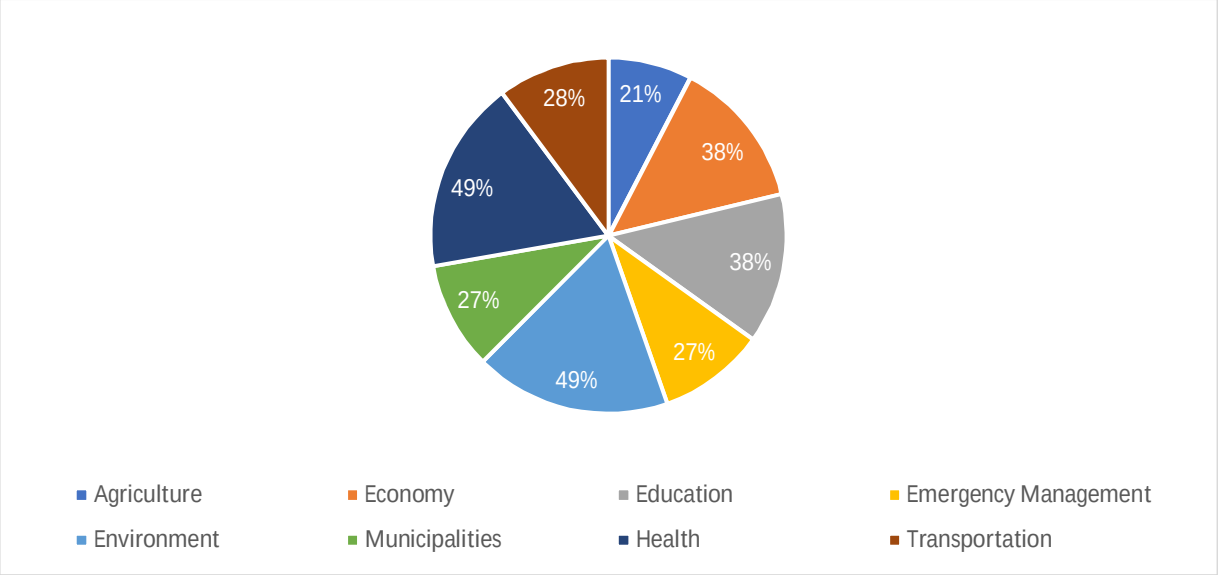
The vast majority of respondents live in single family dwellings (detached) with a smaller portion, 12%, living in multi-family dwellings (including townhouses, apartments, condominiums, etc.)

Do you identify as an Indigenous person?

Yes First Nations	8	1%
Yes Metis	43	5%
No not Indigenous	787	94%

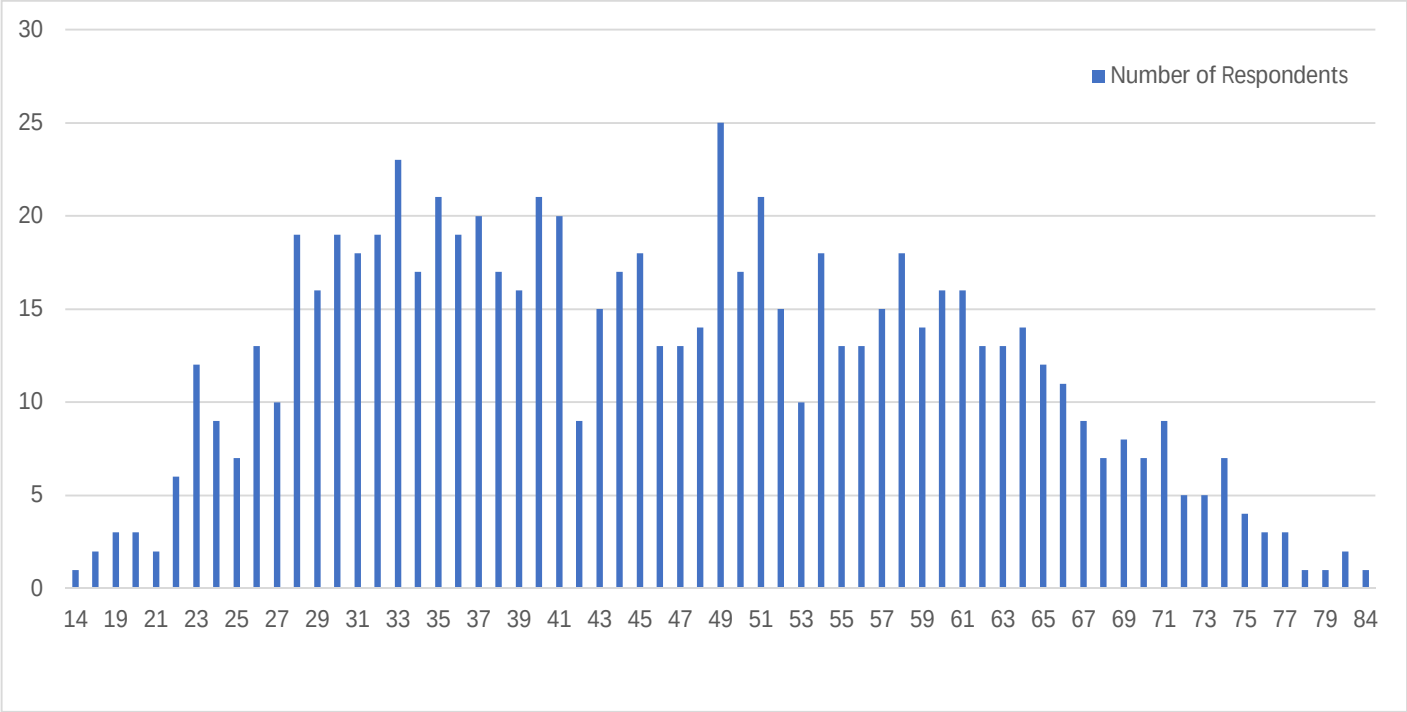
Base: 838 submissions

Area of Interest



Base: 1052 submissions

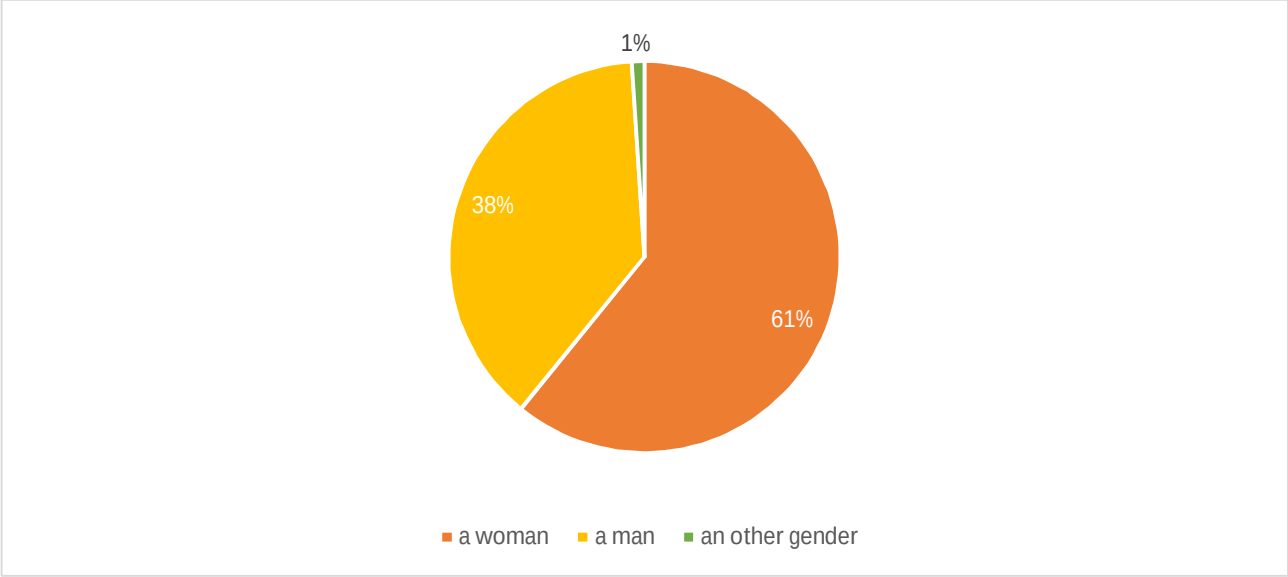
How old are you?



Base: 778 submissions

The median age of the participants in the survey is 35 years of age while the average age is 46.2 years of age.

Gender



Base: 777 submissions

Appendix C

Municipal Survey Results Report

Recycling in Manitoba

Municipal Survey Results

March 1, 2021

Landmark Planning & Design Inc.

DILLON CONSULTING

Manitoba

Table of Contents

INTRODUCTION

As part of a team of consultants, Landmark Planning & Design was retained by the Province of Manitoba to survey Manitoba municipalities about their experience and views on recycling, composting and waste diversion in Manitoba.

Over the last few decades, the Government of Manitoba has made specific efforts to improve waste management practices within the province. However, as waste materials evolve, so does the policy landscape and the technologies available to manage current and emerging waste streams. Manitoba's waste diversion and recycling framework needs to keep pace with this change. This is an opportune time to reflect on current practices and to explore opportunities for strengthening waste management systems in order to divert even more waste from landfills. This project reviewed the current waste diversion and recycling framework in Manitoba to identify its strengths and gaps and recommend options to modernize and improve the current framework. Any changes to the legislative and programming framework would affect the way municipalities deliver waste management and recycling programming. To ensure that the recommendations are informed and forward-looking, stakeholders including municipalities were consulted.

METHODOLOGY

- An invitation to complete the survey was sent to 27 municipalities in Manitoba which were selected based on their characteristics in an attempt to represent a diverse sample. A total of 12 municipal representatives contributed to the survey.
- The survey was conducted between the 2nd and 15th of February, 2021. The survey was conducted using an online questionnaire.
- The survey was designed by Landmark Planning & Design, in collaboration with Dillon Consulting and the Province of Manitoba.
- Inputs will be used to help develop a set of recommendations for improving waste diversion and recycling programming in Manitoba.

KEY FINDINGS

- 10 of out 12 respondents indicated recycling rebates received from the WRARS program is valuable, with 8 indicating them as 'very' or 'extremely' valuable to the operation and financial sustainability of waste diversion and recycling programs.
- Only 2 out of 12 municipalities surveyed reported receiving grants through the WRARS or WRAPP programs since 2017.

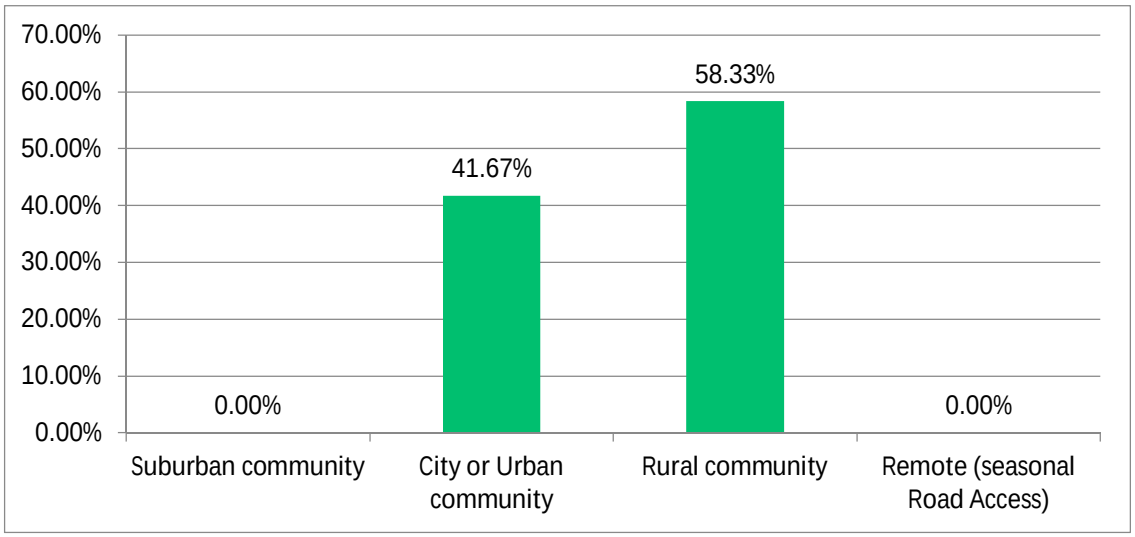
- Roughly half of the municipalities that responded to the survey have active composting programs in their communities. For those that do not, several reasons were provided including costs (2), time specialized equipment (1), lack of interest (1) and being unaware of composting programs (1).
- For specific recyclable materials, responses from municipalities were varied, but can be generally categorized into the following:
    - Positive experiences for blue box materials, beverage containers, tires, used oil and car products, and batteries (both household and vehicle batteries).
    - Mixed experience for cell phones and commercial / agricultural containers for pesticides and chemicals.
    - Neutral experiences, or lack of awareness for electronic waste, paint, fluorescent light bulbs and household hazardous waste, mercury containing thermostats, and expired medications.
- When asked about the main barriers that are present for municipalities for collecting more materials to divert them from landfills, respondents indicated that high costs, high amounts of contamination and general complexity are the main barriers.
- Suggestions for ways of increasing organic material collection and diverting it from the landfill include providing more funding for local municipalities and increasing curb-side collection.

SURVEY RESULTS

General Questions

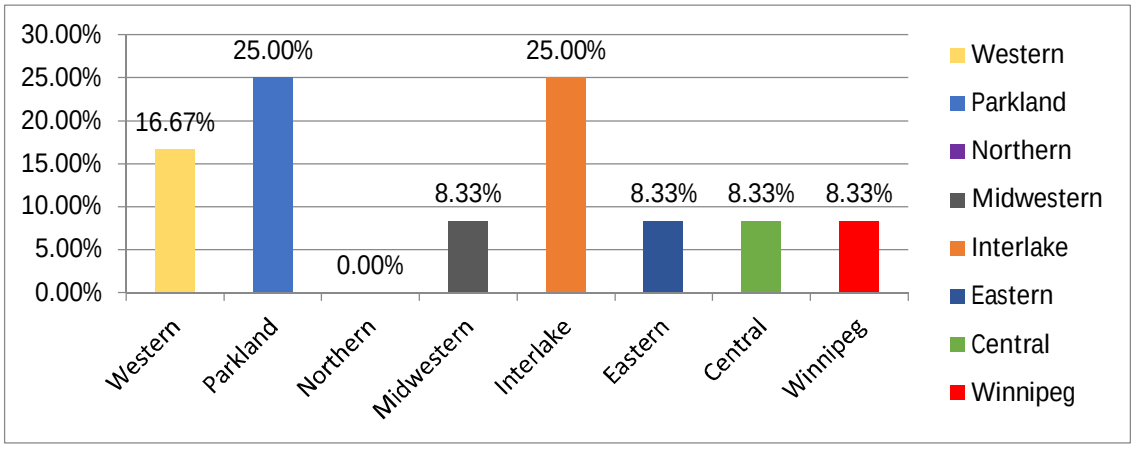
1. Please indicate your community type (choose most applicable):

N = 12



2. Please indicated which region (as per the Association of Manitoba Municipalities) your municipality is located in:

N = 12



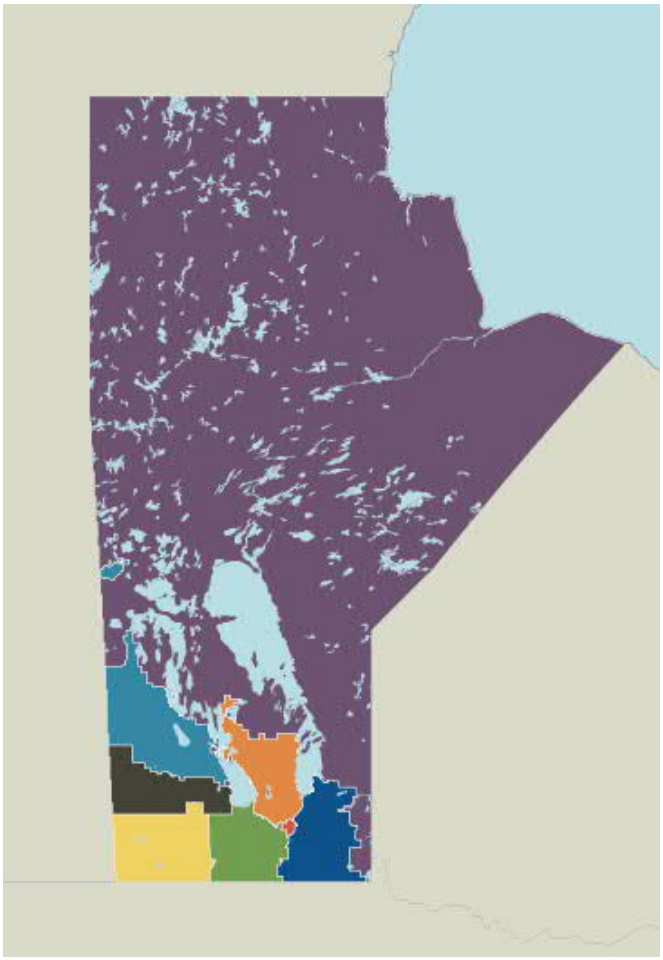
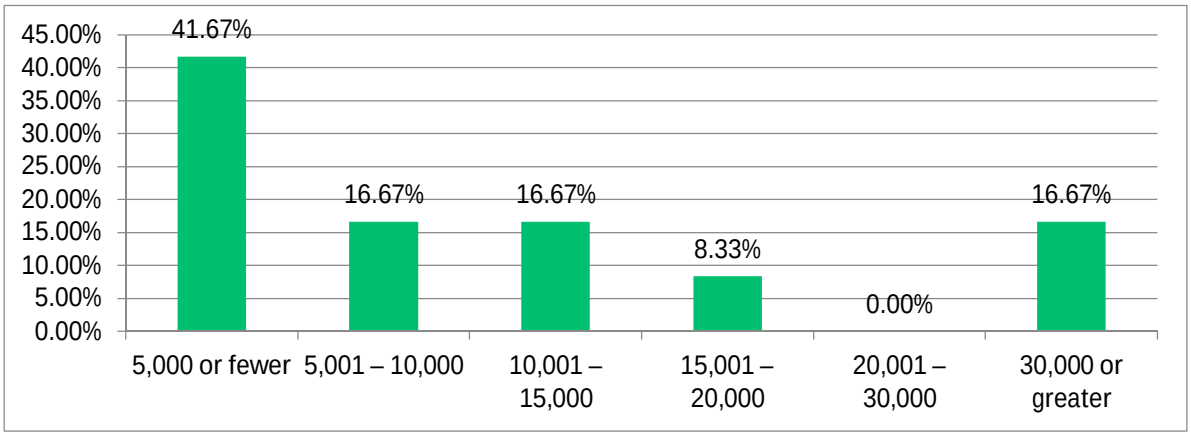


Figure 1: Association of Manitoba Municipalities Region Map.

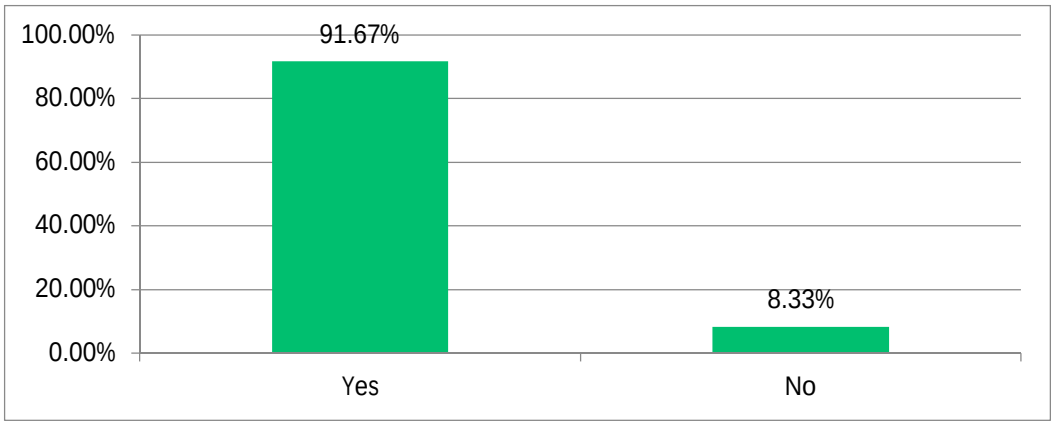
3. Please indicated the population of your community:

   N = 12



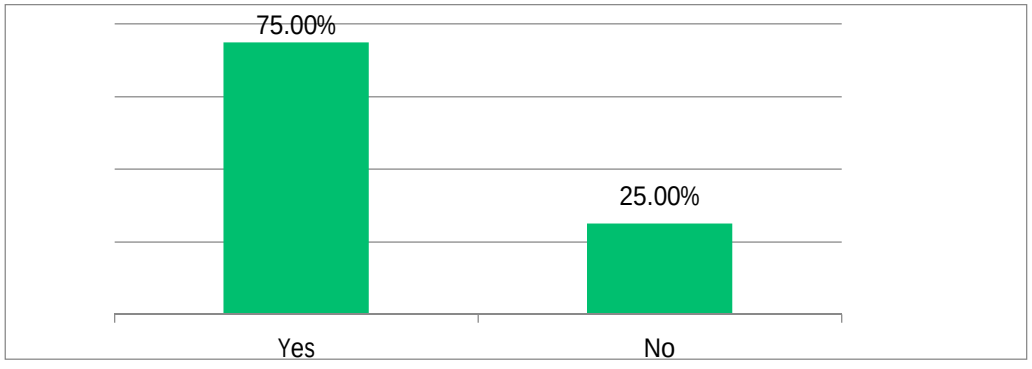
4. Does your municipality engage in promotional activities related to waste diversion?

N = 12



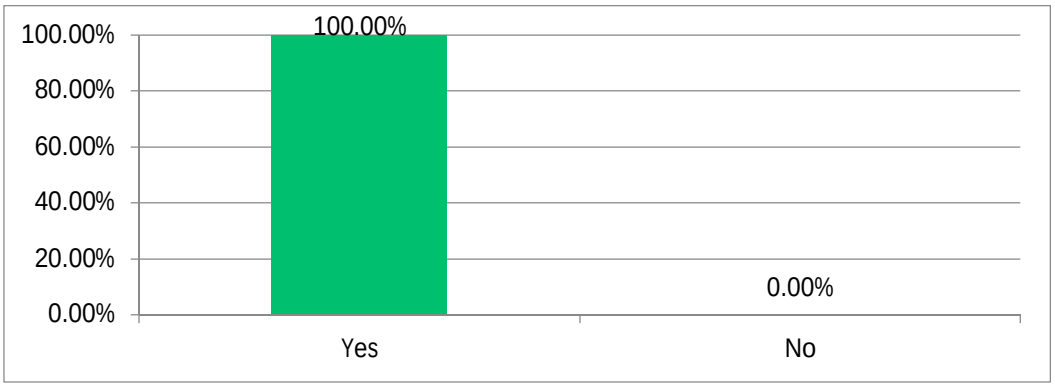
5. Does your municipality provide information and/or materials (either hard copy or online) to your residents regarding garbage, recycling and/or waste diversion activities?

N = 12



6. Does your municipality work with any stewardship organizations to develop the materials for promoting waste diversion and recycling?

N = 12

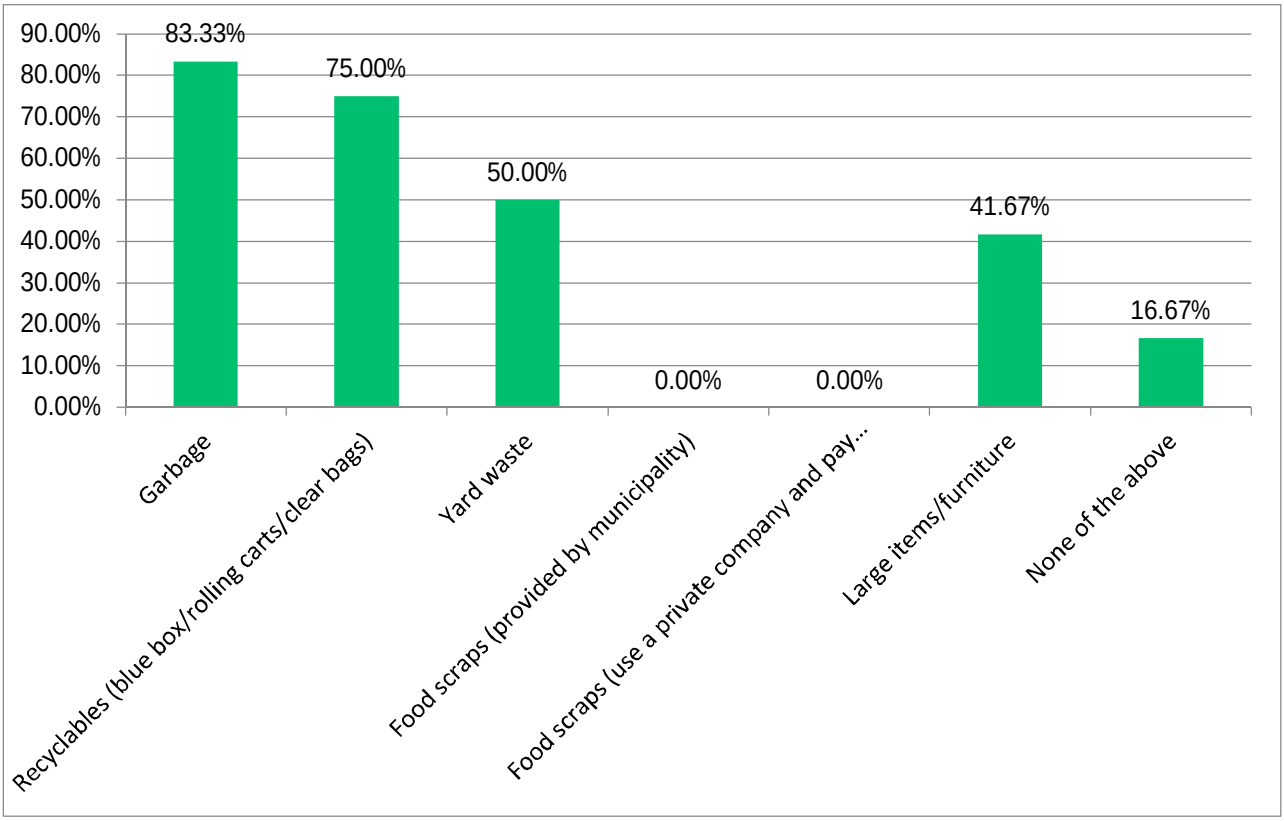


Of the respondents who indicated 'yes', seven respondents listed the following stewardship organizations:

- Multi-Material Stewardship Manitoba (6).
- Canadian Beverage Container Recycling Association (2).
- ReGeneration (1).
- Manitoba Association for Resource Recovery Corp. (2).
- Manitoba Product Care Recycling (1).
- Call 2 Recycle (1).
- Clean Farms (1).
- Tire Stewardship (1).

7. Does your municipality provide curb-side collection of the following? (check all that apply)

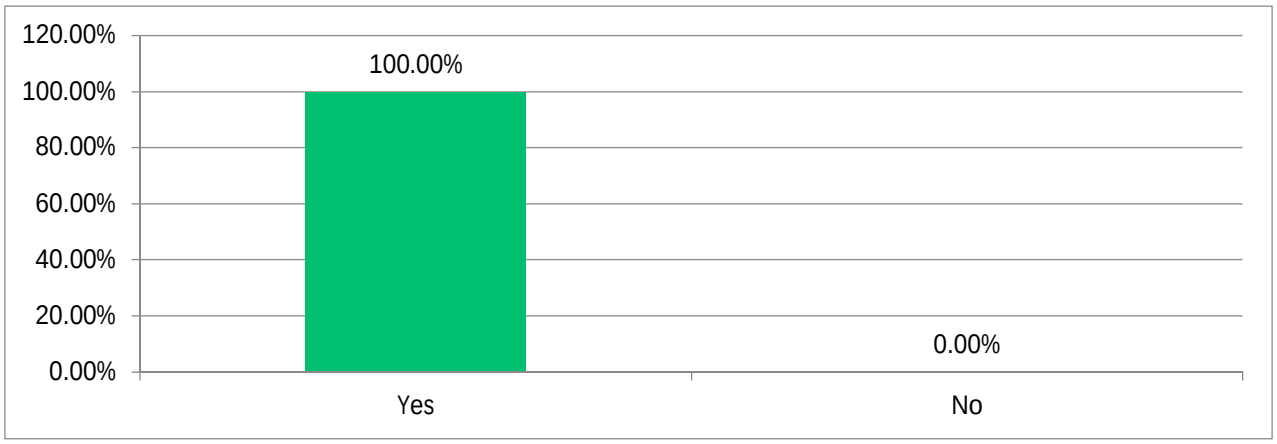
N = 12



None of the surveyed municipalities provide curb-side collection for food waste (compost) either provided by the municipality or through a private contractor. Two (2) of the municipalities surveyed indicated they don't provide any kind of curb-side pickup for any materials.

8. Does your community offer depot or drop-off locations for recycling and waste diversion of items?

   N = 12



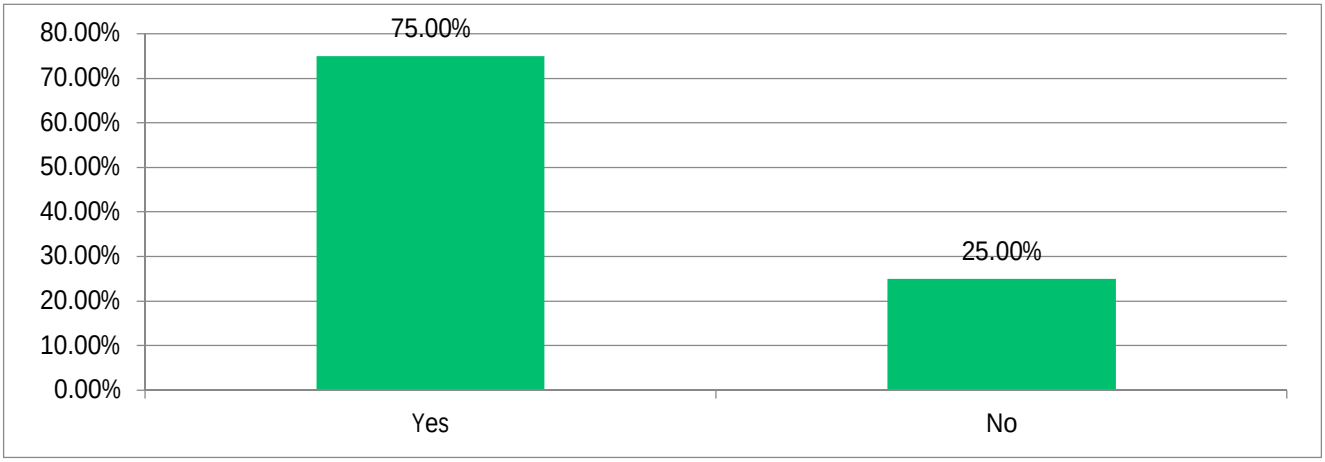
Seven comments provided additional detail:

- Recycle Trails [sic] at our sites.
- 5-6 cu yd bins are located at the municipal waste transfer site for drop-off of recyclable materials.
- 4R Depots for many materials and Community Recycling Depts for 'blue box' type materials and then Christmas Tree depots in season.
- Local Recycling Depot
- We only have Waste Transfer Stations, all waste incoming is sorted and leaves by the appropriate waste or recycling contractor.
- A new diversion centre for HHQ, Electronics, Used Oil and many other products has just been opened.
- Community compost depots.

Funding and Rebate Programs

9. Do you have a landfill that applies the provincial landfill levy? ($10/tonne)

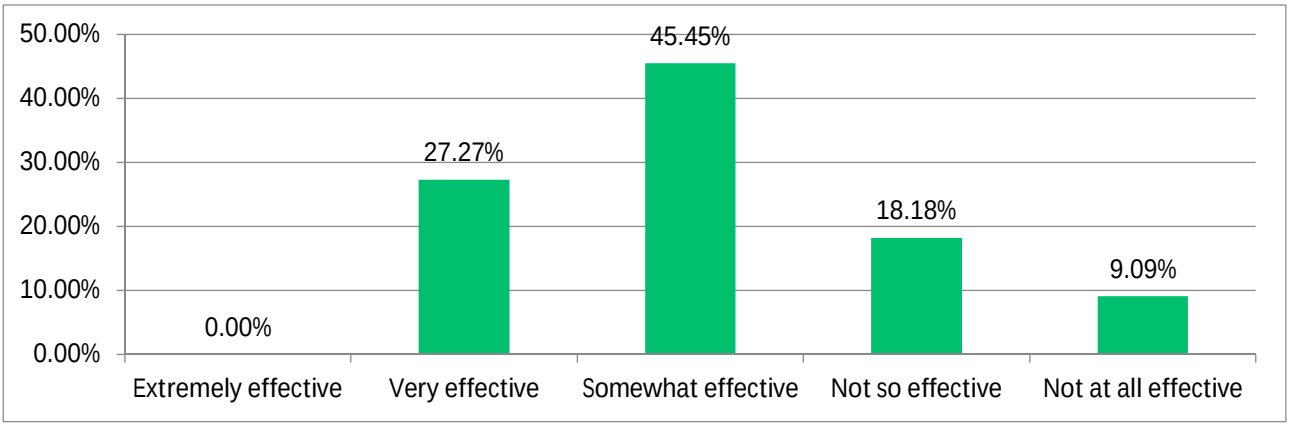
N = 12



Note: Some municipalities do not operate a landfill which may be reflected in the answers to this question.

10. In your opinion, how effective is the landfill levy in diverting waste from landfill?

N = 11

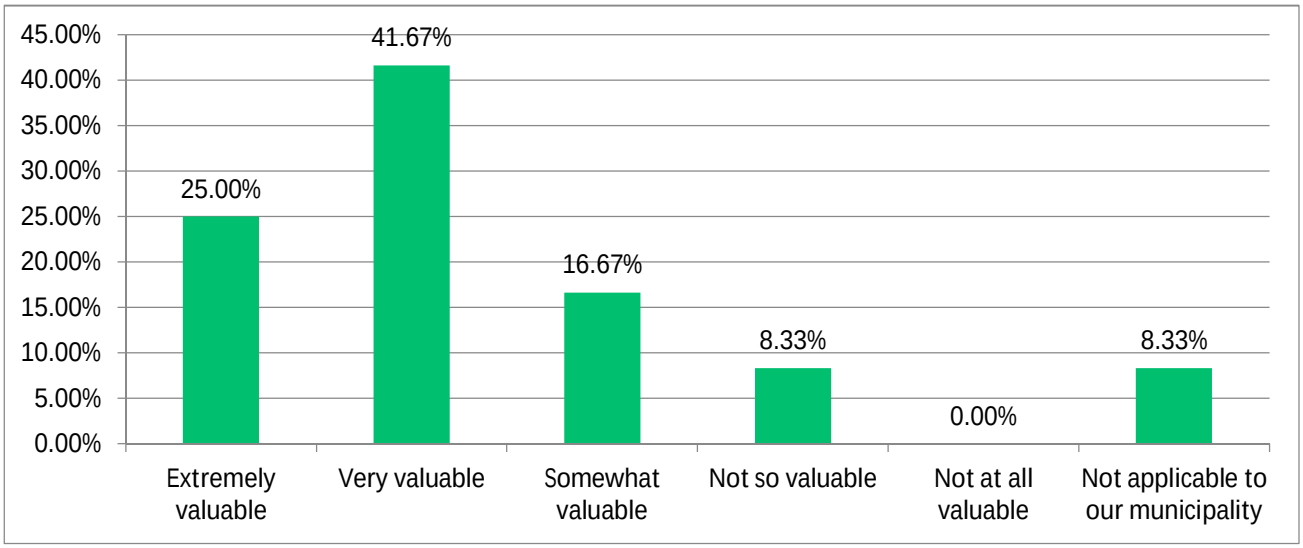


The following comments/suggestions were provided for improvements:

- The residents do not know these levies exist. Brochures or information to pass on to residents would be beneficial so that they understand how the funding is done.
- Increase the Levy to further provide incentive for diversion and make existing programs more sustainable and provide options for more diversion programs.
- It has forced us as a municipality to look at ways to reduce the amount of waste going to the landfill, but in my opinion has done nothing to impact the average resident.
- Was not aware of such a levy.

11. In your opinion, what impact do the recycling rebates you receive from the WRARS landfill levy have on the operation and financial sustainability of your waste diversion and recycling programs?

N = 12

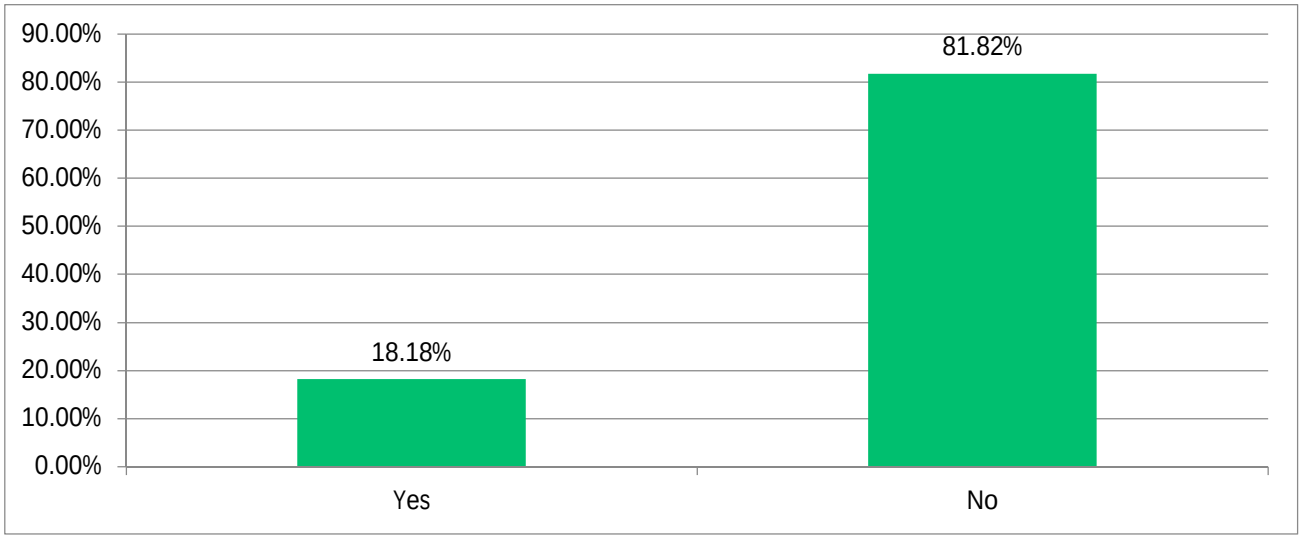


The following comments were received:

- Revenue received from any program in turn reduces tax levy to municipal rate payers and allows for the continuation of local recycling programs.
- Recycling is still a money losing proposition for the RM, so any money to help offset losses is beneficial.
- The rebates help offset the high costs while justifying the programs of waste diversion which can lead to increase and improvement of waste diversion.
- The funding helps to offset the Recycling contract.
- The rebates off set the overall cost of waste and recycling to the Municipality, therefore it reduces the mill rate needed to raise those funds and that calculates to savings to each ratepayer.
- We could not afford to provide recycling and diversion programs without it.
- Not sure how to quantify this answer properly.

12. Since 2017, has your community received WRARS grant funding for any of your local waste diversion programs or pilots? Grants received through the former Waste Reduction and Pollution Prevention (WRAPP) Program may have been funded by WRARS so please include any WRAPP funding received.

N = 11



13. For the previous question (Question 12), if you answered "yes" please describe the project, project outputs and long-term outcomes.

    N = 3

    - Recycling Collection and Processing, 4R Depots, Yard Waste Composting - All have led to waste diversion from our landfill.
    - Applied towards recycling contractor.

14. How can the government and / or stewardship organizations support municipalities in enhancing their waste diversion and recycling programing through new innovative initiatives and pilots?

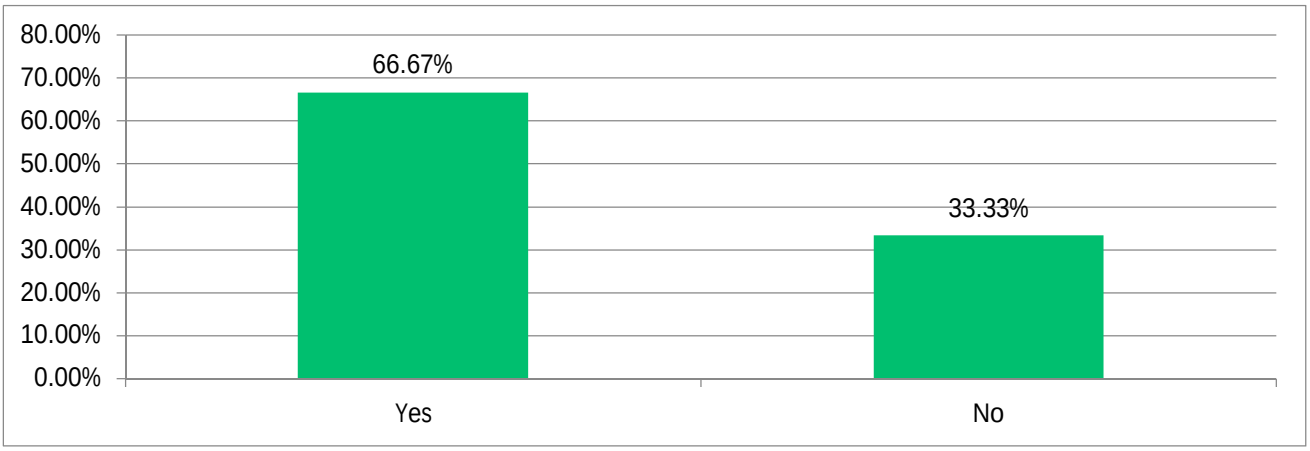
    N = 7

    - Assist municipalities with implementing curb side garbage and recycling pickup.
    - Increase existing point of sale environmental fees and update legislated items such as HHW and packaging so that more can have fees that will cover their life cycle diversion costs in a complete, proper and sustainable way.
    - Funding for feasibility studies and pilot projects.
    - The provincial government needs to aggressively work to implement more allowable recyclables, it does not make sense that some are acceptable in one province but not in the next. For example, our recycling program no longer accepts small plastic containers from items such as strawberries, raspberries, blackberries, pre-cooked deli chickens, etc. However, they did in the past.

- Additionally, we can no longer collect and recycle plastic bags, overwrap, bubble wrap, etc. These items were also acceptable in prior years. I have implemented a recycling program in our community for 16 years, it is sad to see that recycling is taking a step back in some instances rather than growing to include even more acceptable products.
- Capital funding for equipment and facilities.
- Depot system to give refunds direct to consumer, like in SK. One stop shopping for entire recycling program. Direct advice and direct assistance on marketing, rather than examples of printed products. Smaller RMs have neither the horsepower nor the expertise base to design effective marketing campaigns.
- Make sure that initiatives are as easy as possible for residents and organizations to get involved.

15. Are there materials currently in your community's waste disposal stream that you think would be well suited to diversion through a regulated extended producer responsibility program (EPR)?

N = 12



Answers suggest there is demand for larger, multi-materials items including furniture and mattresses and styrofoam that is used in product packaging

If "yes", which materials?

- wood waste.
- Styrofoam packaging materials - continue to fill landfill sites.
- Mixed Plastics, mattresses, bicycles, shingles, drywall, food waste, etc. (to go along with the many already in place).
- as explained in #14, those "recyclable" items that are no longer acceptable.
- Mattresses and furniture, Styrofoam.
- No idea what EPR is.
- Mattresses, white goods.

.

Specific Recyclable Materials

Respondents were asked to consider the following for each material below:

- Does your municipality participate in or provide services for this program?
- What are the programs' strengths and challenges?
- Comment on the financial and non-financial support provided by the stewardship organization that runs the program.

16. What is your municipal experience with Packaging and Printed-Paper Materials, Commonly Referred to as Blue Box Materials?

    N = 10

    Responses indicate majority provide blue box municipal collection systems either internally or by private contractors. Concerns raised include contamination and different collection mechanisms for different materials. Funding support was felt sufficient or not addressed. One municipality did not feel funding requirements were being met.

- Accept Co-Mingled.
- VG.
- Yes, included in roll-off bin recycling program. Use of roll-off bins at drop off locations results in packaging not being collapsed to allow for more space in the bin. Also contamination is a major issue. I don't have enough knowledge regarding the financial/non-financial support to comment.
- We have participated since the inception. The program is too focused on bottom line costs and not enough about waste diversion. They do not meet their financial funding responsibilities.
- Yes.
- Yes. Handled by our contractor, Portage & District Recycling.
- All are accepted, no issues. These items are collected by regular pick up and financial support is received through MMSM funding.
- Yes, we have a full blue box curbside collection program. My biggest problem with the program is that we have to have multiple collection systems for all EPR programs. We need to make recycling easier by allowing small electronics, batteries, and other such items to be collected in blue box programs. Nobody wants to drive to a collection depot to drop of used batteries or an old cellphone

plus the carbon footprint of driving to a separate facility to recycle these items outweighs the benefit of recycling.

- No idea on what this is.
- Yes, we do. Challenges to adapt to volatile market prices. No issues with the support we get.

17. What is your municipal experience with Beverage Containers?

    N = 11

    Responses are generally positive for the beverage container program, however operational costs to collect from the containers provided is not covered and the labour cost was noted. One respondent noted this program could potentially collect additional containers in public spaces.

- Accept Co-Mingled.
- Very good.
- Worked with Recycle Everywhere in providing collection containers for beverage packaging.
- Yes, included in roll-off bin recycling program. Use of roll-off bins at drop off locations results in packaging not being collapsed to allow for more space in the bin. Also contamination is a major issue. I don't have enough knowledge regarding the financial/non-financial support to comment.
- Yes. The program needs to transition from capital cost coverage; container supply, which they have done a good job and get involved in the operational cost coverage to close some gap on full cycle diversion.
- Yes.
- Yes. Handled by our contractor.
- All are accepted, no issues. These items are collected by regular pick up and financial support is received through MMSM funding.
- Yes we participate, again not sure why all of these programs have to be separate from each other. The Recycle Everywhere program is great but the recycling containers that program participants can get should be labelled for all recyclables not just beverage containers. Where does someone walking down the street put their recyclable plastic food container they got at the same time they purchased a beverage. This is all common sense I should not have to bring this to anyone's attention.
- No idea on what this is.
- Yes we do. Labor costs to collect this material for local MRF [sic].

18. What is your municipal experience with Tires?

    N = 11

    Responses indicate most participants are familiar and take part in tire recycling programs. There was some that felt inconsistent collection schedule could be improved.

- We Participate.
- VG.
- Tire Stewardship Program Keep tires out of landfills.
- Yes, we are involved with the Tire Stewardship program - I don't have enough knowledge regarding the financial/non-financial support to comment.
- Yes. The program has inconsistent collection frequencies.
- Yes.
- Yes. Handled by our contractor.
- Our municipality participates in the tire recycling program with Tire Stewardship Manitoba. We receive compensation per unit from Tire Stewardship Manitoba.
- Yes we participate in the tire recycling program. It would be nice to have a regular scheduled visit from Reliable Tire not random throughout the year and then when they do show up they don't have room to pickup all of the tires.
- Tire collection seems to work well, although pick up is slow at times.
- Yes, we do. In the past, it was actual pickup times. All good now!! Seems to be working.

19. What is your municipal experience with Electrical and Electronic Equipment?

    N = 11

    Responses indicate there is generally a positive experience with the e-waste materials collected and the logistical system, however the added operational costs for packaging and secondary hauling may be challenging for some municipalities.

- Huge expense to municipality to haul to depot in another community (...).
- Funding too low for the cost of labor to package.
- Electronic Recycling just started in fall on 2020.
- Yes, we are involved with the EPRA program. Challenge is in packaging the material in a timely manner for EPRA. Both financial & non-financial support is adequate.

- Yes. Strong logistical system and inclusion of secondary items into their processing system. Need to increase environmental fees to take program to next level.
- Yes.
- Yes. Handled by our contractor.
- We collect and have a provincially registered independent e-waste contractor who does pick-ups on our behalf. We collect and house e-waste, however, we do not receive compensation.
- Yes we have just recently taken over this program so I have no additional comment at this time.
- We are just getting in to this. We have no idea what the supports are.
- Yes we do. Seems to be working well. Not involved with the financials.

20. What is your municipal experience with Paint, Fluorescent Lightbulbs, Household Hazardous Waste?

    N = 11

    Responses are generally mixed, for paint, fluorescent lights and household hazardous waste. Some municipalities hold events to collect in lieu of year round collection points. Issues include lack of funding to cover operational costs of collection/packing of items, particularly those not covered as designated materials. Concern as well regarding approval time for registration of a collection facility.

- Do not accept.
- Funding too low for the cost of labor to participate.
- Participate in Household Hazardous Waste Day in 2019 and 2020.
- Yes, we are involved in the Product care program. Provided containers work well. Both financial & non-financial support is adequate.
- Yes. Limited program based on current legislated products list and not enough budget for proper funding.
- Yes
- Yes. Handled by our contractor.
- The Municipality, in partnership with ReGeneration hosts a yearly Community Recycling Event where all recyclable items that cannot be curbside picked up or left at a depot can be brought on this predetermined day and left for recycling. Miller Environmental and Ecoil are on hand to take away all items they can accommodate. We are not compensated for providing this service, however, we are happy to see these products being ethically recycled and not being left at our Waste Transfer Stations.
- We have been working with Product Care to setup a collection facility. Although at the outset everything was going smoothly, I have been waiting 8 months to receive approval from them to open my collection facility and still have not received it.

- We are just getting into this. We have no idea what the supports are.
- Yes we do. Good training from PCA. Terrible staff communication at Miller. Seems to work fine.

21. What is your municipal experience with Used Oil, Filters, Antifreeze?

    N = 11

    Responses are generally very positive for the used oil, filters and antifreeze program.

- Yes, we participate.
- VG.
- Operate Eco-Centre Keeps used oil filters and antifreeze out of the Landfill Very easy program to participate in.
- Yes both of our WDG's have eco-centres and we are involved in the MARRC program. Well received by the public - they look forward to the free oil giveaway program. Both financial & non-financial support is adequate.
- Yes. Great program. Need to increase environmental fees to take program to next level.
- Yes.
- Yes. Handled by our contractor.
- Working with MARRC has been great, they run a great program.
- We participate. Not a lot of help here. Took a while to find out what to do with our brand new used oil tank.
- Yes we do. Program has always worked great. No issues with financial.

22. What is your municipal experience with Single-Use and Rechargeable Batteries (weighing less than 5 kg)?

    N = 11

    Responses are generally positive for the single-use and rechargeable batteries program. Some confusion indicates more program promotion/education needed.

- Accept, good program.
- VG, but still see them in waste stream.
- n/a.

- Yes we have drop off at the Municipal office. May not be well known by residents that this service exists. I don't have enough knowledge regarding the financial/non-financial support to comment.
- Yes. Great program but need to create more awareness and access to the public.
- Yes.
- Yes. Handled by our contractor.
- We participate in the "Call to Recycle" program. We have a box available in our Municipal office for people to deposit used batteries, when full, we call a courier to pick up the batteries and deliver them to be recycled. This program is free to the Municipality and all cost associated are paid for by the Call to Recycle program.
- Yes we have had collection boxes at City Hall and will collect them at our new diversion centre as well. We have no concerns.
- No experience.
- Yes we do. Shipped through our HHW Depot. No issues. Financial works well.

23. What is your municipal experience with Lead Acid Batteries (e.g. batteries for vehicles, boats, recreational vehicles, etc.)?

    N = 10

    Responses were all positive for those that responded as participating in the lead acid battery program.

- Do not participate in a program.
- n/a.
- Yes, we collect these at our WDG's. I don't have enough knowledge regarding the financial/non-financial support to comment.
- Yes. Good program. Simple and steady.
- Yes
- Yes. Handled by our contractor.
- ~same answer as question #20~
- We have just started the collection of lead acid batteries so i have no comment at this time.
- No experience.
- Yes we do. Part of the PCA program and local Interstate Battery collection. All works well.

24. What is your municipal experience with Cell phones?

    N = 10

    Responses are generally positive, however many do not participate or are unaware of how the program works. Indicates need for promotion/education.

- Electronics.
- n/a.
- We do not provide this program.
- Yes. Versatile products that can be included in multiple EPR programs.
- No.
- Yes. See #16.
- We collect cell phones with all electronic waste. We collect and have a provincially registered independent e-waste contractor who does pick-ups on our behalf. We collect and house e-waste, however, we do not receive compensation.
- Yes we have had collection boxes at City Hall and will collect them at our new diversion centre as well. We have no concerns.
- No experience.
- Goes with Call 2 recycle program above.

25. What is your municipal experience with Commercial and Agricultural Pesticide and Fertilizer Containers?

    N = 10

    Responses indicate general support for the program, however lack of clarity on collection. May be due to early implementation stage.

- N/A.
- A collection container site is available for drop-off of agriculture chemical containers. Keep containers out of landfills.
- Yes, we collect these at our WDG's. Many containers are left behind without any follow-up as to why or where else they should go. I don't have enough knowledge regarding the financial/non-financial support to comment.
- N/A.
- Yes.

- Yes. See #16.
- We participate in a collection program with the province.
- The Clean Farms people are highly unresponsive, and I have literally an acre of containers that I have been trying to get them to collect but get no response.
- Seems to work well. Not sure about supports.
- Yes, just recently started. Getting pickup dates for material has been challenging.

26. What is your municipal experience with Mercury Containing Thermostats?

    N = 11

    Responses indicate many are unfamiliar or do not provide this program, which may be due to the declining use of these products over time.

- Do not accept.
- Very rare now.
- N/a.
- We do not provide this program. (unless it is part of Product care's HHW program which is just starting up).
- Yes, but send people to other organization for diversion.
- No.
- Yes. See #16.
- GOOD QUESTION????? I DON'T KNOW.
- I just registered for the program and have not yet received collection supplies.
- None.
- Part of the PCA program above.

27. What is your municipal experience with Expired and Unused Medications?

    N = 11

    Responses indicate a lack of awareness regarding how program operates. Need for promotion/education.

- Do not accept.
- See mostly in waste stream .

- n/a.
- We do not provide this program.
- Yes, but send people to other organization for diversion.
- No.
- No. Local pharmaceutical companies offer this program.
- During our yearly event, a local Pharmacy participates by picking up unused/expired medications and having them recycled. This company also offers sharps containers at no cost for anyone who needs to collect needles, blades, etc. There is no financial support to the Municipality however, we are happy to see these products being ethically recycled and not being left at our Waste Transfer Stations.
- We do not participate as the local Pharmacies are all involved in this.
- None.
- Done through Stericycle. Program works great

Looking Ahead

28. In your opinion, what is the best way to collect for recycling, new materials not currently regulated in an EPR program (or regulated but not yet collected)?

    N = 8

    Respondents indicated that depending on the material, point-of-sale, curbside collection and/or easily accessible drop-offs (one-stop-shops) may be the best collection method.

- I am not aware of what new materials are being referred to.
- Transparent environmental fees at point of sale with clear understanding that it goes to justified waste diversion programs for the applicable products.
- Take it back to point of purchase.
- Not sure.
- Most ratepayers prefer the convenience of curbside pick up of their recycling. We have had great success hosting the annual event, however for a variety of reasons, sometimes holding on to the recyclable item for months at a time is not practical.
- Small items with curbside collection programs, larger items at community diversion centres. (one stop shop).
- Depots with direct payments to consumers.
- Not sure how to answer.

29. What do you think are the main barriers to collecting more materials to divert them from landfills?

    N = 11

    Responses indicate municipal cost for storage, as well as operational staff cost and time to collect are the main barriers for collecting more materials. They also identify transport, accessibility and contamination as challenges. Public participation is an additional challenge and messaging and education may be lacking.

- No room to separate at dumps. Have to buildings to store.
- consumer refunds.
- End user - no market there is no way to get rid of.
- Either it is not convenient for residents, or they simply don't care to divert and it most convenient to just throw everything away.
- Cost. From a municipal and provincial budget perspective as well as the consumer understanding of the different life cycle costs of all products.
- Cost and time.
- Contaminated recycling. No deterrent for this. New Brunswick issues fines for contaminated recycling.
- Some people are just plain LAZY and do not realize the impact their "waste" makes. Some people do not understand the system and when you take the time to explain it to them they seem to participate better. But for the most part it is laziness and unwillingness, especially in instances where they feel they should receive a deposit back on pop, liquor, etc. Even though they are not paying a deposit, they feel the "recycling fee" should be paid to them to "recycle" and there have been instances where they will simply just throw items in the garbage instead. It is very angering, but that mindset does exist.
- The amount of work that individuals have to undertake to properly recycle.
- It is complicated. We can't find the staff to understand and administer it properly, without paying so much we can't afford the pay. There is something slightly absurd in someone driving 20 km each way with 5 kg of recycling, if you think about it.
- Lack of public education... but getting MUCH better.

30. Are there materials currently in an EPR program that you think are not well suited to being regulated through an EPR program?

    N = 9

    Responses indicate that most respondents feel that the current listed materials work within the EPR system

- Electronic waste.
- No.
- No, as long as funding issues can be improved and more products are added to overall model.
- No.
- No.
- I am unaware.
- No.
- No idea.
- No.

31. Do you have any other comments related to potential future expansions of product definitions, products, or product categories for waste diversion through existing or new EPR programs?

    N = 8

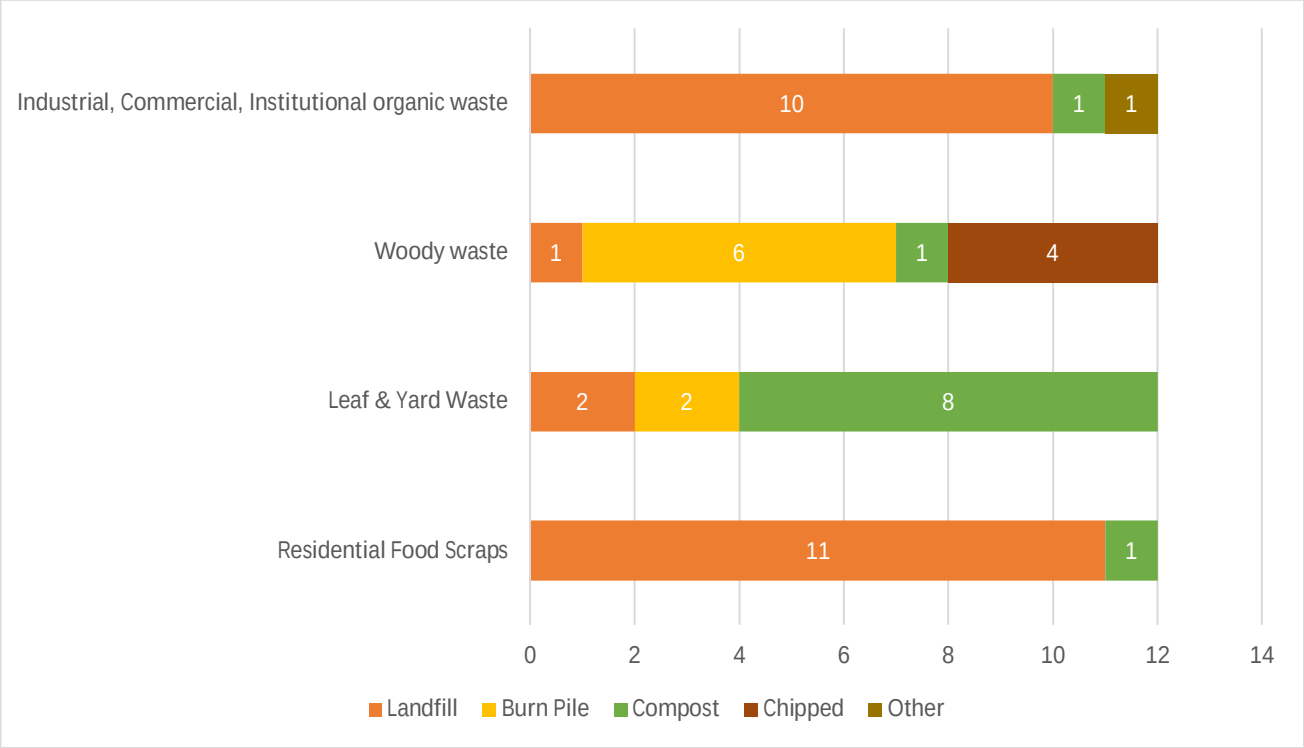
    Some respondents desired greater diversion opportunities, including expansion of programs to cover larger items like white goods, bulky items and mattresses.

- No.
- All stakeholders; producers, consumers, collectors, processors, re-processors and governments need to get on the same page and realize each product has its own life cycle that needs to be planned for so that they all can be to dealt with properly and responsibly. The main thing is cost recovery for the cycle.
- No.
- No.
- I would love to see EVERYTHING be recycled, I am passionate about recycling and the environmental impact it represents.
- Yes mattresses and other furniture need to be part of an EPR program. Large plastic items need to be addressed as well, i.e. patio furniture, planters etc.
- No.
- Get mattresses and white goods on sooner than later please.

Organic Waste

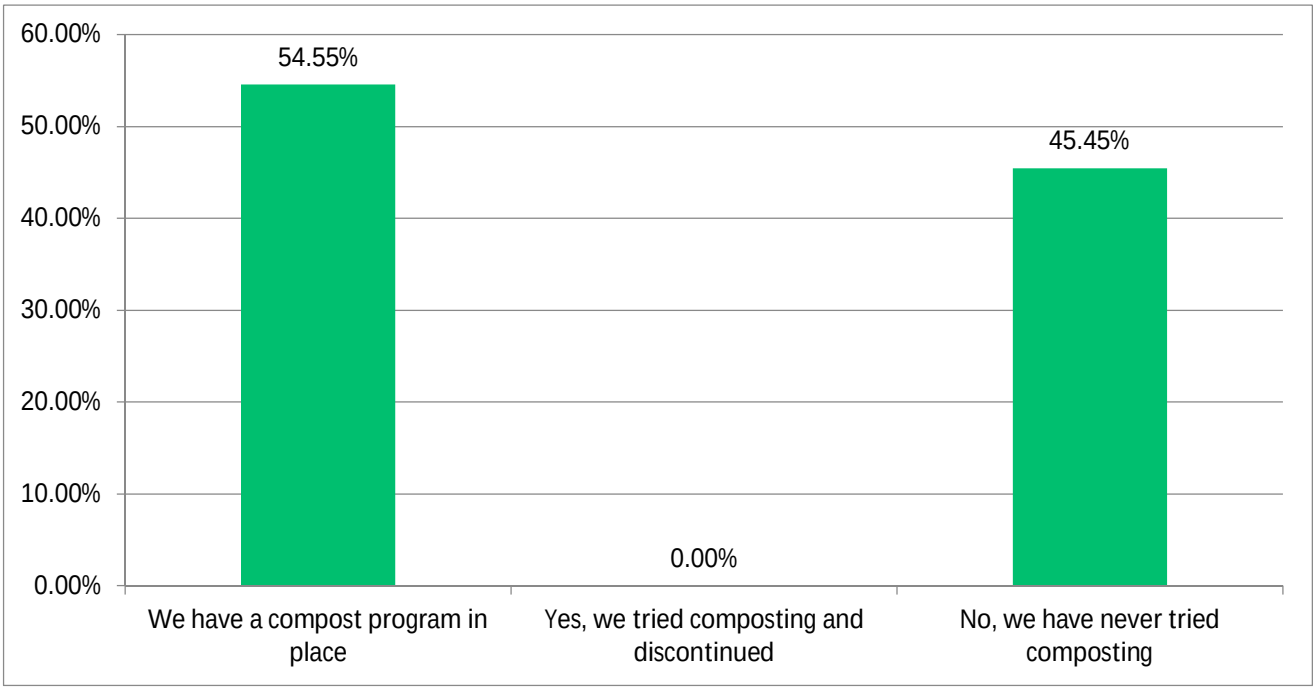
32. Please indicate what currently happens to the following organic waste streams in your community.

N = 12



33. If your community does not have a compost program in place, have you ever considered one?

N = 11

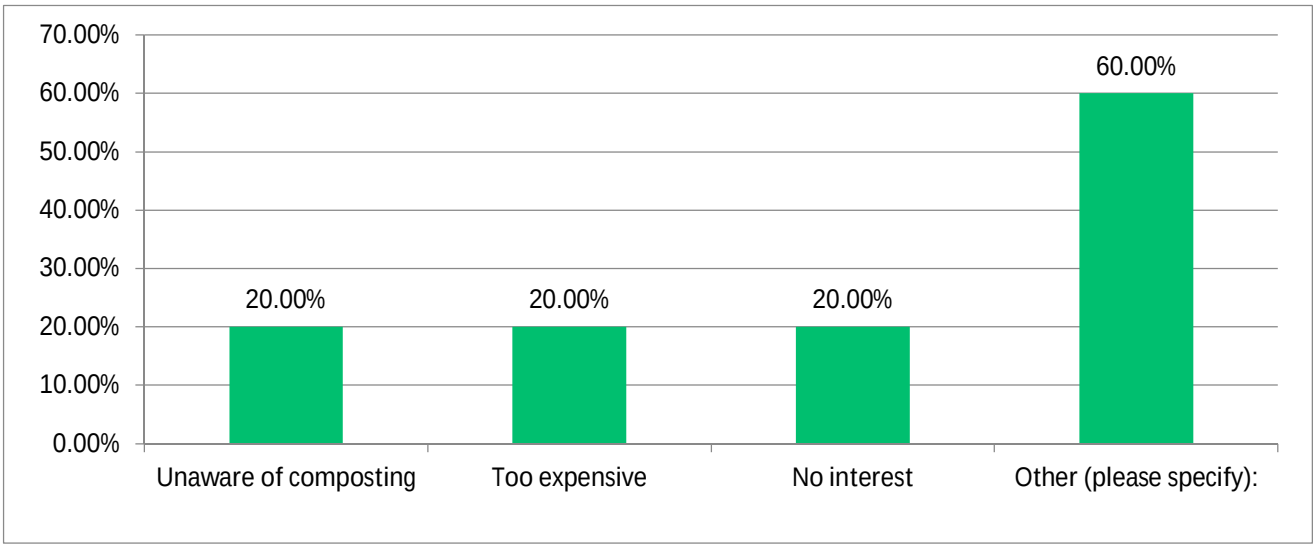


34. For Question 33, if you answered "yes", why?

No responses were logged for this question.

35. For Question 33, if you answered "no", why?

N = 5



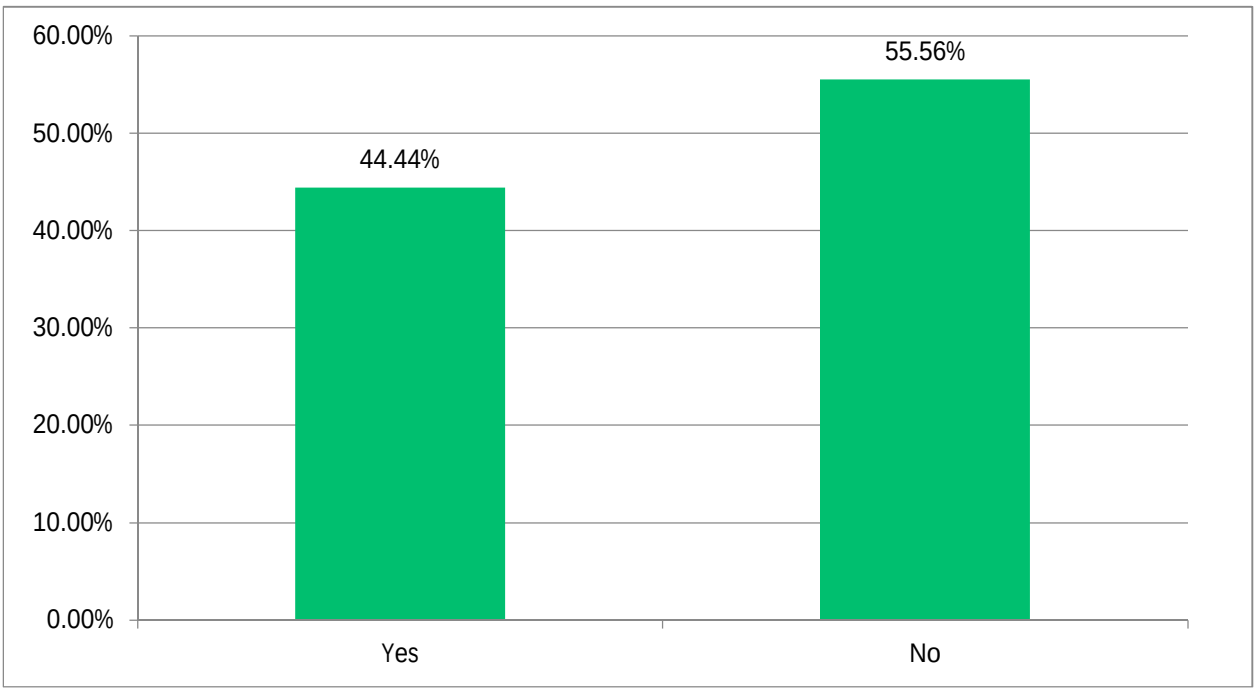
Responses indicate that lack of knowledge/equipment and cost are limitations.

Responses provided for "other" responses include:

- Lack of training, equipment and space.
- We are currently working through getting a program set up with our waste/recycling provider.
- We are considering. However, it will be for use as top cover at the dump only, as running a compost pile per the regulations is too expensive for us.

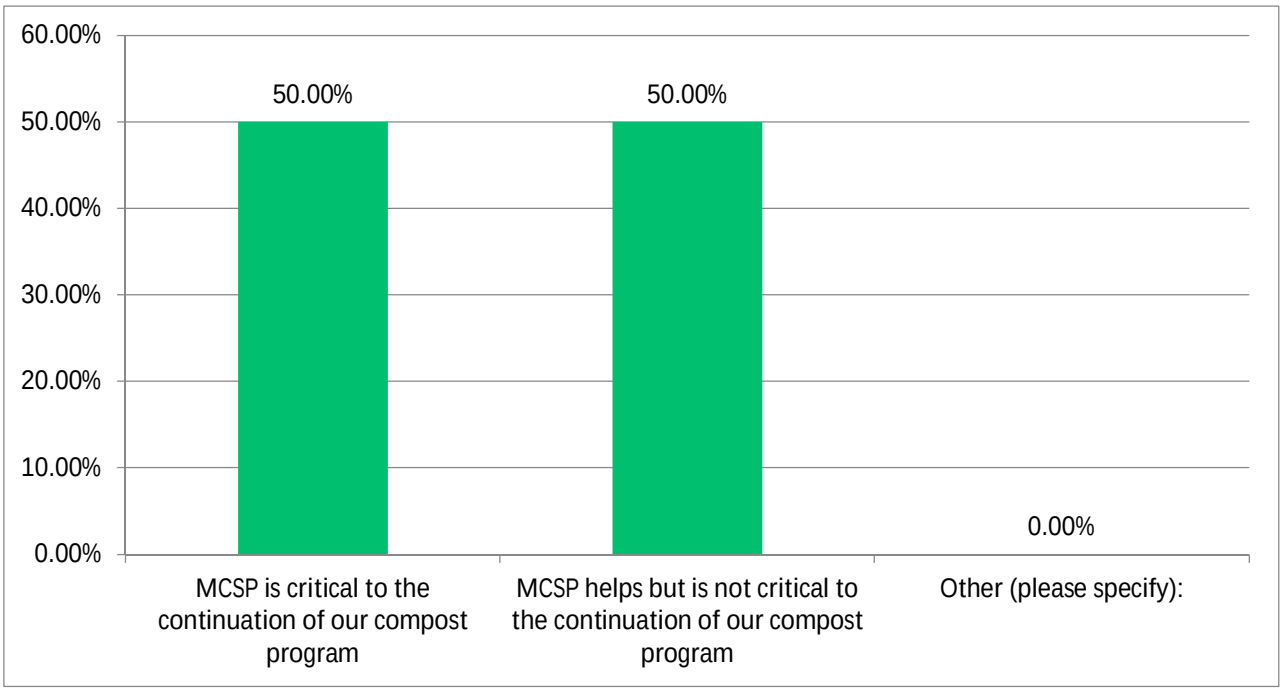
36. If your community has a compost program in place, do you receive Manitoba Composts Support Payments (MCSP)?

N = 9



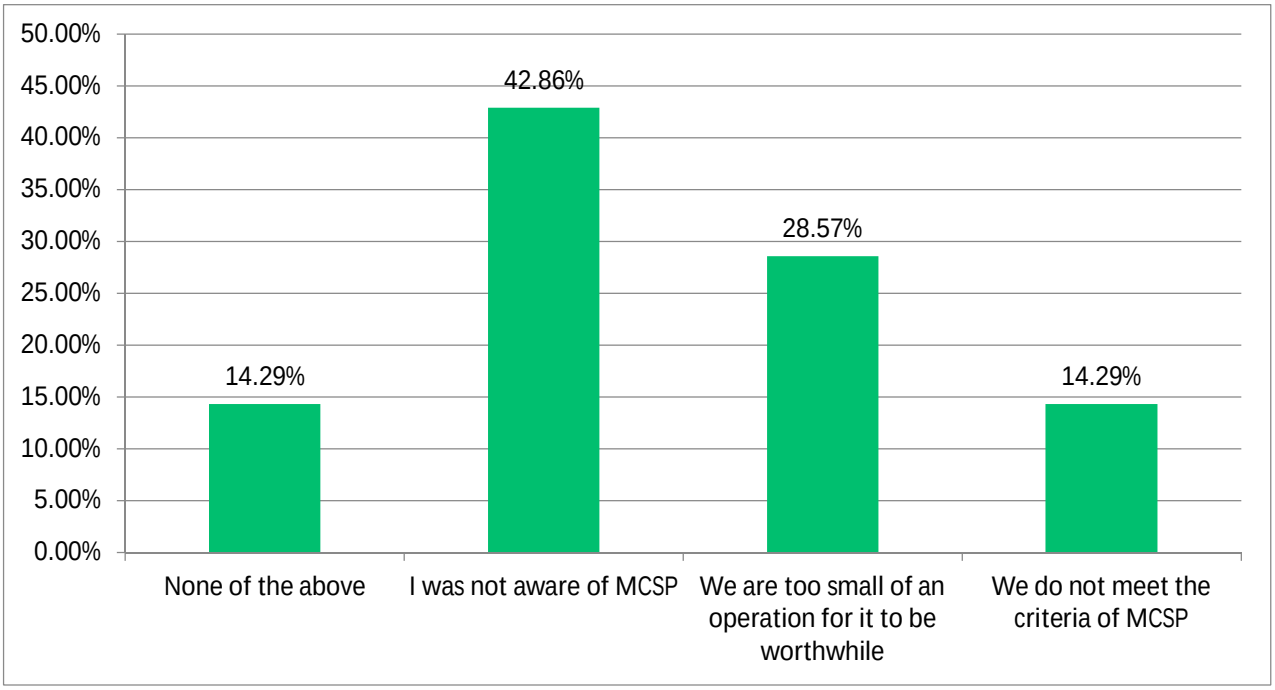
37. For Question 36, if you answered "yes", what are your thoughts?

N = 4



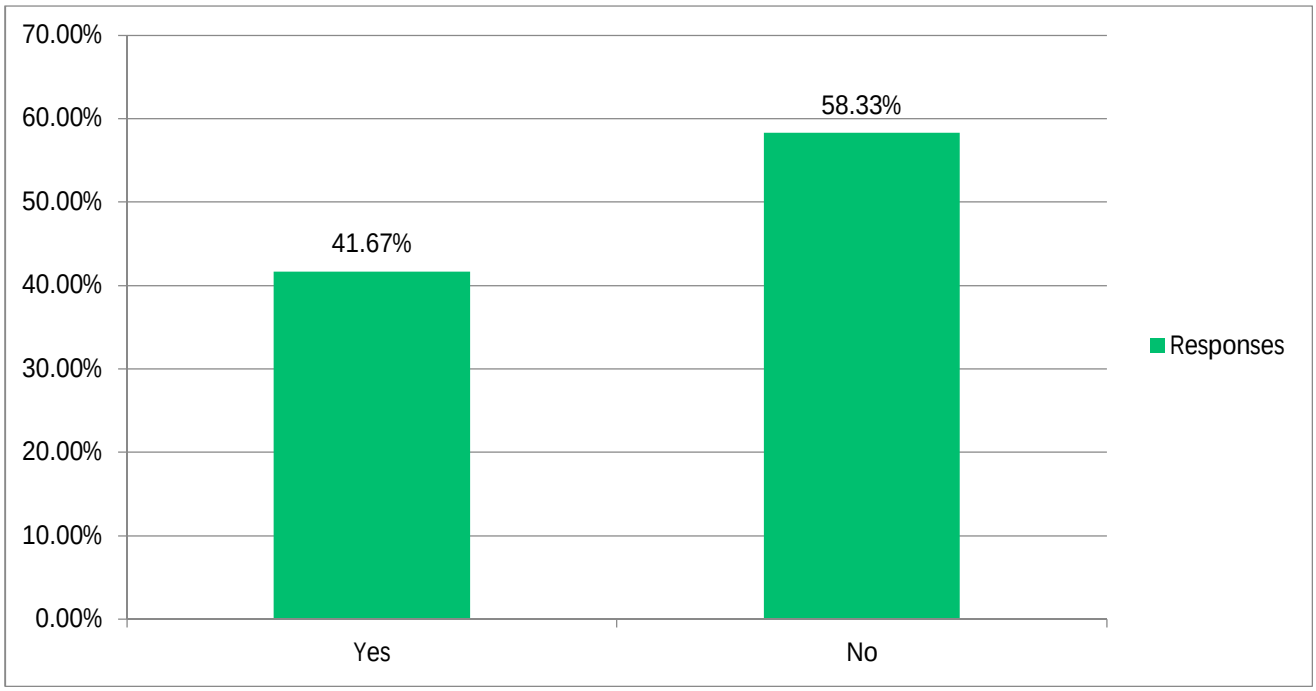
38. For Question 35, if you answered "no", why?

N = 7



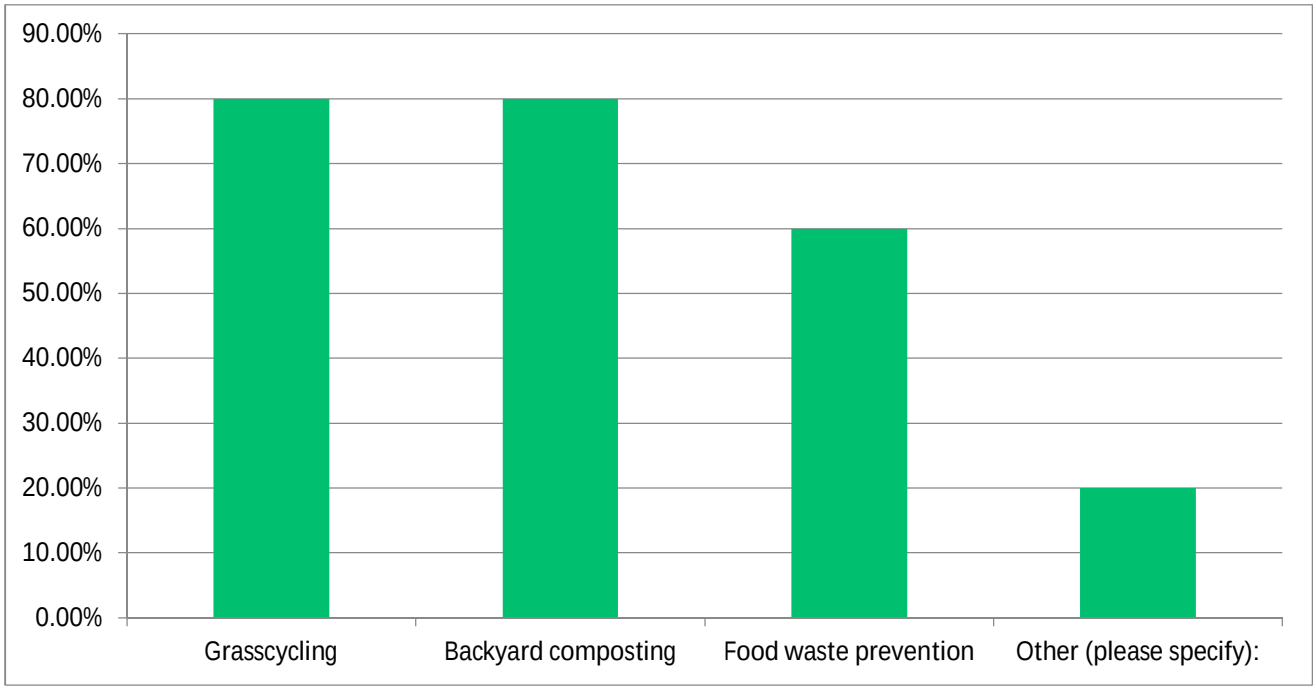
39. Does your community promote other recycling / waste reduction activities related to organic waste?

N = 12



40. For Question 39, if you answered "yes", which activities (check all that apply).

N = 5

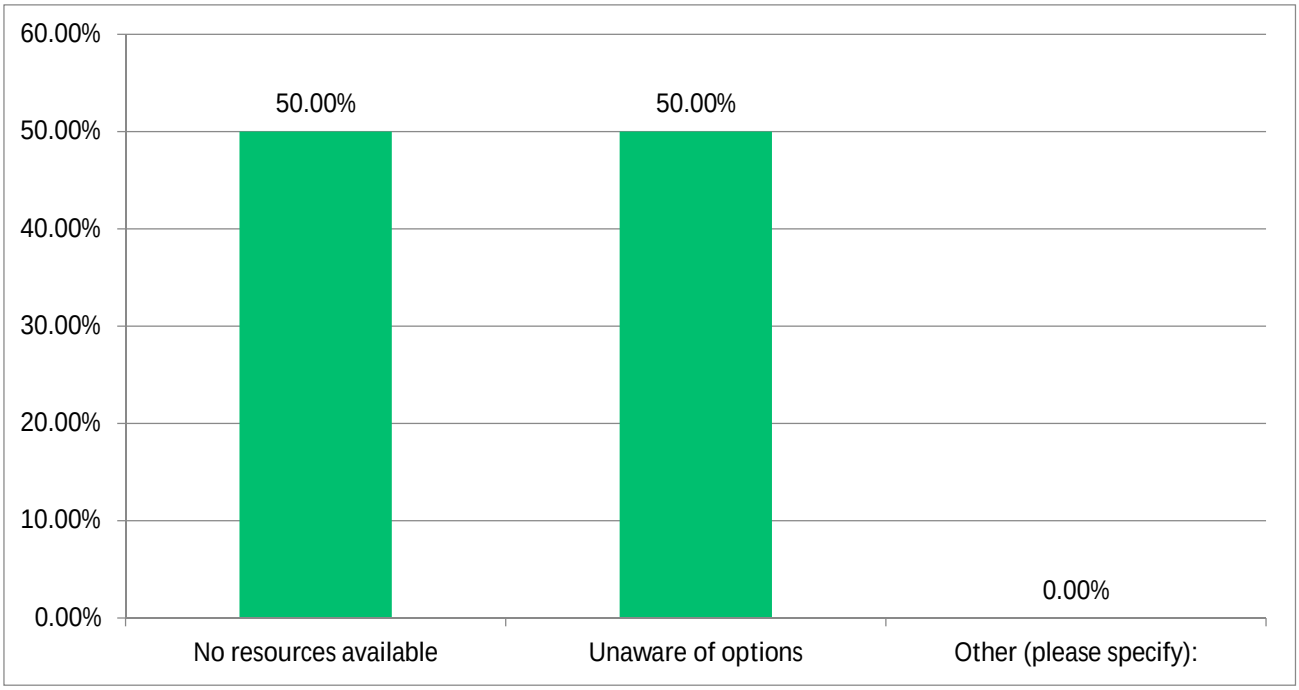


Responses for "other" are as follows:

- Currently conducting a residential food waste pilot project to study sustainability of a full source separated organics collection and composting program.

41. For Question 39, if you answered "no", why?

N = 6



42. What would help you to increase diversion of organic waste from the landfill?

N = 9

Responses indicate the need for increased funding and technical support for municipalities to provide options to allow for diversion of organic waste from landfills.

- Mandated compost collection.
- Organic waste curb-side collection going to a managed regional compost facility.
- Funding.
- People composting for their own use.

- Assistance with set up compost program.
- Curbside compost collection.
- Capital funding for composting equipment.
- Not having to have the taxpayers pay for it - something was cost-neutral. Plus, in the country, a lot of people find it easier to compost in the yard.
- Subsidize curbside organic collection and other initiatives.

Waste Diversion

43. How can the government and/or stewardship organizations support municipalities in enhancing their waste diversion?

    N = 7

    Responses indicate support for increased user fees, increased funding, ease of accessibility (one stop shop EPR) and public education and awareness as being important.

- Hate to say but increase WRARS to $15/tonne.
- Supporting & assisting municipalities to create & implement Solid Waste Management Master Plans that councils can approve in order to move away from landfilling and towards establishing curb-side organic waste, recyclable waste and household waste collection, in conjunction with establishing regional waste diversion locations for all the EPR program materials.
- Implementing more environmental fees to pay for all product life cycles and then less scrutiny by stewardship organizations against well established and justified waste diversion programs.
- Offer funding for implementation of new programs to communities, for example composting. As mentioned above, it would also be nice to see a better program in place for recycling "non recyclable" items once again that we once accepted.
- Reduce red tape and increased opportunities for shared funding or no interest loans to setup facilities.
- One stop shopping for everything. Detailed, on-the-ground advice from experienced folk who have lived the problem. The people in Winnipeg are nice, and helpful, but...Detailed marketing support tailored for the specific market and that don't call on office help that doesn't exist.
- Public education!

44. What can be done to support Manitoba municipalities in diverting more designated materials from landfills?

N = 7

Responses indicate need for financial and technical support to provide options. Importance of access, ease of use and public education and awareness noted.

- Financial support
- Provide the expertise & resources to implement change.
- More funding based on a strong push to the public that all the things we enjoy have to managed properly from manufacturing to diversion and/or disposal.
- As a rural community, our biggest struggle is getting the materials picked up or finding contractors that are willing to travel to collect. We give all of our recycling away, with the exception of tires and the curbside pick ups we get from MMSM.
- Make it easier, make the PRO's work together to collect more items through blue box programs.
- The Province could run regional landfills - if necessary partly paid by municipal levies and by the recycling revenues - which are large enough to have professional staff and large enough to handle all requirements.
- Public education

45. What can be done to support Manitobans to divert more designated materials from landfills?

N = 8

Responses indicate user fees needed along with landfill bans and enforcement. Ease of use and public education important.

- More landfill bans.
- Continue to provide public education with the sense and meaning and reasons for why it is important to do.
- Continued diligence in the importance of environmental respect and sustainability. In other words, charging appropriately to manage waste properly for generations to come.
- Stiffer penalties for those who choose not to recycle.
- Education and incentives are powerful tools.
- Make it easier!!!!! Don't require them to go to 12 different collection sites to recycle.
- Marketing goes some way. I think the provinces with direct to consumer refunds do better.
- Perhaps a version of the refund system in Alberta.

Appendix D

Stakeholder Webinar Summary and Findings

Recycling in Manitoba

Stakeholder Webinar Summary and Findings

March 29, 2021

Landmark Planning & Design Inc.

DILLON CONSULTING

Manitoba

Table of Contents

1 BACKGROUND

Over the last few decades, the Government of Manitoba has made specific efforts to improve waste management practices within the province. However, as waste materials evolve, so does the policy landscape and the technologies available to manage current and emerging waste streams. Manitoba's waste diversion and recycling framework needs to keep pace with this change. This is an opportune time to reflect on current practices and to explore opportunities for strengthening waste management systems in order to divert even more waste from landfills. This project reviewed the current waste diversion and recycling framework in Manitoba to identify its strengths and gaps and recommend options to modernize and improve the current framework.

Figure 1: Manitoba's Waste Diversion and Recycling Framework Review - Project Scope

The goal of the Stakeholder Engagement Program was to engage with program users and targeted stakeholders to gain un understanding of the current challenges and gaps with the current system, to introduce best practices and proposed concepts to stakeholders for targeted feedback, and to allow the stakeholder groups to engage with each other. Engagement was sought with Manitoba's general public, the product steward organizations, municipalities, industry, northern and indigenous communities and non-profit organizations.

Part 1 of the Stakeholder Engagement Program included a series of surveys, emailed questionnaires and interviews. Summaries of the Part 1 engagement activities are available as separate documents.

Part 2 included three stakeholder webinars which were conducted to explore potential "areas of exploration" in greater detail and discuss impacts (positive and negative), effectiveness and potential implementation considerations. PROs, municipal representatives, NGOs, Indigenous groups, and industry representatives were invited to participate in the webinars. The overall goal of the webinars was to provide an open forum for discussion and ideas, discuss challenges, opportunities, impacts and implications. This memo provides a summary of Part 2 Engagement activities.

2 APPROACH

For the webinars, topic areas and discussion points were developed after summarizing and analyzing previously collected information from stakeholder interviews and surveys. The discussion topics for each session were tailored to the target audience with an emphasis on gleaning key feedback from each stakeholder group's areas of expertise/experience.

The Project Team identified three stakeholder groups were targeted for the webinar sessions:

- Producer Responsibility Organizations (PRO)

- Municipalities and municipal interests (including norther, remote and Indigenous)
- Industry groups and Non-Governmental Organizations (NGOs)

For the webinar sessions it was determined that three sessions would be conducted. Session #1 was for the PROs and Session #2 was for the Municipal/Industry/NGO groups. Session #3 brought all groups together to share each other's perspectives from Sessions #1 and #2, find common ground and discuss ideas for implementation and overcoming barriers to implementation.

Discussion points were further clarified and sorted depending on the intended audience to gather specific feedback. The third webinar served as a final opportunity for all stakeholders to provide further input into overcoming barriers to implementation and sharing ideas between the stakeholder groups.

Invitations to participate in the stakeholder webinars were sent to each PRO group, a selection of 27 municipalities (with an attempt to build a sample of municipalities from all regions, representing urban and rural interests) and a selection of industry groups and NGOs.

Inputs from these stakeholder webinars, together with findings from the stakeholder interviews and the public and stakeholder surveys, will be used to help develop a set of recommendations for improving waste diversion and recycling programming in Manitoba.

3 WEBINAR FORMAT

Three webinars were held on Mach 16, 18 and 23, 2021. The webinars were conducted virtually through the Zoom platform and included an interactive component conducted through a 'Jam Board' on the Google platform.

Participants were shown a brief presentation, outlining key findings from previous stakeholder interviews and the public and stakeholder surveys that were previously conducted.

Those in attendance could participate in the discussion in several ways:

- An interactive Jam Board was set up to facilitate feedback on specific topic areas. Participants could add virtual sticky notes for all others to see and discuss.
- Live discussions were permitted where participants could use their microphones to ask questions and participate in the discussion.
- Participants could use the 'Q and A' function of the Zoom webinar to provide written questions to the webinar hosts.
- Participants could also use the general 'chat' function of Zoom to provide additional comments or questions.

4 SESSION ONE: MARCH 16 – PROS

4.1 Session Overview

The March 16 webinar was developed for producer responsibility organization (PROs) to facilitate feedback on specific topic areas. Topic areas included the following, with a focus on identifying positive impacts, effectiveness, implementation, and challenges:

- Landfill Bans
- 100% Producer Responsibility
- Expanded list of Designated Materials
- Enhanced Targets and Metrics

Participants were asked to consider the above-noted topics with the following considerations:

1. How would the implementation of these ideas impact your business/organization/municipality?
2. Would they be effective in achieving the goals as described?
3. How could they be delivered in a way that would be effective?
4. What are the potential negative unintended consequences of these opportunities?

Participants at the March 16 webinar included the following:

Participant	Organization
Adrian Vannahme	CBCRA
Caroline Czajko	HRAI
Colin McKeana	CBA
Christa Rust	CBCRA
Dennis Neufeld	EPRA
Jason Brown	PCA
Jay Illingworth	EPRA, Ottawa
Karen Melnychuk	MMSM
Kathy Cass	PCA
Ken Friesen	CBCRA
Kim Trimmer	Cleanfarms
Kristen Romily	Call2Recycle
Mannie Cheung	PCA
Rob Benson	MARRC
Tiffany Desjardins	HRAI
Ursula Grant	CWTA
Lora Meseman	Reclay StewardEdge
Kim Timmer	Cleanfarms

The following is a summary of what was heard at the PRO webinar session. A complete collection of input is included in the Appendices.

4.2 Topic #1 – Landfill Bans

Impacts (Positives)

- Increased diversion
- Increased awareness and education
- Promote circular economy

Effectiveness (Would it work?)

- Yes it would
- Would work best if aligned with convenient diversion alternatives

Implementation (how to do it)

- Provincial regulation – across entire province, not differing by municipality
- Public awareness (P&E)
- Done in collaboration with PROs
- For organics keep focus on consumers

Issues (Challenges)

- Municipalities do not like it
- Enforcement
- Not a popular move for politicians

4.3 Topic #2 – 100% Producer Responsibility

Impacts (Positives)

- It's the "right thing to do"
- Increased transparency, clearer funding
- Assists municipalities
- Would be effective for organics
- Would allow MB to catch up to other provinces
- Saves tax payers money

Effectiveness (Would it work?)

- Would work best if harmonized with other provinces

Implementation (how to do it)

- Industry should select funding model
- Adequate transition time would be required
- Look to the NS model for flexibility, learn from pros and cons of other provincial models
- All programs are funded differently, this would remain in 100% EPR
- Oversight bodies not recommended
- Accessibility is the most important factor, can't make people recycle, but you can provide them the option to recycle.

Issues (Challenges)

- Requires substantial funding to operate a 100% EPR model

- Misconceptions from municipalities that this will mean all responsibilities and/or costs shifted away to industries
- Misconceptions and differing approaches to a 100% model
- For organics it's difficult to identify a responsible producer
- Sticking points for municipalities are costs. EPR regulations don't absolve municipalities of dealing with waste or shift all responsibilities onto producers. Must work in partnership.
- Umbrella model?
- Industries don't want others to speak for them, don't want to speak for others.

4.4 Topic #3 – Enhanced Targets and Metrics

Impacts (Positives)

- Creates a level playing field
- Targets can be very effective in shifting change

Effectiveness (Would it work?)

- Targets may not actually increase diversion
- Re-use and reduction should be included
- Programs can't force people to divert materials, ease of use and education are important
- Hard numbers may be most relevant, trends and ranges

Implementation (how to do it)

- Targets should be material-specific for best results – not universal
- Differentiation between durables and single-use/disposables
- Regulators and PROs should have direct interaction for accountability
- Aspirational and flexible targets would be best
- Should be done with other measures such as landfill bans
- Look at accessibility and convenience instead of just recovery rates
- Partnerships are vital, targets are good, should be an element of stretch to get people interested in continuing.
- Setting targets can be effective – may need to be flexible
- Additional oversight bodies not ideal
- PROs should always be there to work with municipalities.
- Gives a sense of feeling to the community that the PROs are there to work with the community.
- Waste has to be a priority locally. Can't provide for communities if they aren't recycling in the first place.
- What about a central transfer station in Thomson for northern communities?

Issues (Challenges)

- Issues with enforcement of regulations
- Recovery rates not always the best indicators (such as for durable goods that may last decades)
- Important to remember that if a target is not met it does not necessarily mean the program isn't working (for example re-sale/repair of items)
- Some metrics for measuring targets are unproven/inaccurate

4.5 Topic #4 – Expanded Materials Lists

Impacts (Positives)

- Could help address contaminants and issues with recycling bins
- Could help reduce litter
- Organics would be a good target
- Items with contaminants (isofoam cylinders, coffee cups) would be good targets

Effectiveness (Would it work?)

- Requires regulatory framework change to allow ease of additions
- If focus is placed on what and why
- Collection can be a challenge

Implementation (how to do it)

- Should be done in collaboration with PROs and industry stewards
- Requires updated regulatory framework
- Priority should be on items that contaminate the recycling stream and toxic materials
- Should harmonize with other provinces
- If done with consultation
- Where possible, do through existing stewards – add to existing programs
- Requires adequate implementation/transition time

Issues (Challenges)

- Is there a market for new materials?
- Processing technologies

5 SESSION TWO: MARCH 18 – MUNICIPAL / INDUSTRY

5.1 Session Overview

The March 18 webinar included representatives from local municipalities and industry groups. This webinar included the following topic areas, with a focus on impacts, effectiveness and implementation:

- Landfill Bans
- 100% Producer Responsibility
- Expanded Materials
- Levies (user pay)
- Organics and CR&D Diversion
- Program Accessibility – Regional Collaboration

Participants were asked to consider the above-noted topics with the following considerations:

1. How would the implementation of these ideas impact your business/organization/municipality?
2. Would they be effective in achieving the goals as described?
3. How could they be delivered in a way that would be effective?
4. What are the potential negative unintended consequences of these opportunities?

Participants at the March 18 webinar included the following:

Participant	Organization
Stefanie Vieira	AMM
Jessica Floresco	Mother Earth Recycling
Robin Bryan	Green Action Centre
Tracy Hucul	Green Action Centre
Heather Fast	Manitoba Eco Network
Beth McKechnie	Green Action Centre
Angela Bidinosti	Aboriginal Affairs and Northern Development
Mike Fernandes	Strategy Makers
Chris Parker	Winpak
Richard Farthing-Nichol	Centre for Environmental Resources
Randy Webber	Environment Canada
Deb Odegaard	Flin Flon Recycling Centre
Amy Smith	Green Action Centre
John Graham	Retail Council of Canada
Lindsay Hargreaves	City of Brandon
DJ Sigmundson	RM of St. Andrews
Ron Hahlweg	RM of St. Andrews
Billie Jo Thompson	City of Thompson
Neil MacLaine	City of Thompson
Glen Koroluk	Manitoba Eco Network
Michelle Saunders	Food, Health and Consumer Products Canada
Chris McTaggart	Town of The Pas
Ashley Gaden	Government of Manitoba
Darcey Wittig	Town of Lac Du Bonnet
John Sinclair	Natural Resources Institute
Anne-Marie Novello	Bell Canada
Gordon Peters	Great West Life
John Visser	RM of Rockwood
Ian Tesarski	RM of Rockwood
Ben Price	RM of Grahamdale
Kelly Kuryk	Government of Manitoba
Kenzie Caldwell	Government of Manitoba
Cody Cameron	Municipality of Harrison Park
Bernardo Pasco	Town of Flin Flon
James Reitlo	Town of Flin Flon
Darrell Aitken	City of Dauphin
Eldon Wallman	City of Steinbach

The following is a summary of what was heard at the PRO webinar session. A complete collection of input is included in the Appendices.

5.2 Topic #1 – Landfill Bans

Impacts (Positives)

- Increased diversion (x)
- Increased awareness and education (x)
- Increases life of landfills
- Effectiveness (Would it work?)
- Doesn't address hard to recycle items
- Would require education/awareness
- Most effective when done in tandem with other measures
- Yes it would
- Would require standards

Implementation (how to do it)

- Community by-laws
- Regulatory and policy updates
- Begin with easiest items (yard waste, cardboard)
- Public education/awareness campaign
- Funding for infrastructure, education, programming
- Regional collaboration/shared services
- Overall direction and goals for province need to be established prior to landfill bans

Issues (Challenges)

- Hard to monitor/enforce (x)
- Could increase illegal dumping
- Community resistance
- Many landfills not adequately staffed

5.3 Topic #2 – 100% Producer Responsibility

Impacts (Positives)

- Would promote/increase recycling, increase diversion
- Reduced costs for municipalities
- Allows producers to design systems that create efficiencies, increase consistency and reduce consumer confusion
- Would encourage circular economy
- Shifts costs from municipalities to consumers/producers

Effectiveness (Would it work?)

- Current system with one year lag in funding from MMSM discourages participation
- Most effective if producers are part of design of systems
- It's a proven model elsewhere in Canada – learn from other jurisdictions
- Would work best with a national approach

Implementation (how to do it)

- Include blue-bins for multi-family residential

- Ease and simplicity are key – you can buy all goods at a single store, why do you need to take products several different places for disposal?
- Consult PROs and producers
- Learn from other provinces
- Requires enforcement and penalties
- Requires flexibility

Issues (Challenges)

- Costs passed on to consumers
- Removes local decision making
- Possible challenges with unions
- Municipalities may not fully understand funding models

5.4 Topic #3 – Expanded Materials Lists

Impacts (Positives)

- More materials = increased diversion
- Increases landfill lifespan
- ICI materials, white goods, cigarette butts, mattresses, plastics/films furniture etc.
- Styrofoam, plastic bags and online shopping packaging

Effectiveness (Would it work?)

- Yes
- Need infrastructure for collection and markets/uses for materials
- If aligned with national efforts

Implementation (how to do it)

- Try to ensure local processing
- Funding for transport/processing
- Work with large producers of single-use items to find alternatives
- Include all PPP not just residential
- Start with easy items (x)
- Regional collection hubs
- Develop on-site capacity for processing materials

Issues (Challenges)

- Who pays for increased costs of transport etc.
- Separating ICI from residential is difficult
- Clarification from Feds on upcoming changes (i.e., single use plastics) should be done
- Need hard data to inform decisions

5.5 Topic #4 – Higher Landfill Levies

Impacts (Positives)

- Effective tool to encourage diversion and market response
- Could motivate change in industries such as CRD

- Could generate more funds for municipalities to fund diversion programs and Education

Effectiveness (Would it work?)

- Yes
- Does not impact "upstream" issues and amounts of good produced
- If items can't be processed locally should they be available?
- Especially if there are differential tipping fees
- Maybe not – seen as a tax
- Might make people consider their actions more

Implementation (how to do it)

- Must be paired with alternatives and convenient programs
- Differential fees according to products could help
- Would need to find the right price to not shift to illegal dumping
- Major promotion and education required.

Issues (Challenges)

- Seen as an increased "tax" by some
- Not all landfills are equipped with equipment (scales) and staff
- Increases in illegal dumping/burning etc.

5.6 Topic #5 – Organics and CR&D Diversion

Impacts (Positives)

- This is an "absolute must"
- Reduction in methane as well as landfill savings
- Also produces useable compost
- Potential for waste to energy
- Huge impacts on diversion rates

Effectiveness (Would it work?)

- Yes
- Has been successful elsewhere
- MB is below national averages
- Can be done through backyard programs, drop-offs or curbside

Implementation (how to do it)

- Look to other cities/provinces for lessons
- Partnerships with industries (food prep, landscaping, greenhouses)
- Align with social procurement policies
- Focus of re-use of CR&D materials when possible
- Education and promotion are essential
- Use incentives for construction industry
- Focus on major producers (restaurants, institutions etc.)
- Require CR&D haul-outs in northern/remote communities
- Regional composing facilities

- Include pet waste

Issues (Challenges)

- Vast distances in north and rural areas
- Ensue composting is done with quality/end user in mind
- Safety concerns for composting in northern areas – bears, wolves etc.
- What else can be done with construction waste?
- Is there more supply than demand for organics?

5.7 Topic #6 – Program Accessibility – Regional Collaboration

Impacts (Positives)

- Takes strain off smaller communities
- Economies of scale
- Saving on costs for infrastructure and facilities

Effectiveness (Would it work?)

- Yes, especially for rural areas

Implementation (how to do it)

- PROs would require info on regional assets
- Mixed loads more than regional hubs
- Tie into WMR Plan 2050
- Collaboration between municipalities and northern/indigenous communities
- MARR would be a great venue to plan for regionalization

Issues (Challenges)

- Transportation costs
- Lack of regional support at government level
- Large distances
- New councils with new ideas every 4 years4
- GHGs from transport

6 SESSION THREE: MARCH 23 – ALL STAKEHOLDERS

6.1 Session Overview

The final webinar held on March 23 was open to all stakeholders including PROs, and municipal and industry representatives. The purpose of this session was to share what was heard from the previous two sessions and introduce topics for discussion to seek additional feedback and develop ideas and solutions to overcome barriers to implementing new ideas. The final webinar included the following topics with a focus on implementation and overcoming challenges:

- Landfill Bans
- 100% Producer Responsibility

- PRO targets and goal setting
- Levies (user pay)
- Organics Diversion
- CR&D Diversion
- Program Accessibility

Whereas Sessions #1 and #2 included on identifying impacts and effectiveness as well as implementation, Session #3 emphasized implementation and overcoming barriers to implementation. As such, participants were asked to consider the above-noted topics with the following considerations:

1. What are potential barriers to implementation and/or potential issues?
2. What is the best way to implement and overcome barriers/issues?

One key goal of Session #3 was to allow all stakeholder groups to hear each other's opinions. The findings of Session #1 and Session #2 were shared in Session #3. Additionally, the Project Team identified areas of shared interest between all groups. These included:

- Increased diversion is important
- Programs should be easy to use and convenient
- Clear diversion alternatives should be offered and changes should be complimentary
    - (e.g.: landfill bans must be implemented in conjunction with clear alternatives)
- Pro-active solutions to potential negatives should be included in changes
- Manitoba should incorporate key learnings from other provinces
- Education, promotion and awareness are key
- Collaboration and consultation

Participants at the March 23 webinar included the following:

Participant	Organization
Adrian Vannahme	CBCRA
Amy Smith	Green Action Centre
Ashley Gaden	Government of Manitoba
Bernardo Pasco	City of Flin Flon
Beth McKechnie	Green Action Centre
Chris McTaggart	Town of the Pas
Chris Parker	Winpak, Winnipeg Division
Christa Rust	CBCRA
Cody Cameron	Municipality of Harrison Park
Colin McKeana	CBA
Darrell Aitken	City of Dauphin
Deb Odegaard	Manitoba Association of Regional Recyclers and Flin Flon
Dennis Neufeld	EPRA
Glen Koroluk	Manitoba Eco-Network
Graham Scellenberg	Keystone Agricultural Producers
Ian Tesarski	RM of Rockwood

James Reitlo	City of Flin Flon
John Sinclair	Natural Resources Institute
Karen Melnychuk	MMSM
Kathy Cass	PCA
Ken Friesen	CBCRA
Kristen Romily	Call2Recycle
Lindsay Hargreaves	City of Brandon
Mannie Cheung	PCA
Meagan Hatch	n/a
Mike Gordichuk	City of Winnipeg
Michelle Saunders	Food, Health and Consumer Products of Canada
Mike Fernandes	StrategyMakers Consulting
Moira Geer	City of Winnipeg
Randy Webber	Independent Consultant
Ron Benson	MARRC
Sarah Wallace	MMSM
Stefanie Vieira	Association of Manitoba Municipalities
Tiffany Desjardins	HRAI

The following is a summary of what was heard at the PRO webinar session. A complete collection of input is included in the Appendices.

6.2 Topic #1 – Landfill Bans

Challenges

- Financial cost to municipalities
- Potential strategy for specific wastes
- Alternate disposal methods prior to ban being put in place

Implementation Ideas (How could it be done?)

- Only done when there is reasonable access to collection in the community
- Education on why the ban is in place
- Provide incentives with bans
- Bans should reflect local contexts / alternative availability
- Might be easier to implement for stewarded materials

6.3 Topic #2 – 100% Producer Responsibility

Challenges

- Can't let current MRF technology dictate collection and sorting methods
- ICI sector introduces complications
- Requires aggressive targets
- Doesn't work for organics

Implementation (What would it look like?)

- Government to hold industry accountable to ensure consumers are paying

- Transportation costs should be accounted for
- EPR needs to work with current MRF infrastructure
- National coordination (including consistency with the National Action Plan Toward Zero Plastic Waste) is key
- Transparency and enforcements are important components
- Transportation grants to help early implementation
- 100% individual producer responsibility model is an option
- Alternative collection methods are required

6.4 Topic #3 – PRO Targets and Goal Setting

Challenges

- Need targets for commercial waste (not just household waste)
- Need to engage with companies that will reprocess the waste for the circular economy
- Current targets are too low
- Shortfalls in funding are barrier to increasing diversion
- Targets should be practical and align with National Action Plan Toward Zero Plastic Waste
- Consumer choice should be factored into targets

Implementation (What would be most effective?)

- Must be a coordinated approach
- All recycling programs should have targets
- Improved education for province and municipalities on programming
- "realistic" targets that are product specific, not a one-size-fits-all
- Stewards should face fines for not meeting targets

6.5 Topic #4 – Higher Landfill Levy

Challenges

- Should be consistent with other provinces to not burden Manitoba businesses
- Should be related to the lifecycle costs of the landfill
- If levy is raised, where does money go? Back into infrastructure to lower environmental impacts?
- Connection between higher fees and increased services (e.g., organics management)

Implementation (How could it be effective as a tool?)

- Political will is required
- Needs to be done with big education piece
- Risk looking like a cash grab
- Could show increased diversion, but only if all landfills have scales to track tonnage
- Different levy for residential, industry, CR&D
- Illegal dumping will likely increase

6.6 Topic #5 – Organics Diversion

Challenges

- Can work well in urban areas, but might not be possible province wide
- Without financial assistance, costs might be too high
- Requires strong political will
- Animals in the northern areas are a challenge
- Different system (anaerobic vs aerobic) produce inconsistent outputs.
- The program should be the same cost province wide
- Requires significant start up capital funding and expertise

Implementation (How could we do it?)

- Adding compost as a clear stream will reduce contamination, but clearer guidelines on products (plant based) are required
- Facilities should meet ISO standards
- Include food waste disposers in the strategy
- Should not be gasifying organics or using WTE technology for organics
- Explore policies to support organic diversion like preventing food waste, food preservation, urban garden space, etc.
- Marketing for end products for municipalities and agricultural community

6.7 Topic #6 – CR&D Diversion

Challenges

- Collection alone not a value-added activity – requires an outlet for diverted materials
- What amount of demo materials can be realistically reused
- Shouldn't add costs to building/commercial enterprises, already expensive province to build
- Need to attract industry to process materials, transportation costs will kill efforts

Implementation (How to do it?)

- The restore shows there is demand for salvaged materials
- Could be accepted into the HHW program if ICI was accepted
- Opportunity for social enterprise to sort materials, provide education to reduce waste and advertise market for salvage materials
- Mandate commercial waste in EPR programs

6.8 Topic #7 – Program Accessibility

Challenges

- Prairie provinces have opportunity to work with industry to create aligned programs

Implementation (What would be most effective?)

- Needs collaboration with various stakeholders, lead by Province
- Requires local community participation
- Success of EPR programs is dependent on shared responsibility model
- Other regulations need to be consistent and not act as barriers

- Tailored resources
- Should consider GHG impacts and climate change

7 SUMMARY

- In most cases, a strong political will is required to address goals and implement them when required. Direct interventions like landfill bans or 100% producer responsibility may provide key steps forward toward increasing diversion and improving programs overall, but it will take additional effort and political support to be effective.

- Increased diversion was identified as being important and a common goal. Whether your perspective is from a PRO, NGO or municipality with overarching concern for the environmental sustainability, or maximizing the lifespan of a landfill, this is a shared interest.
    - Diversifying waste streams to include Organics and CR&D materials is supported, but comes with its share of unique challenges.
    - For both Organics and CR&D, start-up costs, transportation costs and end products are all core concerns when considering province wide programs.

- Stakeholders identified the importance of diversion programs and alternatives to waste disposal being easy to use, easy to understand and convenient for users. Whether as a means of increasing participation or preventing illegal dumping, making waste diversion and recycling accessible is important.
    - This can be sought through improved marketing, increased and enhanced education programs, and improved collaboration with various stakeholders involved in the entire life cycle of recyclable goods.

- Building off the last point, there needs to be clear alternatives for disposing waste, especially if landfill bans, increased landfill levies or other measures are considered as part of the Waste Review.

- Further to the last two points, attendees made it clear that there is value in identifying potential barriers and side effects of new programs and changes to the framework and that we should be pro-active in offering implementation strategies to mitigate these potential negatives.

- With regard to progressing into the future, attendees agreed that setting realistic targets is an important part of understanding what programs are working, and what programs require additional supports. However, targets should be specific to the material being recycled and can also address specific geographic or material specific contexts that may affect its ability to be tracked accurately.

- When exploring new programs, or considering adding new materials to programs, emphasis should be placed on “easy wins” first to build momentum and find success, while longer-term or more difficult pursuits are planned and pursued.

- Stakeholders also spoke to taking lessons from other provinces and identifying the strengths of our existing framework against other Canadian provinces and borrowing the best ideas from national and international examples.

- Ensuring the public, municipalities and all key players have knowledge and are educated in relevant matters, as well as awareness and promotional campaigns were identified as being crucial. Thus, education and promotion of programs/diversion options are seen as paramount.

- And finally, collaboration and consultation were identified as having utmost importance.

APPENDIX D-1

March 16 Stakeholder Presentation

Manitoba's Waste Diversion and Recycling Framework Review

Stakeholder Engagement Webinar

March 16, 2021

Manitoba

Landmark Planning & Design Inc.

DILLON CONSULTING

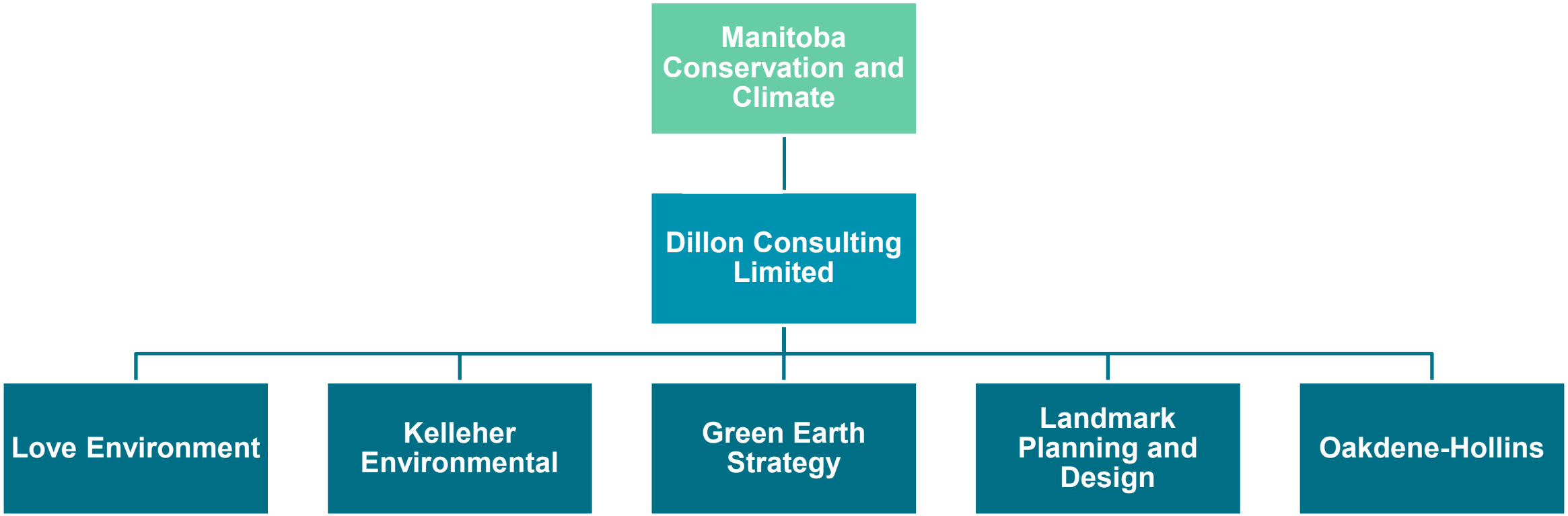
75 YEARS

Welcome

- Manitoba Conservation and Climate (MCC) is conducting a review to support the modernization of Manitoba's regulatory and programming framework for waste diversion and recycling.
- Discussion will be around key topics with the focus on extended producer responsibility (EPR).
- MCC are attending today as observers only.
- All questions shall be directed to the presenters, not MCC.

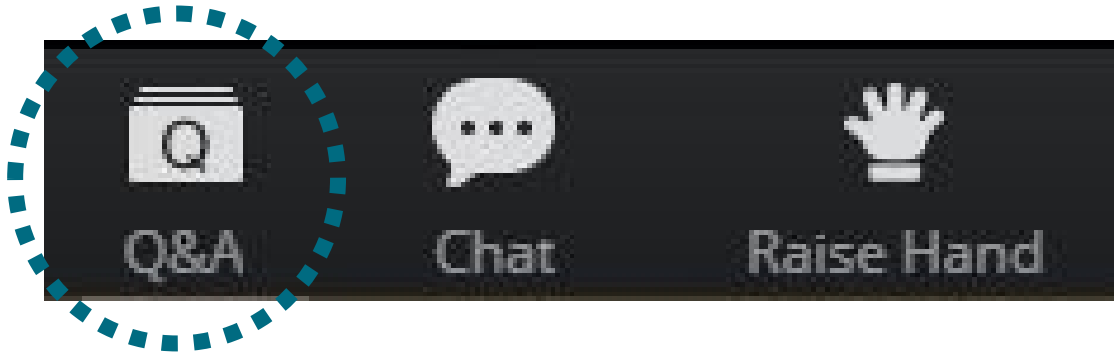
Workshop Agenda

- Team introductions
- Zoom webinar overview
- Overview of the scope of the review
- Overview of waste management in Manitoba
- Overview of “What We Heard” so far
- Discussion of select “Areas of Exploration”



Zoom Webinar Overview

- Respectful dialogue and participation are expected.
- If you have a question or comment during the presentation, please use the “Q&A”. We will try to answer questions during the webinar.
- Please reserve the “Chat” function for making technical inquiries.
- “Raise Hand” can be used during the interactive session.

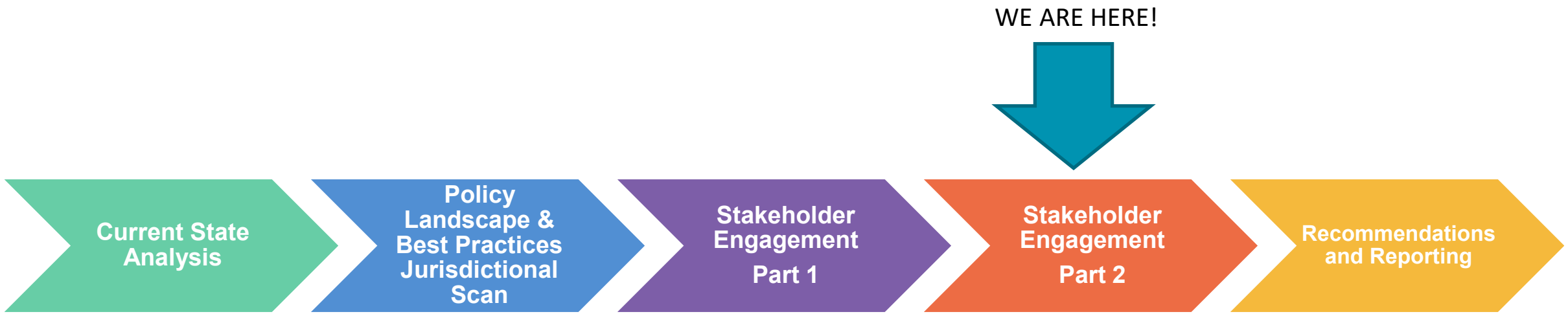


Scope of Project

Scope of Project Review

- The project scope included four main tasks
- December 2020 to March 2021

- Focus was on the modernization of the provincial framework of waste diversion and recycling

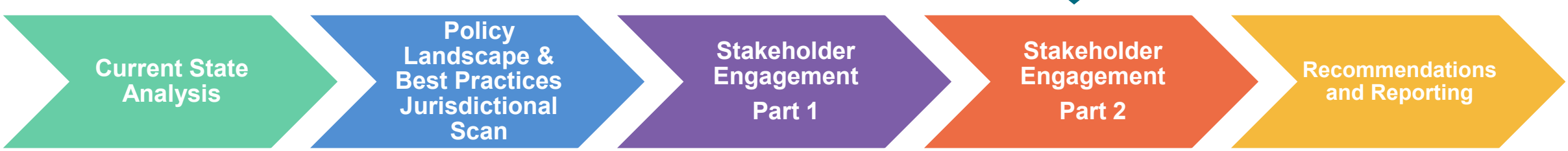


Scope of Project Review

The nine project objectives include a review of:

- Program enhancement
- Program accountability
- Program effectiveness
- Circular economy
- Funding allocation
- Barriers and opportunities
- National targets
- GHG targets
- Partnership synergies

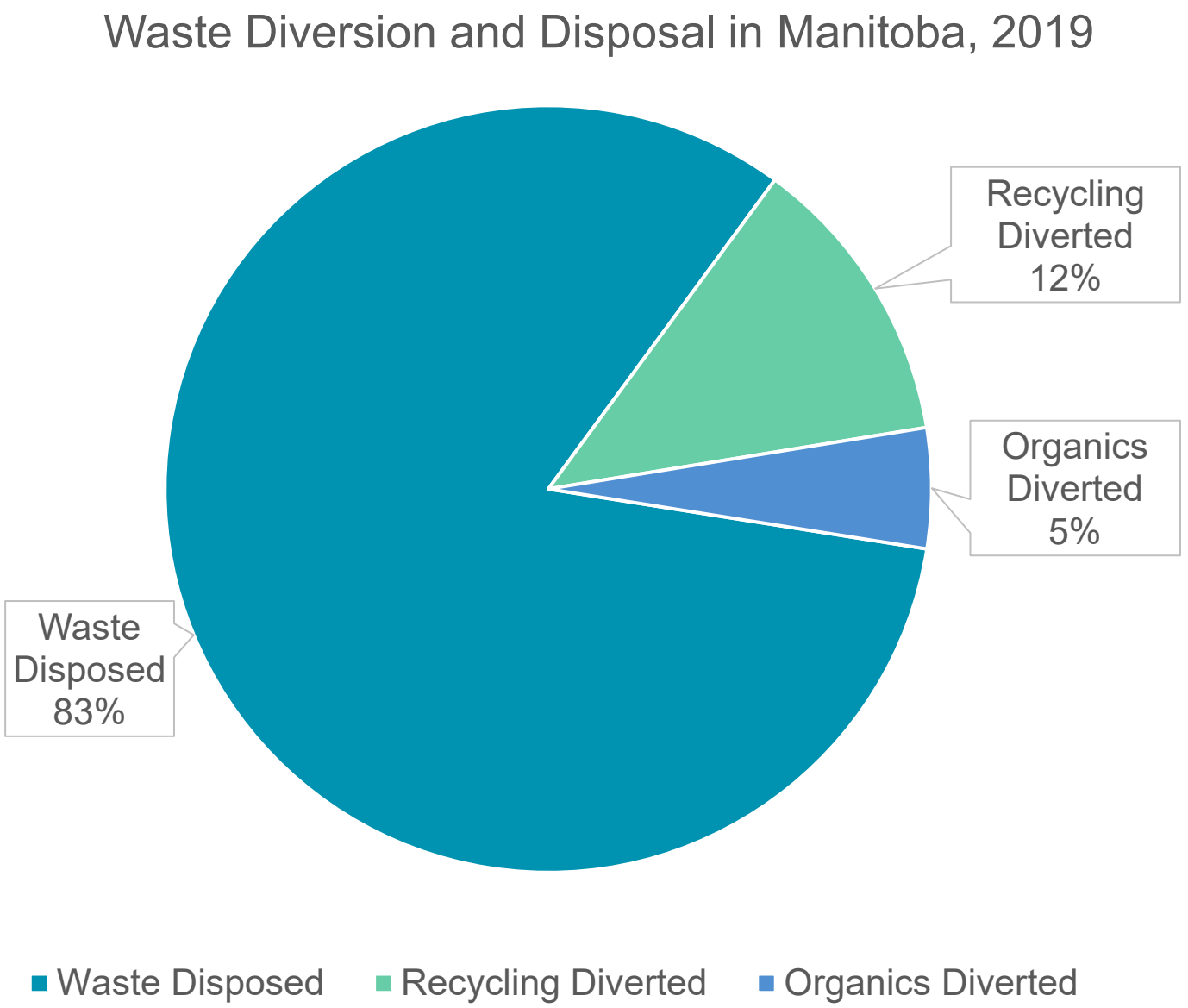
WE ARE HERE!



Current State of Solid Waste Management in Manitoba

Current State of Solid Waste Management in Manitoba

- 17% waste diversion rate
- 719 kg/capita waste disposal rate



https://www.gov.mb.ca/sd/pubs/annual-reports/annual_report_2019_20.pdf

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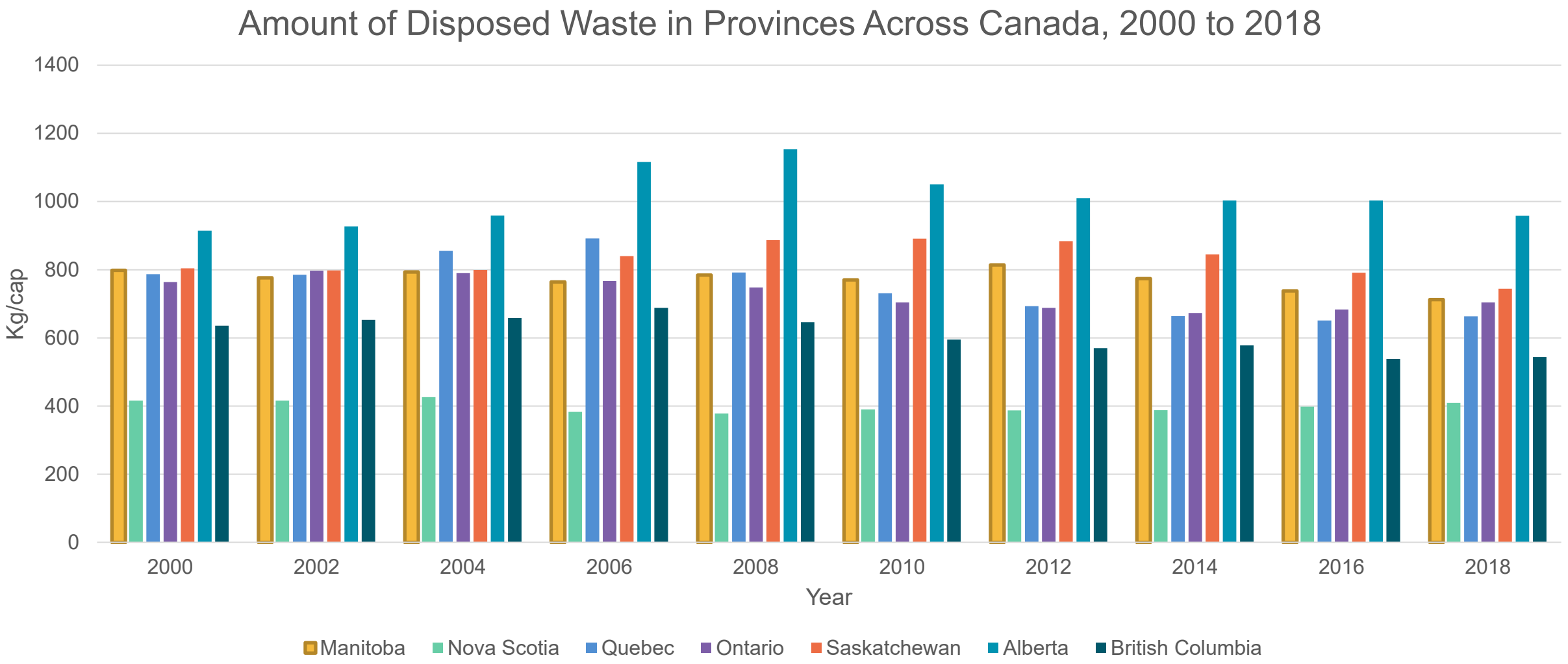
Current State of Solid Waste Management Across Canada



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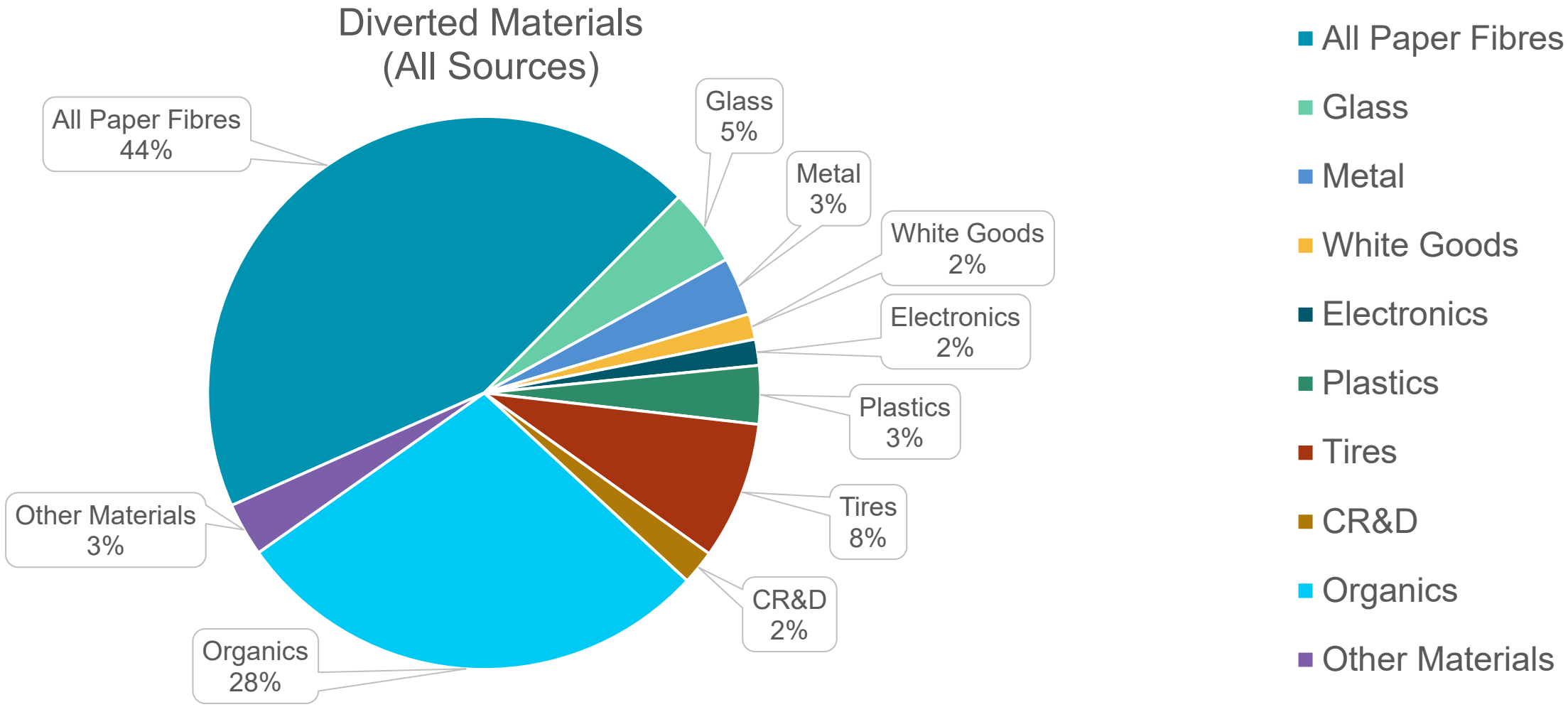
Current State of Solid Waste Management in Manitoba – Diversion Breakdown



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What We Heard

Stakeholder Engagement Feedback

Stakeholder Engagement Approach

Public Survey
Municipal Survey
Individual Interviews
Emailed Questionnaires

What We Heard – Public Surveys

Recycling Information

- Is confusing,
- Lack of awareness,
- Not confident in their knowledge.

Discouraged By

- Lack of local options for recycling,
- Inconvenience,
- Unsure it gets recycled.

Support For Diversion of

- Organics, Plastics, Styrofoam, and Glass

Composting

- 50% compost and 50% do not:
  - Lack of education on how to compost,
  - Nuisances (including smells and pests),
  - Limitations due to living arrangements.

Recycling Program Availability

- 41% very satisfied or satisfied,
- 34% either dissatisfied or very dissatisfied.

71% of Participants Recycle

What We Heard – Municipal Surveys and Interviews

PRO Programs

- 100% EPR – complicated for municipalities; need producer accountability and service standards
- Lack of consultation on 100% EPR for PPP
- Collection by PROs not frequent enough
- PPP – not receiving 80% of their eligible expenses
- Lack of dialogue between municipalities and PROs – need a forum/council
- Most stewardship programs would not function without municipal support

Funding and Program Cost

- Recycling collection, transportation, staffing cost burden/barrier, too much financial responsibility on Municipalities, programs are not adequately funded
- WRARS funding 80/20 – felt some rebate amount is being held back; transparency issues

Other Comments

- Missing diversion opportunities for organics, CR&D
- Composting needs to be operationally and financially attainable for municipalities
- Illegal dumping concerns
- Municipal feedback not reflected in government outcomes
- Do not support landfill bans – onus on municipalities to enforce bans

What We Heard – Producer Responsibility Organization (PRO) Interviews

Successes

- WRAP legislation is well written; broad, non-specific; allows industry to design plans
- Support landfill bans
- Good collaboration between PROs
- Manitoba is a leader and one of the best regulatory regimes
- Overall meeting or working towards program plan targets (accessibility, recovery)
- Work with and support municipalities as partners in support of collection, depots, P&E
- MARR: supportive forum, network
- GHG reporting not currently a requirement

Challenges

- Need Gov't support with free riders
- MB staffing changes are a challenge
- Support National harmonization
- Performance: multiple metrics, not a single metric
- Plastics: Single-Use Plastics (SUP) focus
- Program plan updates should be every 3-5 years

What We Heard – Service Providers, NGOs, and other Stakeholders

Challenges

- Lack of program transparency
- Lack of recycling access in the north
- Pay levy/fees – do not receive same funding and services
- Northern shipping cost is a burden
- Unrealistic expectation from the PROs
- PROs focus on recycling; not reduction
- Unclear – PROs role vs community roles

Stakeholder Suggestions

- Northern consultant point person – very useful
- Option for one umbrella organization to represent all 12 programs
- Would like to see a technical steering committee
- Strategy needs a strong circular economy approach
- Regional servicing contracts (processors)
- Need locally and culturally appropriate education materials
- 100% EPR for MMSM

What We Heard – First Nations and Northern Perspectives Interviews

Challenges

- Paying the enviro fees on some designated materials, but are not provided service access
- Limited by capacity and funding for waste management
- Challenging to register for PRO programs and meet the requirements to participate
- Materials already being stockpiled – no good clarity on what to do next
- Backhaul program is effective, but only serves a limited number of remote communities

Stakeholder Suggestions

- Develop a northern regional strategy
- Support for organics diversion in the north
- Align provincial goals and programs with funding available through the First Nations Solid Waste Management Initiative
- Support for addition of mattresses and large appliances as designated materials

Key ‘Areas of Exploration’ for Discussion

Interactive Exercise

Interactive Exercise

- Please open a window in Jamboard. We emailed you a link to our board.
- We will provide an overview and run an interactive exercise.

- Review each “Area for Exploration” using the following lenses:
  1. How would the implementation of these ideas **impact** your business/organization/municipality?
  2. Would they be **effective** in achieving the goals as described?
  3. How could they be **delivered** in a way that would be effective?
  4. What are the potential negative **unintended consequences** of these opportunities?

Key Areas for Exploration

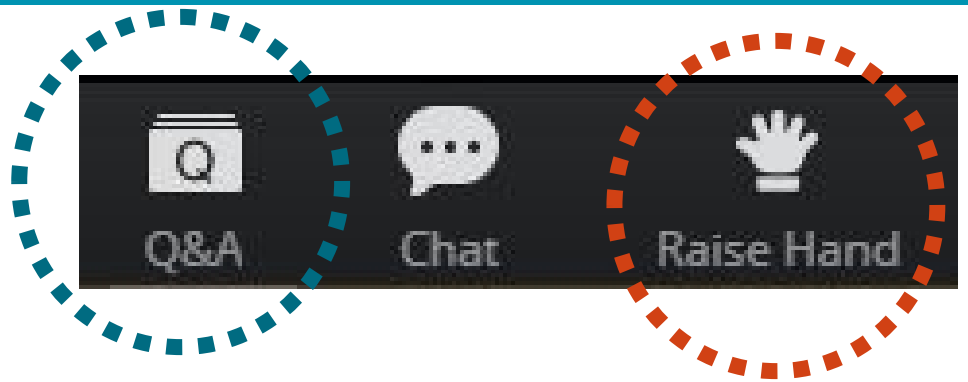
Landfill Bans

100% Producer Responsibility

Expanded Designated Materials List

Enhanced Targets and Metrics

Questions/Comments



Thank You!

APPENDIX D-2

March 16 Feedback

WASTE DIVERSION AND RECYCLING FRAMEWORK REVIEW: PRO WEBINAR SUMMARY

Date: March 16, 2021

This is a summary of verbal comments received during the March 16th Manitoba Waste Review Webinar for Producer Responsibility Organization (PRO) representatives. This pertain to verbal discussions only and should be considered in concert with the Jamboard interactive exercise component of the meeting.

ATTENDEES:

- Manitoba Conservation and Climate: Rhian Christies, Jennifer Chambers, Matt Popowich, Kenzie Caldwell
- Project Team: Jeannie Bertrand, Heidi Gerlach, Sara Sadowy, Jeff Pratte, Brendan Salakoh, Evan Allan, Geoff Love

PROS:

- Adrian Vannahme - CBCRA
- Caroline Czajko - HRAI
- Colin McKeana - CBA
- Christa Rust - CBCRA
- Dennis Neufeld - EPRA
- Jason Brown - PCA
- Jay Illingworth - EPRA, Ottawa
- Karen MeInychuk - MMSM
- Kathy Cass - PCA
- Ken Friesen - CBCRA
- Kim Trimmer - Cleanfarms
- Kristen Romily - Call2Recycle
- Mannie Cheung - PCA
- Rob Benson - MARRC
- Tiffany Desjardins - HRAI
- Ursula Grant - CWTA
- Lora Meseman - Reclay StewardEdge
- Kim Timmer - Cleanfarms

TOPIC 1:

- No verbal discussion was had.

TOPIC #2: 100% PRODUCER RESPONSIBILITY

- Organics would make a big impact, but it's difficult to find a responsible producer
- Keep focus on consumers as there are large gains to be made for organics (as shown in the survey)

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Winnipeg, Manitoba R3B 0G5
Tel: 204.453.8008
E-mail: info@landmarkplanning.ca

- Sticking points for municipalities are costs. All municipalities have differing costs. EPR funds a "model" not a "Cadillac" service. Not fair for them to say industry doesn't cover it all.
- EPR regulations don't absolve municipalities of dealing with waste or shift all responsibilities onto producers. Must work in partnership.
    - Costs are higher for municipalities, but both parties have to be brought to table.
- What about an umbrella model?
    - Industries don't want others to speak for them, don't want to speak for others.
    - Likely wouldn't apply in MB.
- Preference is similar to a BC model, not completely, but definitely not the IPR system in Ontario.
- Difference with BC
    - BC meets more formally but in MB we meet informally to work on various projects.
    - Preference is for the BC model but not a complete copy. (there was varying agreement with this.

TOPIC #3: ENHANCED TARGETS AND METRICS

- How to ensure targets are met?
    - The government already has enforcement, they just need to use it.
    - We don't need another regulatory body.
- What targets?
    - 75% recovery target for CBCRA - has been very effective and motivating to producers and everyone else to get towards that target. Could be the single reason for getting things from 42% recovery to almost 70%.
- What about sticks and carrots for motivation?
    - Government can use their existing "sticks" and "carrots" .
    - One target might not work for everyone.
    - Landfill bans coupled with diversion targets would be valuable.
- What about consequences if you don't meet targets? Or dates?
    - Set a date for achieving goals, having a date is great fist step.
    - There needs to be adequate transition period.
- 75% recovery target for CBCRA - has been very effective and motivating to producers and everyone else to get towards that target. Could be the single reason for getting things from 42% recovery to almost 70%.
- Implementing fees/fines? Depends on the material stream. CBCRA has a specific date from the government for reaching its target. Simply having a date, regardless of incentives or penalties, is a good first step
- Are there preferred metrics?
    - Accessibility is the most important factor, can't make people recycle, but you can provide them the option to recycle.
- If accessibility is provide, what then?
    - Difference between items, life cycle of each individual item needs to be considered and taken into account.
- Partnerships are vital, targets are good, should be an element of stretch to get people interested in continuing.

    - 2 key cornerstones of partnership: awareness and convenience.
- The life cycle of products should be considered. For example, a plastic bottle that was used and discarded after several minutes has different implications than a radio or electronic device that served it's function for decades.
- PROs should always be there to work with municipalities.
    - Gives a sense of feeling to the community that the PROs are there to work with the community.
- What about a central transfer station in Thomson for northern communities?
    - Thompson as a hub may be too far.
    - Best way to get producers out is get it on trucks. In some places we use trailers originating from Winnipeg to save costs. Doesn't make sense to handle things twice (Thompson and then Winnipeg) might as well just send it down from the communities straight to Winnipeg.
    - Backhauling takes advantage of the empty trucks that are returning from communities anyway, they are hauling goods north and then returning with goods – these trucks are returning to Winnipeg anyway.
- Waste has to be a priority locally. Can't provide for communities if they aren't recycling in the first place.
    - Meany PROs aren't being invited into communities.

Topic #4: Expanded Designated Material List

- Priority should be on items that contaminate the recycling stream
- There are things like take-out cups (mainly coffee cups) that are huge contaminants in the stream and have been working to see if there is a solution - clearly need a solution with a market and sorting capabilities as well as need province assistance with that. In terms of volumes of materials, it's a huge priority.
- Toxic and contaminating items would make sense to keep out of landfills and incorporate into programs. (e.g. isofoam cylinders, other items)
- If new materials are added, where possible, additions should be for existing programs, not new programs or streams
    - Don't have population to support more stewardships
    - Increases confusion and complexity
- Focus on increasing collection services and communication and messaging.
- Should be at the discretion of the producer.
- Some items may not fit under existing programs (e.g. mattresses)
    - Already voluntary programs for mattresses.
- Are voluntary programs good?
    - No opinion.
- It's up to industry whether they want an existing program or not to handle material

Open Floor

- Need to bring ICI material sectors to the table – this could address a major gap that currently exists in Manitoba.
- Producers should be consulted in any proposed changes, PRO's do not necessarily speak directly for the producers and they can share unique insights.

- EPR program is working well
- Challenges are being felt everywhere, can learn from other provinces. Overall, young program (10 years) with room to grow and improve.
- Some programs operate in multiple provinces - Manitoba has a good balance, holding PROs accountability, ensuring a broad range of materials are accepted and recycled - "if it ain't broke don't fix it"
- EPR program and provincial government in Manitoba is working well in Manitoba than many other provinces. Issues around accessibility, dealing with remote communities and costing formulas are issues in other provinces as well. Manitoba could learn and benefit from other provinces. Not an easy solution. Reminder that EPR in Manitoba is only ten years old. There has been a great deal of activity and work done over the last ten years and will get to those issues but they are complex issues and they take time to resolve them. Lots of space but low population - there are challenges to delivering programs equitably across the country.

Interactive Engagement Exercise

Sticky note exercise: share your thoughts and ideas

- How would the implementation of these ideas impact your business/organization/municipality?
- Would they be effective in achieving the goals as described?
- How could they be delivered in a way that would be effective?
- What are the potential negative unintended consequences of these opportunities?

Your sticky notes are anonymous

Topic #1: Landfill Bans

for material managed under a waste diversion program

Impact (Positives)

- Reduction of landfilled materials by making disposal more expensive than recycling (currently not the case for IC&I waste!)
- needed to prevent competing system against programs. ie leakage. to allow programs to meet their targets and goals
- a good way to help educate the public
- It is important to reduce Stewarded Products from getting in the landfill
- Increased diversion
- Works in other jurisdictions
- circular economy
- prevents leakage from collections/competing against programs, not allowing programs to achieve targets and goals
- Becomes an informal requirement
- Incentivizes consumers to take responsibility for the material.

Effectiveness (Would it work?)

- Yes, it would work for materials in stewardship programs
- Bans only after solutions
- Landfill bans would help divert products from landfill
- Depends on the program must give solutions before ban
- As long a convenient solutions are available
- Would help for some materials. Some are easier than others.

Implementation (How to do it?)

- Bylaw or Provincial Regulation
- Province-wide landfill bans on electronics in provinces like NS are proven effective
- Provincial Regulation
- Provincial Regulation
- BANS should be implemented in conjunction with PROs
- Province can help with awareness of bans
- Public awareness (P&E)

Issues (Challenges)

- Municipalities don't like it
- Enforcement
- Enforcement issues
- provincial politicians need to see the win in this
- Enforcement and illegal dumping
- consistency
- Manitoba Government is scared to act
- Bans should be provincially regulated across the board (not muni by muni)

Topic #2:100% Producer Responsibility

industry would be fully responsible for program (collection, processing, P&E)

Impact (Positives)

It's the right thing to do - more transparency, clearer funding streams, helps municipalities

Essentially being done now for many of the materials.

Targets can be very effective

It would allow MB to catch up with Ontario, BC, EU

Municipalities (should) like it.

lets do this for organics.

save taxpayers money

Effectiveness (Would it work?)

harmonize with other provinces

need for local gov't to recognize non $ value

transparency of funding EPR is critical

Would work if there was the ability to harmonize approaches across provinces.

EPR is not the right tool to influence design for environment. manufacturing is typically on a global sale.

Implementation (How to do it?)

Electronics already 100% self-funded, and always have been

EPR should allow for industry to choose financing model. regs silent on financing schemes

Adequate transition time required

Programs all use different mechanisms to fund, and to collect. This doesn't change with a move to 100% EPR.

Look East not West. East (NS) has a model that allows for flexibility and best results.

already 100% for most programs

NO oversight bodies please

don't need another Green Manitoba

PRO direct relationship with regulator is best

Alberta will def implement an oversight body - NOT recommended. too complex and expensive

best for dept to not get involved. its a B2B decision

Ontario IPR model is clearly not proven and looks crazy expensive. STAY AWAY!

Issues (Challenges)

funding to manage 100%

transition period

ON is not the model to look to

BC is not the model to look to

The challenge is that EPR regulations do not transfer full responsibility for waste from Local Gov to PROs - Local Gov have some responsibility as well

difficult to determine and define what is 100%

Would still require PROs to have flexibility in how they develop/manage their programs.

BC is the most expensive program in the world. Look to the new Ontario model instead.

Topic #3: Enhanced Targets and Metrics

more robust targets and accountability to increase diversion

Impact (Positives)

- Creates a level playing field of Producers
- Targets must be PRO- or material-specific
- targets must be material specific. not one size fits all
- Targets will be different for all PROs. There shouldn't be a push for one-size-fits-all. Need to allow for flexibility. Ultimately, landfill tells the story.
- need differentiation between consumables vs durable
- Targets can be very effective

Effectiveness (Would it work?)

- Have to be mindful of what suite of metrics might work instead of focus on "recovery".
- By adding targets will not increase diversion
- re-use and reduction to be included
- LC has to be take into account for recovery targets
- should not be evaluated on absolute numbers but rather observed trends. not on any specific target but perhaps as suite of performance targets
- if targets are required, a range vs absolute numbers for target may be more practical
- as noted, programs can't force public to drop of their material for recycling. this needs to be factored into any targets
- Landfill will tell you what you need to worry about.

Implementation (How to do it?)

- KPIs and targets should be part of program plan development process between regulators and PROs
- Regulators can hold PROs accountable directly
- Need to look at "risk" of not meeting targets when trying to determine whether they are necessary.
- targets should be aspirational, many variables (i.e. Covid) get in the way of achievement often
- add a landfill ban as a lever
- accessibility as a metric
- don't recommend penalties for lack of performance, but they could be used for lack of participation (i.e. free riders).
- instead of recovery rates,,,,look at accessibility and convenience
- specific target date required in legislation

Issues (Challenges)

- Government's don't like doing enforcement for EPR programs - not just in MB
- Government needs to enforce regulations
- recovery rates for durable goods don't work. lifespans are sometimes decades, not weeks or days
- recovery rates are not applicable to all programs and should not be imposed on all programs
- Important to remember that NOT meeting a metric does not mean the program isn't working. Consumers make the decision and sometimes they decide to keep, or sell, etc. This can't be captured by the program.
- If recycling is not required, could pose a challenge to achievement of targets. i.e. IC&I, MFDs
- certain products have commercial value, and may not be collected in huge quantities by programs - they never make it to our depots
- Some programs include multiple mechanisms for "collection" i.e. reuse, which make reaching a defined % challenging.
- targets for certain products are difficult to determine. historically, models by consultants haven't proven to be accurate, reasonable or realistic

materials to be added to recycling programs

Topic #4: Expanded Materials List

Impact (Positives)

Helps to deal with some contaminates issues within recycling bins.

Isofoam cylinder

Good idea for: plastic bags, large appliances

Organics

Could help reduce litter

requires a regulatory framework change to allow ease of addition of product categories

Effectiveness (Would it work?)

Really need to focus on the WHAT and the WHY. Look at risk.

EPRA MB already covers appliances (microwaves).

Some materials already have viable markets outside of EPR programs. Collection can be challenging.

Implementation (How to do it?)

if done in conjunction with PROs and industry stewards...this is a good idea

This should be done for a reason (i.e. ending up in landfill). These additions - willy nilly - are ridiculous.

need advance consultation with potentially affected industries

surveying MUNIs to see what are the problem materials, can help narrow list for expansion

Some programs will automatically collect new materials as a result of the programs they've developed.

adequate time must be built in for implementation

requires backdrop regulatory framework to ensure fair playing field and program success

service providers can not have multiple collection bins for identical materials

Engage with EXISTING Stewardship. Do not allow additional competing Stewards as this will make collection difficult

governance for new products needs to be determined by the affected industry

must have a viable & sustainable management option for the products that are being considered for expansion

need a defined path based on set principals to help guide expansion. volume vs recyclability vs hazards etc..

harmonization with neighboring provinces and across Canada always best way to proceed

need to consult with OEMs for whole new categories

Producers must be consulted

need for harmonization with existing programs in other provinces

Issues (Challenges)

need to have a market for any new materials

Markets & technology to process material

The entire IC&I sector needs to be added to programs

ICI material inclusion

APPENDIX D-3

March 18 Stakeholder Presentation

Manitoba's Waste Diversion and Recycling Framework Review

Stakeholder Engagement Webinar

March 16, 2021

Manitoba

Landmark Planning & Design Inc.

DILLON CONSULTING

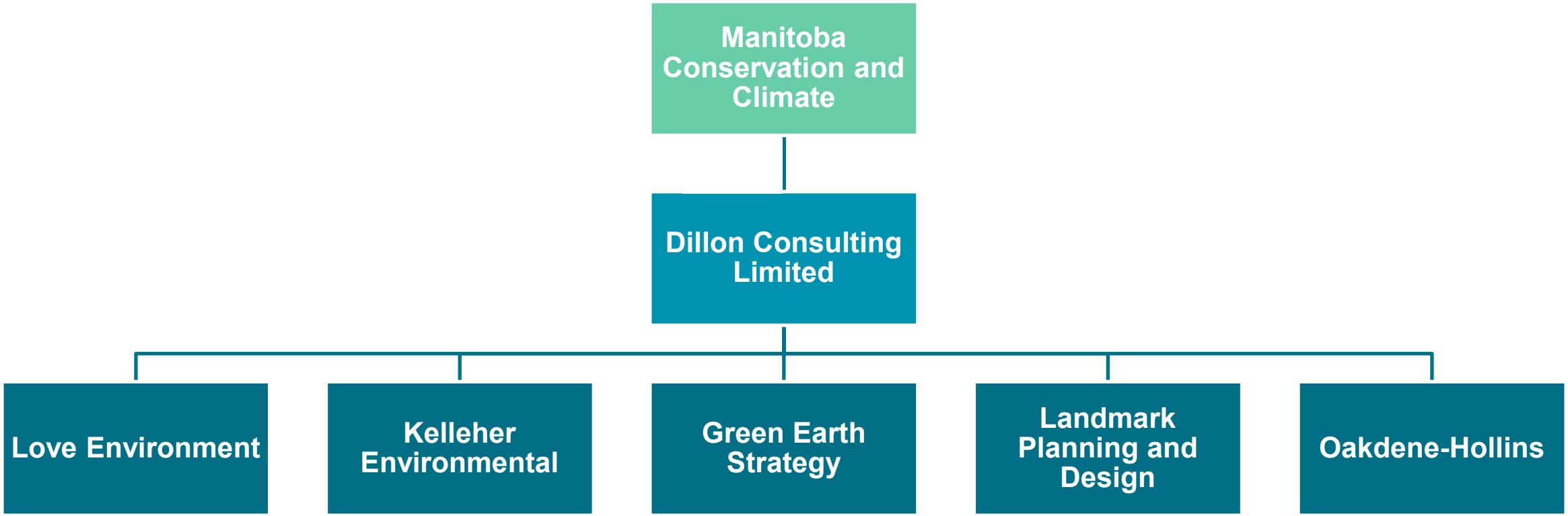
75 YEARS

Welcome

- Manitoba Conservation and Climate (MCC) is conducting a review to support the modernization of Manitoba's regulatory and programming framework for waste diversion and recycling.
- Discussion will be around key topics with the focus on extended producer responsibility (EPR).
- MCC are attending today as observers only.
- All questions shall be directed to the presenters, not MCC.

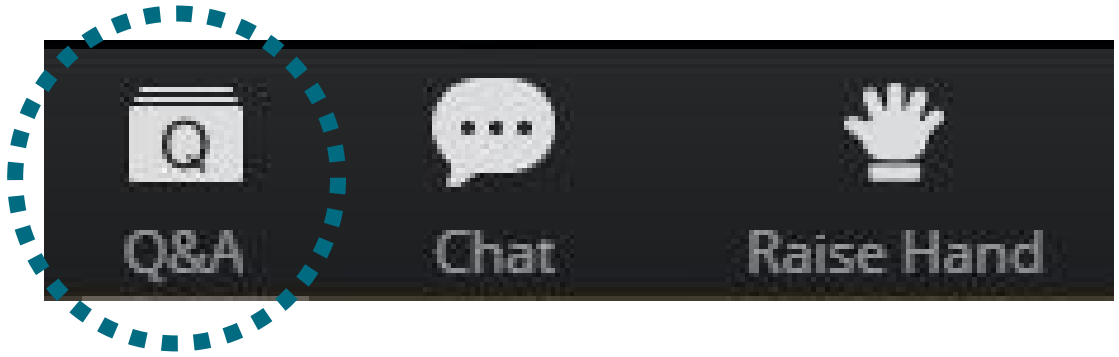
Workshop Agenda

- Team introductions
- Zoom webinar overview
- Overview of the scope of the review
- Overview of waste management in Manitoba
- Overview of “What We Heard” so far
- Discussion of select “Areas of Exploration”



Zoom Webinar Overview

- Respectful dialogue and participation are expected.
- If you have a question or comment during the presentation, please use the “Q&A”. We will try to answer questions during the webinar.
- Please reserve the “Chat” function for making technical inquiries.
- “Raise Hand” can be used during the interactive session.

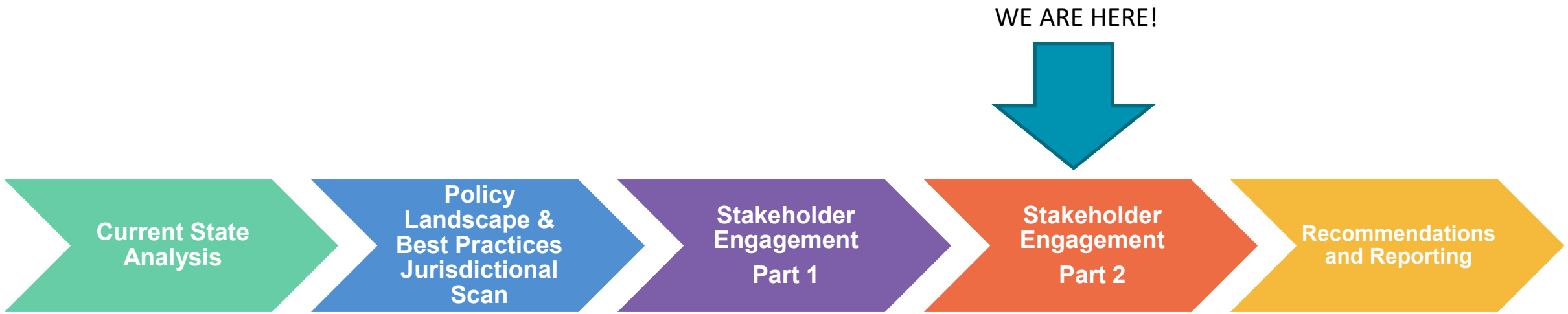


Scope of Project

Scope of Project Review

- The project scope included four main tasks
- December 2020 to March 2021

- Focus was on the modernization of the provincial framework of waste diversion and recycling

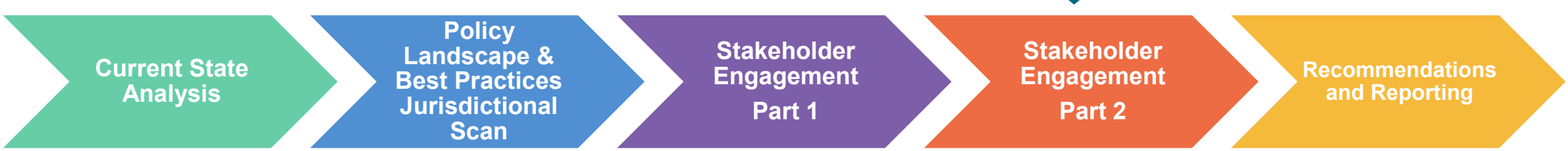


Scope of Project Review

The nine project objectives include a review of:

- Program enhancement
- Program accountability
- Program effectiveness
- Circular economy
- Funding allocation
- Barriers and opportunities
- National targets
- GHG targets
- Partnership synergies

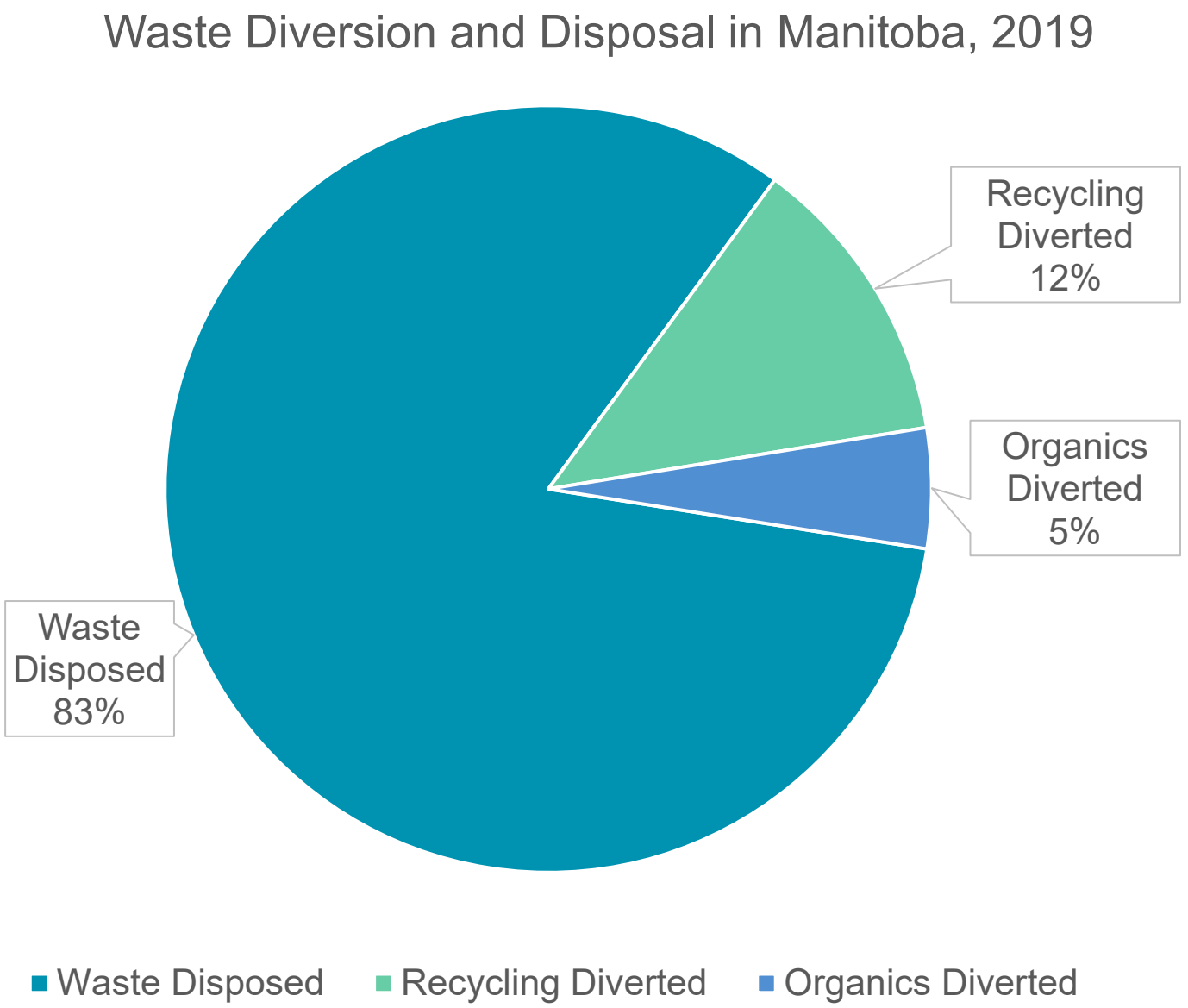
WE ARE HERE!



Current State of Solid Waste Management in Manitoba

Current State of Solid Waste Management in Manitoba

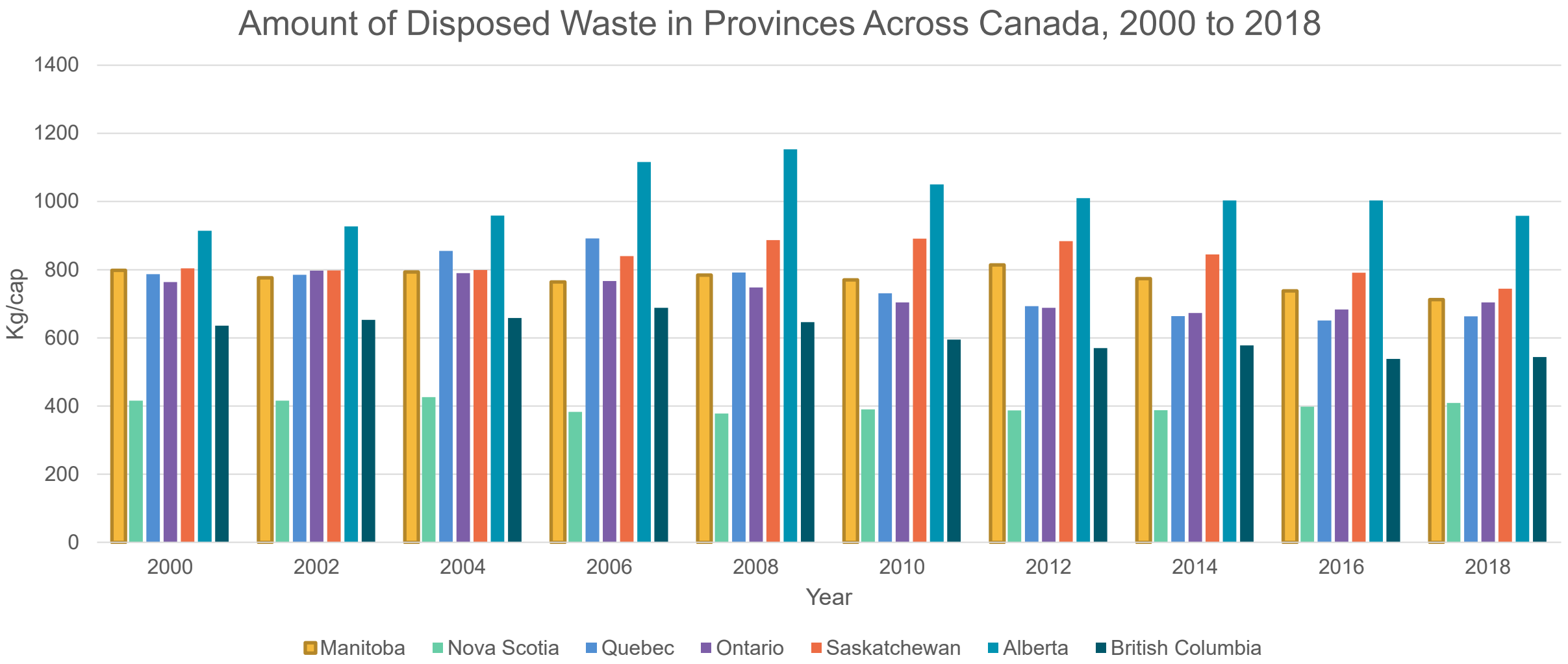
- 17% waste diversion rate
- 719 kg/capita waste disposal rate



https://www.gov.mb.ca/sd/pubs/annual-reports/annual_report_2019_20.pdf

DILLON CONSULTING 75 YEARS

Current State of Solid Waste Management Across Canada



https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810003201

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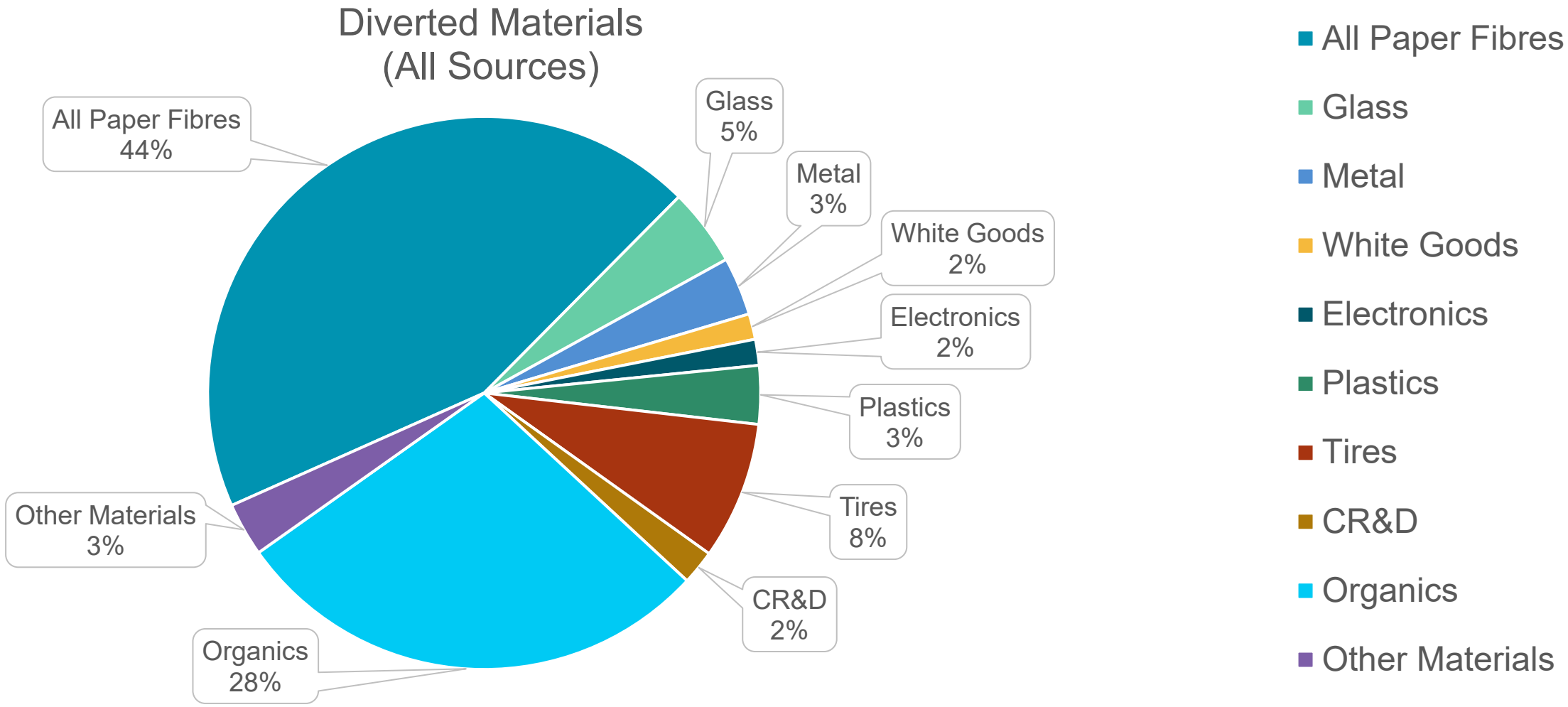
Current State of Solid Waste Management in Manitoba – Diversion Breakdown



https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810013801

What We Heard

Stakeholder Engagement Feedback

Stakeholder Engagement Approach

Public Survey
Municipal Survey
Individual Interviews
Emailed Questionnaires

What We Heard – Public Surveys

Recycling Information

- Is confusing,
- Lack of awareness,
- Not confident in their knowledge.

Discouraged By

- Lack of local options for recycling,
- Inconvenience,
- Unsure it gets recycled.

Support For Diversion of

- Organics, Plastics, Styrofoam, and Glass

Composting

- 50% compost and 50% do not:
  - Lack of education on how to compost,
  - Nuisances (including smells and pests),
  - Limitations due to living arrangements.

Recycling Program Availability

- 41% very satisfied or satisfied,
- 34% either dissatisfied or very dissatisfied.

71% of Participants Recycle

What We Heard – Municipal Surveys and Interviews

PRO Programs

- 100% EPR – complicated for municipalities; need producer accountability and service standards
- Lack of consultation on 100% EPR for PPP
- Collection by PROs not frequent enough
- PPP – not receiving 80% of their eligible expenses
- Lack of dialogue between municipalities and PROs – need a forum/council
- Most stewardship programs would not function without municipal support

Funding and Program Cost

- Recycling collection, transportation, staffing cost burden/barrier, too much financial responsibility on Municipalities, programs are not adequately funded
- WRARS funding 80/20 – felt some rebate amount is being held back; transparency issues

Other Comments

- Missing diversion opportunities for organics, CR&D
- Composting needs to be operationally and financially attainable for municipalities
- Illegal dumping concerns
- Municipal feedback not reflected in government outcomes
- Do not support landfill bans – onus on municipalities to enforce bans

What We Heard – Producer Responsibility Organization (PRO) Interviews

Successes

- WRAP legislation is well written; broad, non-specific; allows industry to design plans
- Support landfill bans
- Good collaboration between PROs
- Manitoba is a leader and one of the best regulatory regimes
- Overall meeting or working towards program plan targets (accessibility, recovery)
- Work with and support municipalities as partners in support of collection, depots, P&E
- MARR: supportive forum, network
- GHG reporting not currently a requirement

Challenges

- Need Gov't support with free riders
- MB staffing changes are a challenge
- Support National harmonization
- Performance: multiple metrics, not a single metric
- Plastics: Single-Use Plastics (SUP) focus

What We Heard – Service Providers, NGOs, and other Stakeholders

Challenges

- Lack of program transparency
- Lack of recycling access in the north
- Pay levy/fees – do not receive same funding and services
- Northern shipping cost is a burden
- Unrealistic expectation from the PROs
- PROs focus on recycling; not reduction
- Unclear – PROs role vs community roles

Stakeholder Suggestions

- Northern consultant point person – very useful
- Option for one umbrella organization to represent all 12 programs
- Would like to see a technical steering committee
- Strategy needs a strong circular economy approach
- Regional servicing contracts (processors)
- Need locally and culturally appropriate education materials
- 100% EPR for MMSM

What We Heard – First Nations and Northern Perspectives Interviews

Challenges

- Paying the enviro fees on some designated materials, but are not provided service access
- Limited by capacity and funding for waste management
- Challenging to register for PRO programs and meet the requirements to participate
- Materials already being stockpiled – no good clarity on what to do next
- Backhaul program is effective, but only serves a limited number of remote communities

Stakeholder Suggestions

- Develop a northern regional strategy
- Support for organics diversion in the north
- Align provincial goals and programs with funding available through the First Nations Solid Waste Management Initiative
- Support for addition of mattresses and large appliances as designated materials

Key ‘Areas of Exploration’ for Discussion

Interactive Exercise

Interactive Exercise

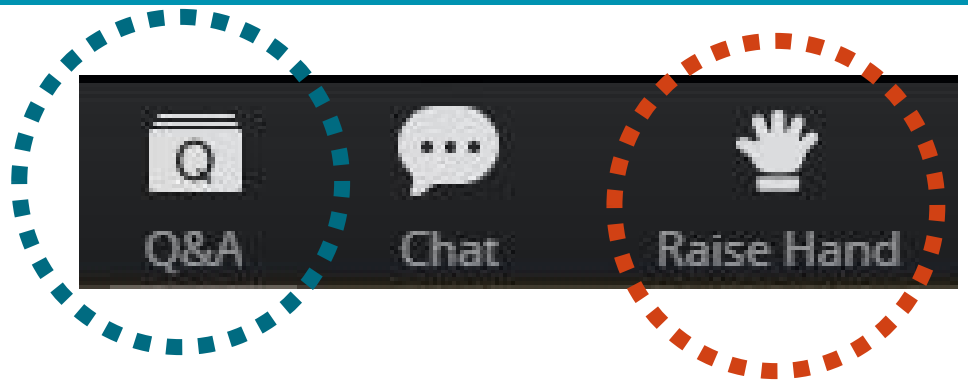
- Please open a window in Jamboard. We emailed you a link to our board.
- We will provide an overview and run an interactive exercise.

- Review each “Area for Exploration” using the following lenses:
  1. How would the implementation of these ideas **impact** your business/organization/municipality?
  2. Would they be **effective** in achieving the goals as described?
  3. How could they be **delivered** in a way that would be effective?
  4. What are the potential negative **unintended consequences** of these opportunities?

Key Topics for Discussion

Landfill Bans	100% Producer Responsibility	Expanded Materials	Levies (user pay)	Organics and CR&D Diversion	Program Accessibility – Regional Collaboration

Questions/Comments



THANK YOU

If you have any questions related to today's session please contact:
jpratte@landmarkplanning.ca

If you have any questions about the Review process or technical components please contact:
jbertrand@dillon.ca

If you have any questions for Manitoba Conservation and Climate please contact:
jennifer.chambers@gov.mb.ca

APPENDIX D-4

March 18 Feedback

WASTE DIVERSION AND RECYCLING FRAMEWORK REVIEW: Muni/Industry/NGO WEBINAR SUMMARY

Date: March 18, 2021

This is a summary of verbal comments received during the March 18th Manitoba Waste Review Webinar for Municipalities, industry groups and NGOs. This pertain to verbal discussions only and should be considered in concert with the Jamboard interactive exercise component of the meeting.

ATTENDEES:

- Manitoba Conservation and Climate: Rhian Christies, Jennifer Chambers, Matt Popowich, Kenzie Caldwell, Kelly Kuryk, Ashley Gaden
- Project Team: Heidi Gerlach, Lori Andrews, Sara Sadowy, Jeff Pratte, Brendan Salakoh, Evan Allan

STAKEHOLDERS:

- Amy Smith – Green Action Centre
- Angela Bidinosti – Indigenous Services Canada
- Art Goudy – RM of Rockwood
- Ben Price – RM of Grahamdale
- Bernardo Pasco – City of Flin Flon
- Beth McKechnie – Green Action Centre
- Billie Jo – City of Thompson
- Chris McTaggart – Town of the Pas
- Chris Parker – Winpak, Winnipeg Division
- Cody Cameron – Municipality of Harrison Park
- Darrell Aitken – City of Dauphin
- Deb Odegaard – Manitoba Association of Regional Recyclers and Flin Flon
- DJ Sigmundson – RM of St. Andrews
- Eldon Wallman – City of Steinbach
- Glen Koroluk – Manitoba Eco-Network
- Heather Fast – Natural Resources Institute
- Ian Tesarski – RM of Rockwood
- James Reitlo – City of Flin Flon
- Jason Price – RM of Grahamdale
- John Graham – Retail Council of Canada
- John Sinclair – Natural Resources Institute
- Lindsay Hargreaves – City of Brandon
- Michelle Saunders – Food, Health and Consumer Products of Canada
- Mike Fernandes – StrategyMakers Consulting
- Neil MacLaine – City of Thompson
- Randy Webber – Independent Consultant
- Richard Farthing-Nichol – Centre for Indigenous Environmental Resources

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- Robin Bryan – Compost Winnipeg
- Ron Halweg – RM of St. Andrews
- Sam Mirza-Agha – Town of la Pas
- Scott Haddow – City of Brandon
- Stefanie Vieira – Association of Manitoba Municipalities
- Tracy Hucul – Green Action Centre

ALL TOPICS:

- No verbal submissions were made. Please refer to Jamboard Summary.

Interactive Engagement Exercise

Sticky note exercise: share your thoughts and ideas

- How would the implementation of these ideas impact your business/organization/municipality?
- Would they be effective in achieving the goals as described?
- How could they be delivered in a way that would be effective?
- What are the potential negative unintended consequences of these opportunities?

Your sticky notes are anonymous

Topic #1: Landfill Bans

for material managed under a waste diversion program

Impact (Positives)

- Polluter pays principle. Paying for waste helps reduce waste.
- Extends the life of the landfill
- Demonstrated effectiveness in waste diversion
- hard to monitor
- recovers valuable resources
- Government needs to help municipalities with assistance not regulation... we don't want to see downloading onto munis. Need to respect municipal capacity
- Great for the widely recyclable plastic containers but doesn't address hard to recycle plastics/films
- reduces waste going to landfill
- smaller footprint/longer life
- strong incentive for compliance, reduced landfill costs.
- Drives diversion. Currently, it's too easy to just throw things out without any real personal consequence.

Effectiveness (Would it work?)

- would be effective if matched with significant investment in education to create buy in.
- It has worked in other jurisdictions
- Most effective when done in tandem with other measures (not a stand alone tool)
- Increasing fees had huge positive impact on reducing landfill waste in the East.
- there needs to be a standard
- It could be successful, but would have to have a support system in place to implement effectively.
- Yes it would work.
- resistance from the community

Implementation

- community by-laws
- Would require support to small municipalities to support recycling program if they don't already have one
- Need alternative implemented prior to closure
- public education campaign
- Would have to be incorporated with incentives and disincentives.
- Systematic funding/support tailored to community needs to develop infrastructure, public education programming, etc.
- make bringing recycling mandatory when bringing garbage
- Would have to be incorporated with incentives and disincentives.
- Beginning with easiest such as cardboard, hazardous waste where there are existing and accessible programs
- a regulation under the WRAP Act
- Convert landfill to waste diversion only facility
- regional organizations that coordinate
- policy update
- phase it in, one waste category at a time
- Needs infrastructure to divert banned material to appropriate places
- start with something easy, like leaves or yard waste
- Regional collaboration, shared servicing

Issues (Challenges)

- Illegal Dumping (upvote)
- puts a lot of pressure on landfill employees to enforce
- difficult to enforce/monitor
- potentially results in illegal dumping or cross border shipping of waste
- Jurisdictional constraints (fed vs prov)
- Staffing and Training Challenges for smaller municipalities
- large issues with illegal dumping in the bush. already happens because of tipping fees.
- illegal dumping or shipping of waste out of jurisdiction
- landfills would require adequate support for ensuring compliance.
- resources, education
- needs significant promotion
- Prior to going down the path of a landfill ban, province needs to determine what is the goal it wants to achieve, and if a ban is the appropriate instrument.
- hard to monitor

Topic #2:100% Producer Responsibility

industry would be fully responsible for program (collection, processing, P&E) for PPP "Blue Box" materials

Impact (Positives)

It would help initiate recycling and prevent non-recyclable material produce

Consistent messaging/education

Industry control for higher efficiency and consistency of collected materials across the province

Reduced costs to municipal govs

EPR allows producers to collect value of material and work toward a

Producers need opportunity to deliver an efficient and effective residential recycling program.

Allows producers to design the system and design materials to allow for efficiencies, create commonality and reduce consumer confusion.

Must look at opportunities to create commonality among provincial Blue Box programs as most paying producers are larger companies with national packaging portfolios.

Relieves municipal responsibility to manage and fund.

Should include multi-residential buildings for blue bin materials

moves costs from taxpayers to consumers

Would encourage/support more municipalities to participate

Would be less confusing.

Would encourage industry reuse and circular design

80% rebate from MMSM doesn't kick in till after a year from registration

- discourages communities from taking on household recycling as it requires a cost up front and (at best) only get 80% back which also doesn't include transport

I think we need to look at how consumers purchase their goods and flip the concept around to determine a better model for packaging and material return at the end of a product/package's "life".

Consumers purchase most of their goods at a "one stop location" (i.e, a store). To divert materials consumers in Winnipeg must take used materials/packages to 7 or more different locations

(e.g, household batteries go to a library, mattresses to Mother Earth, clothes to Value Village, etc.). To be innovative it would be wise to create a single location where consumers can return all of their goods.

Producers create the good/product along with the packaging, but it is the retailer, consumer and municipality who become responsible to deal with it in the end.

A mirror image of a store.

Effectiveness (Would it work?)

100% EPR for PPP should provide producers with opportunity to design the system and recover value of materials.

Needs to also include transportation

heightened role for producers in funding PPP in MB would incentivize innovation in reducing packaging, waste

Producers need to have a more prominent role in program structure and funding, however that looks. waiting for national strategy would create major delays.

I would be more effective if the reporting for communities can be reduced at the same time as the PRO taking over other responsibilities

Proven as an effective model across other materials and increasingly across Canada (BC). Important to align with as many provinces as possible to drive greatest efficiency and environmental outcomes.

Opportunity for interprovincial alignment, particularly as Saskatchewan and Alberta are having the same discussion at same time.

It would work better with a national/North America approach and if there was not so many PROs, ne to consolidate

Concern with PRO's doing education and engagement, should be delivered by non industry (conflict of interest if focus is on reduction and not just recovery).

yes, right now there is lack of motivation to remove items like mattresses from the waste stream.

National Strategy Required

Implementation (How to do it?)

Needs plan to incorporate current

n

Needs all OCC, and PPP from everywhere not just residential.

needs a 'can do' approach to make things happen rather than 'that is not eligible'

Needs up front funding to establish a program

PRO's are the experts so most knowledgeable to manage.

Leverage the reviews underway in SK, AB, ON, NS to inform these conversations.

There should be grants that incentivize PRO's and fees to penalize PRO's that do not follow strategy.

reimburse municipalities for all costs associated with collecting to product.

EPR for PPP must be limited at this time to residential collection sources.

Must gather data on material types/volumes and producers (not necessarily the same as producers for residential PPP) before considering expansion into ICI.

Issues (Challenges)

Costs passed on to consumer

How does CBCRA fit into it?

Materials are not solely made in one country.

Municipalities understanding the role that industry would play under a EPR model, versus compensation model that is presently in place.

removes local decision making

Possible challenges with union workforce

EPR must be flexible to allow large and mid-size companies to participate in different ways (active vs passive participation)

Topic 3: Expanded Materials List

materials to be added to recycling programs

Top Impact (Positives) Expanded Materials List

white goods, mattresses/box springs, IC&I (CRD), more types of plastics/films, ELVs, furniture, small appliances

ditto

ditto

Bam of single use items including bags, straws, Styrofoam, and cutlery

landfill cells last longer and less machine maintenance (e.g. mattresses

Furniture, appliances, a/c units, renovation/demolition /construction waste.

Very good idea. I think this is a good idea to look at adding material lists for diversion/EPR.

Cigarette butts. Nasty stuff. Need to get these out of the waterways.

Styrofoam- assists with on-line shopping and removes difficulty to process/market.

mattress disposal is a big issue in the northern region, current costs to recycle a mattress doesn't cover the actual destruction fee... predicament though of increasing fees and seeing increase in illegal dumping.

Furniture

expand to include commercial materials not just residential in funding program costs.

Clothing

ICI material, white goods, mattresses, and organics

more materials = higher diversion = more resources recovered

ditto

Styrofoam

Effectiveness (Would it work?)

Yes, it would work

Easy to accept more things, harder to actually do something with them

infrastructure and a need for the raw material to be reused.

Need to ensure programs are aligned with national efforts around plastics for example

Plastic bag ban would be great for a province-wide initiative

Ensuring processing can be local, if not local then a partner elsewhere for processing

Implementation (How to do it?)

always welcome, provided an adequate plan, funding for materials transport and processing are in place

Have to deal with decontamination of fridges, freezers, a/c units - look at whether to have regional decommissioning/ dismantling sites to reduce transportation costs

Leads naturally to discussion of one single entity for PROs (e.g. Recycle BC) - as more PROs are created, becomes increasingly challenging for landfill staff (already hard with 12 different PROs)

Include training for landfill staff in different size communities and north vs south

review of the materials to focus the materials on ones that can be reused.

Regional collection hubs

Need to work with restaurant and foodservices and large institutions (universities, hospitals) on reducing single use cutlery, cups, plates, etc.

producer to find out how a material/product is created, so that at the end of its life, a material can be deconstructed in the reverse process it is developed (e.g, how iphones are assembled and

need to cast out a wider call to the community to identify new stewards

Start with low hanging fruit and/or those materials that can be turned into useful end use products

Develop on-site capacity and training to handle different materials

figure out the post collection transport and processing side, then its easy

include all ppp from everywhere not just residential including OCC

include ICI in PPP stewardship plan

Support the City to develop a compost process site in Winnipeg to help divert huge amount of organics.including residential

Is lenges)

Should not assume that either materials or producers of PPP are the same for residential/ICI. They should remain separate policy discussions.

Market/transportation costs who pays for it?

There are other policy tools to collect materials from ICI other than EPR.

for some materials, ie organics, ICI CRD it may be difficult to find a steward

system) could be very disruptive to existing system (guys that pick up appliances / muni that get value from metals). Better to look at having industry fund the cost of ODS removal like MARR in BC to address the problem,

Cost of developing the infrastructure to handle additional materials

Companies are looking at reduce and re-use options, but not always captured in recyling policy/reporting. Difficult to articulate progress.

separating ICI from residential is very difficult in small communities

Public education - people already don't know what can and can't go in recycling bin

Need data before considering policy expansion.

control on what materials PRO's can use is not controlled.

Should seek clarification from the federal government on their activities related to single-use plastics before including SUPs in EPR program. Puts producers in conflict between regulatory proposals.

increasing $10 per tonne landfill levy to increase diversion

Topic 4: Higher Landfill Levies

Topic #4: Higher La… evies

Impact (Positives)

Pricing is a powerful incentive to increase diversion

acts as disincentive.

Yes, again, it gives message that negative environmental impacts have a cost and we have to pay for that.

Quoting someone else: "To encourage diversion, differential tipping fees (i.e., fee reductions or surcharges) can be set so that the economics of diversion become more favourable than those of disposal."

Most efficient - prompt market response, innovation

Could motivate more diversion from CRD projects

ditto

Why don't we cut some off these products off from entering the province in the first place. I think we need a higher order "ban" from the Province indicating that the sale of

importance incentive for waste reduction

generate more money in the system, however counter intuitive if the goal is zero waste

Would keep WDG's from filling up and more funds for future waste projects

If it can't be refurbished, remanufactured, or-recycled in Manitoba, or there is not a market outside of Manitoba established, then the material should not be available in Manitoba.

materials/products in MB cannot be done with certain products, so the onus is not on the consumer and the municipality at the end of a product's life.

An increase could allow f… an umbrella group to aid in the diversion of waste.

ditto

Effectiveness (Would it work?)

Yes, needs to be more in line with other Canadian provinces. Currently it one of the lowest and hasn't been increased in years.

Is there documentation to show levies work?

In the short-term this would increase revenue for expanding waste diversion programs and GHG reduction efforts

Not exactly as it places the fee onto the end-user/municipality

Higher tipping fees help divert materials from the landfill but don't address the volumes of waste generated

Differential tipping fees (surcharges or discounts) can be used to incentivize the desired behaviour

it would almost certainly increase utilisation of diversion programs.

would have to phase in the increase

It has to be high enough to create incentive to not mindlessly throw things away.

Would make consumers or users think about diverting their waste more than just putting in landfill

Implementation (Ho… it?)

An increased levy needs to be paired with good alternatives, accessible recycling/diversion systems

pair increase with education, increases in recyclable materials list would mitigate overall cost increases to users

Aiding municipalities in diversion from the increase of the levy

Studies show that higher tipping fees are most effective when applied comprehensively (i.e., to all landfills, both private and government owned/operated)

maybe try a differential landfill fee, ie raise the levy to $40 on ICI and CRD

Challenge is to find the right pricing level. Right now we're too low as it's not a disincentive. But if you make it too high then it can result in illegal dumping.

Disagree >

Ditto >

support for service agreements between INR communities and First Nations

No tipping fees for diverted waste, but have tipping fees for garbage only.

would need major promotion of alternatives for waste.

If a certain material is never allowed in to the province then we don't have to create bans or levies to deal with the material later on.

Producers need a single that the province as a market of consumers does not want to deal with the material.

There should be some "up the line" thinking of what the province can do in the beginning to achieve "zero waste" with a certain material/product.

Issues (Challenges)

will be an increase to all taxpayers

Not all landfills have a weigh scale

increased costs to municipalities whose landfill tonnage is calculated on a per capita rather than a scale. Scales are too expensive for small communities. This does also not show a reduction in waste

small communities without a scale have no way of showing that reduction or increase in waste tipped.

increased tipping fees at the landfill (assuming tipping fees are used at the landfill)

First Nations likely wouldn't have a levy so near by communities could dump illegal at FN landfills

waste diverted to inappropriate dumping areas.

Ditto

Higher fees could result in illegal dumping and or burning in rural areas

there are already major barriers to access for landfill disposal to low income folks

Topic 5: Organics and CR&D

add diversion programs specific to food waste and construction waste

Impact (Positives)

reusable construction waste

instead of burning organics, diverting organics to make compost follows the circular economy principle

reduction in methane

Jobs and a secondary economy (ie, like ReStore) can be created by diverting more CRD waste

biggest impact to reduce the waste per capita waste generation in the province.

Absolute must given the quantity of organic waste and IC&I waste

Compost used to add to green spaces or resale

quickly growing demand for compost with popularity of gardening spiking

organics can provide municipalities with a source of biofuel, or revenue stream with sale of biofuel

Huge impact. Forty percent of our residential waste and approximately 30% of ICI waste is organic material that could be composted

potential for waste to energy

processed organics for sale (revenue)

Effectiveness (Would it work?)

Big impact in emissions reductions especially methane from organics

many successful municipal level food waste collection programs to draw best practices from

Manitoba is well below the national average for organics diversion and Winnipeg is one of the last cities of its size in Canada without a residential curbside collection organics program - it's time.

Make it easy for people to compost. It they cannot compost on their own, a pickup service would make it easy and efficient. I know this is already available, but an expanded service would be great.

Major GHG reductions, landfill methane odour reductions.

To reduce food waste need to build compost capacity and infrastructure, including processing capacity, but also include food skills as a priority to prevent food waste at consumer level.

organics can be banned from landfill, focus should be on backyard composting, drop off points and then efficient curbside programs.

provide supports and incentives, research, training and market development

No question about effectiveness and positive impacts of diverting organic waste (including food) as well as CRD -- many examples around NA and globally.

Yes. Definitely support organics and CRD waste as diversion programs.

involve social purchasing policies in roll out of organic waste diversion. A major opportunity to engage social enterprise and hire workers with barriers to employment.

Lots of precedent - MB is very behind on this and can draw lessons from many other jurisdictions

Organic waste diversion should be treated same as trash and recycling, i.e. a municipal service (volumes stay the same, just different bins - could alternate weekly pick ups)

Needs financial support for startup

Definitely want food waste included and pet waste ideally.

Needs to be made easy, clear, and cheap for households to adopt

Link to food security - give communities incentive to process organics and support local food initiatives

Re-store to determine a method/process for dealing with CRD waste. It is already a depository for this material. it would be a natural extension to consult with them on ways to collect, store and transport CRD waste from CRD sites

Develop regional composting facilities

CRD: require industry to plan hauling out waste materials if development is happening in northern or remote areas

Ensure education to residents emphasizes the ability to compost bones, dairy, etc. (beyond the items they currently put in their backyard compost). They will still benefit from curbside pickup.

education for waste managers on best practices

support new technologies/innovation to deal with waste streams, less red tape to pilot programs.

selling the end product for organics. Finding a market.

remember large distances for Northern programs - regional is much more travel.

ensuring compost processing is done with quality, end user in mind.

Safety concerns from nothern communites for organics. bears, wolves, dogs, cougars.

Look at a differential tipping fee for unsorted vs sorted IC&I waste

use increased WRARS levy to fund organics.-- expand to commercial organics program.

could give incentives to use for clean fill (construction materials i.e concrete)

Require contractors to do on site sorting or support small start-ups or social enterprises to sort IC&I waste at the job site

look at the easy diversion programs that can be has in the food manufacturing, restaurant and retails sector

More supply than demand (organics)

Organics program would need to also be able to address and process composable materials. If capacity does not exist today should be considered by province, in partnership with CCME and ECCC.

Where else would the construction materials go?

partnerships with greenhouses and landscapers

Implementa (v to do it?)

Issues (Challenges)

Topic #6: Program Accessibility- Regional Collaboration

regional hubs for collection and transport of diverted materials

Impact (Positives)

- Takes the strain off smaller communities
- economies of scale
- not sure how many landfills are still in the province these days, but we still need to reduce the number and create regional transfers stations
- 57 Transfer Stations
- 174 landfills
- Yes, totally support regional collaboration and collection.
- Greater efficiency, lower barriers for small communities
- 51 FN waste sites.

Effectiveness (Would it work?)

- makes sense for rural regions especially
- As long as the process was clear and education for public.
- Save on cost of building facilities that would not be used to capacity
- Regulate the use of non-fossil fuel powered transportation
- Under EPR it is important for PROs to have information on regional assets (public and private) in order to determine highest value efficiency to meet accessibility requirements.

Implementation (How to do it?)

- communities, would need to look more at mixed loads rather than regional hubs, e.g. extending the PRO backhaul for winter road communities to all northern or remote communities. Requires logistical
- An ad hoc "Northern Waste Roundtable" exists with several FNs and other orgs. Could be a good informal group to garner some ideas.
- I think we still have a regional waste management authority act, more local governments and Indigenous governments need to get together to create a waste authority
- Should be supported but decision left to local governments.
- MARR would be a great venue to figure how out to do some of the discussion and possible planning around regionalization. MARR already has regional recyclers sharing in a collaborative venue.
- Agree
- It would make sense to tap into the "best and the brightest" in MB with this issue.
- Tie into WMR Plan20-50 implementation
- Prioritize developing relationships between municipal and FN communities (e.g. Collaborative Leadership Initiative)
- A transportation/efficiency plan
- MARR is an untapped resource for obtaining data, information and innovation. Instead of just sharing information amongst participants, find a way to garner their smart ideas and wisdom to figure out these types of issues.

Issues (Challenges)

- Transportation Costs
- GHG's from transportation
- Increased GHGs
- Large distances between WDC's
- New councils with new ideas every 4 years
- Lack of regional governance support - individual communities don't have the capacity to do this on their own
- collaboration and agreements between Town's, RM's and FN is not always a straight forward process

APPENDIX D-5

March 23 Stakeholder Presentation

Manitoba's Waste Diversion and Recycling Framework Review

Stakeholder Engagement Webinar

March 23, 2021

Manitoba

Landmark Planning & Design Inc.

DILLON CONSULTING

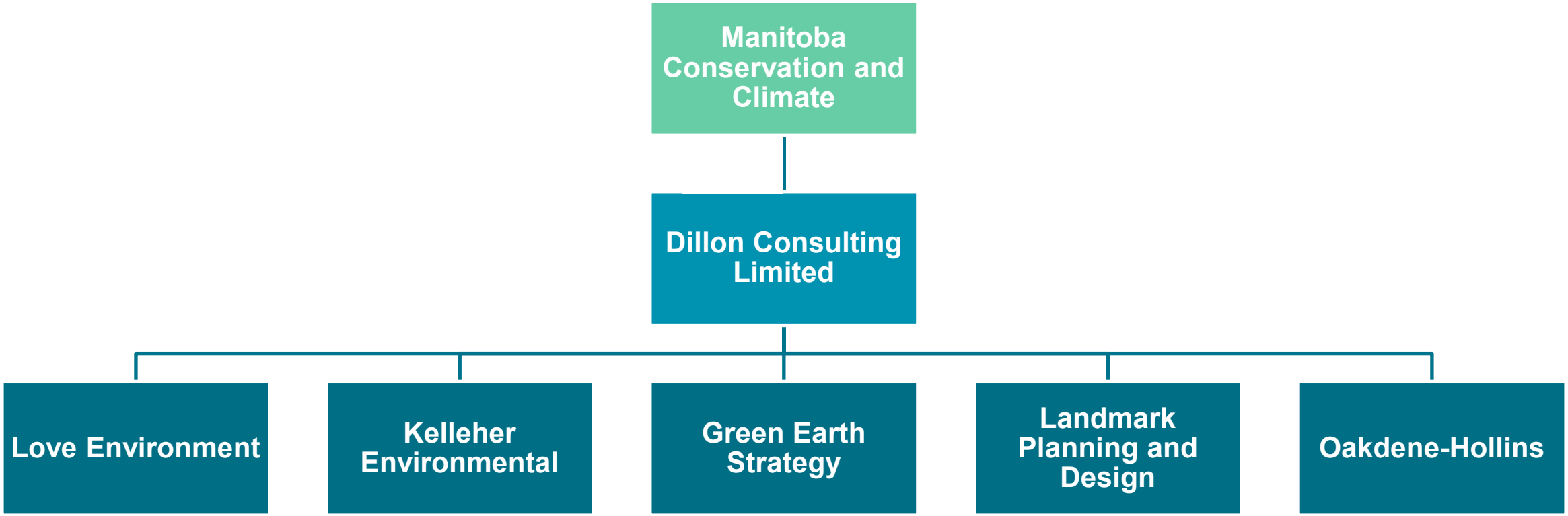
75 YEARS

Welcome

- Manitoba Conservation and Climate (MCC) is conducting a review to support the modernization of Manitoba's regulatory and programming framework for waste diversion and recycling.
- Discussion will be around key topics with the focus on extended producer responsibility (EPR).
- MCC are attending today as observers only.
- All questions shall be directed to the presenters, not MCC.

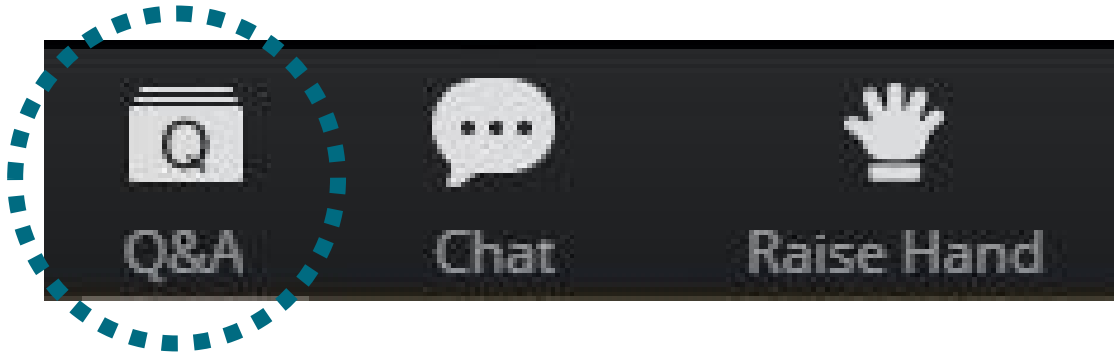
Workshop Agenda

- Team introductions
- Zoom webinar overview
- Overview of the scope of the review
- Overview of waste management in Manitoba
- Overview of “What We Heard” so far
- Discussion of select “Areas of Exploration”



Zoom Webinar Overview

- Respectful dialogue and participation are expected.
- If you have a question or comment during the presentation, please use the “Q&A”. We will try to answer questions during the webinar.
- Please reserve the “Chat” function for making technical inquiries.
- “Raise Hand” can be used during the interactive session.

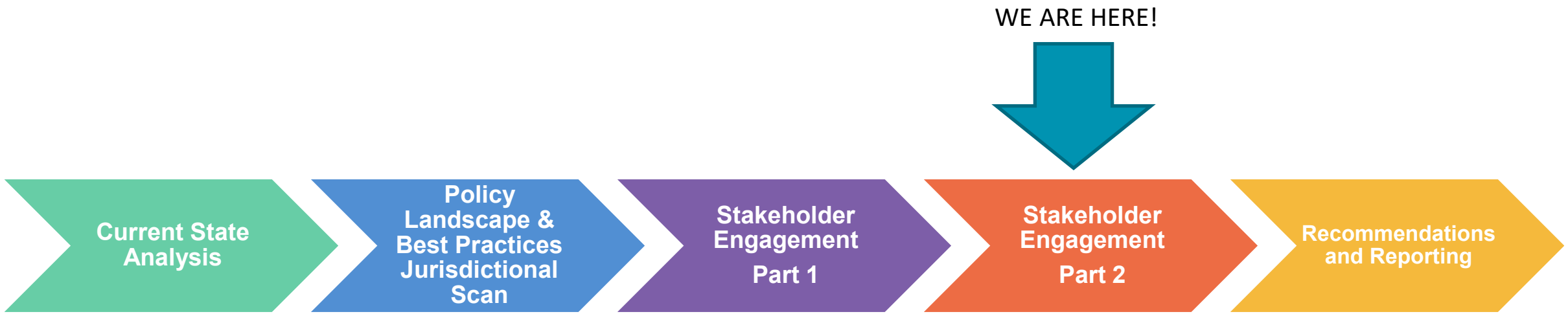


Scope of Project

Scope of Project Review

- The project scope included four main tasks
- December 2020 to March 2021

- Focus was on the modernization of the provincial framework of waste diversion and recycling

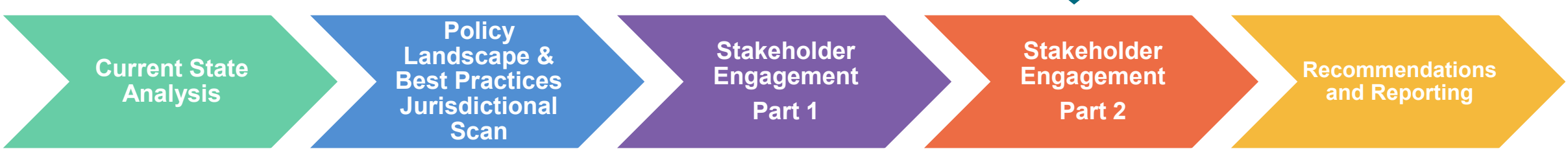


Scope of Project Review

The nine project objectives include a review of:

- Program enhancement
- Program accountability
- Program effectiveness
- Circular economy
- Funding allocation
- Barriers and opportunities
- National targets
- GHG targets
- Partnership synergies

WE ARE HERE!



What We Heard

Stakeholder Engagement Approach

Public Survey
Municipal Survey
Individual Interviews
Emailed Questionnaires

What We Heard – Public Surveys

Recycling Information

- Is confusing,
- Lack of awareness,
- Not confident in their knowledge.

Discouraged By

- Lack of local options for recycling,
- Inconvenience,
- Unsure it gets recycled.

Support For Diversion of

- Organics, Plastics, Styrofoam, and Glass

Composting

- 50% compost and 50% do not:
  - Lack of education on how to compost,
  - Nuisances (including smells and pests),
  - Limitations due to living arrangements.

Recycling Program Availability

- 41% very satisfied or satisfied,
- 34% either dissatisfied or very dissatisfied.

71% of Participants Recycle

What We Heard – Municipal and First Nations and Northern Perspectives

Municipalities

- 100% EPR – complicated for municipalities; need producer accountability and service standards
- Recycling collection, transportation, staffing cost burden/barrier, too much financial responsibility on Municipalities, programs are not adequately funded
- Missing diversion opportunities for organics, CR&D
- Illegal dumping concerns

First Nations and Northern Perspectives

- Paying the enviro fees on some designated materials, but are not provided service access
- Limited by capacity and funding for waste management
- Challenging to register for PRO programs and meet the requirements to participate
- Align provincial goals and programs with funding available through the First Nations Solid Waste Management Initiative
- Develop a northern regional strategy

What We Heard – Producer Responsibility Organization (PRO) Service Providers, NGOs, and other Stakeholders

PROs

- WRAP legislation is well written; broad, non-specific; allows industry to design plans
- Support landfill bans
- Good collaboration between PROs
- Manitoba is a leader and one of the best regulatory regimes
- Work with and support municipalities as partners in support of collection, depots, P&E
- Support National harmonization
- Performance: multiple metrics, not a single metric

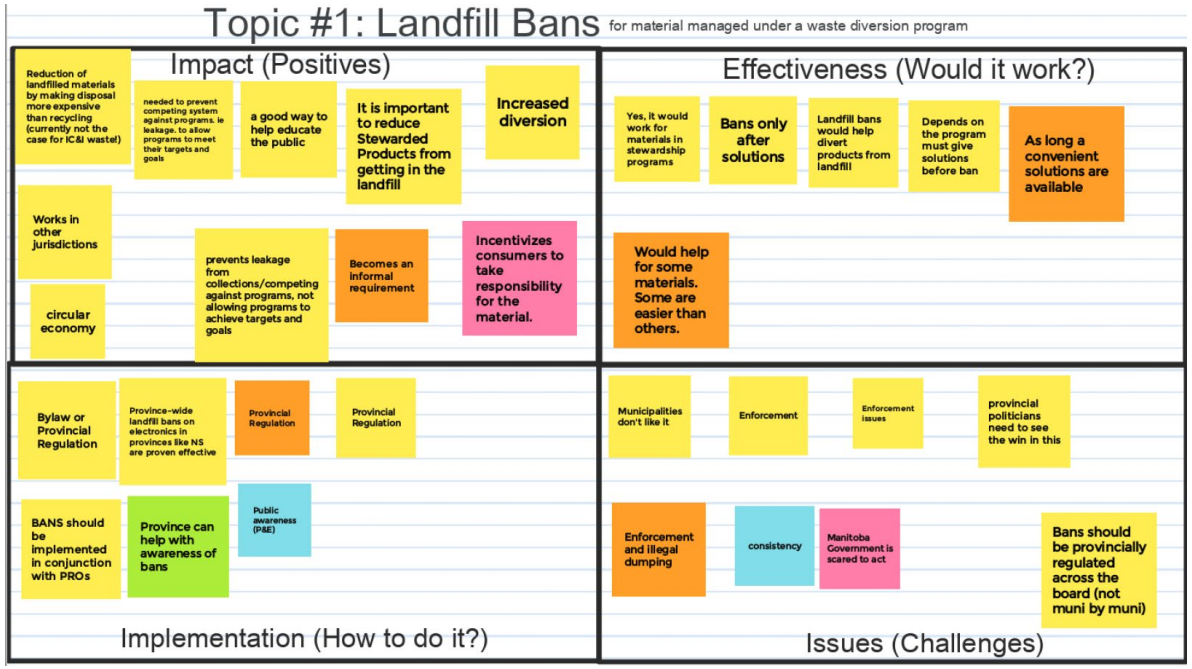
Service Providers, NGO, and others

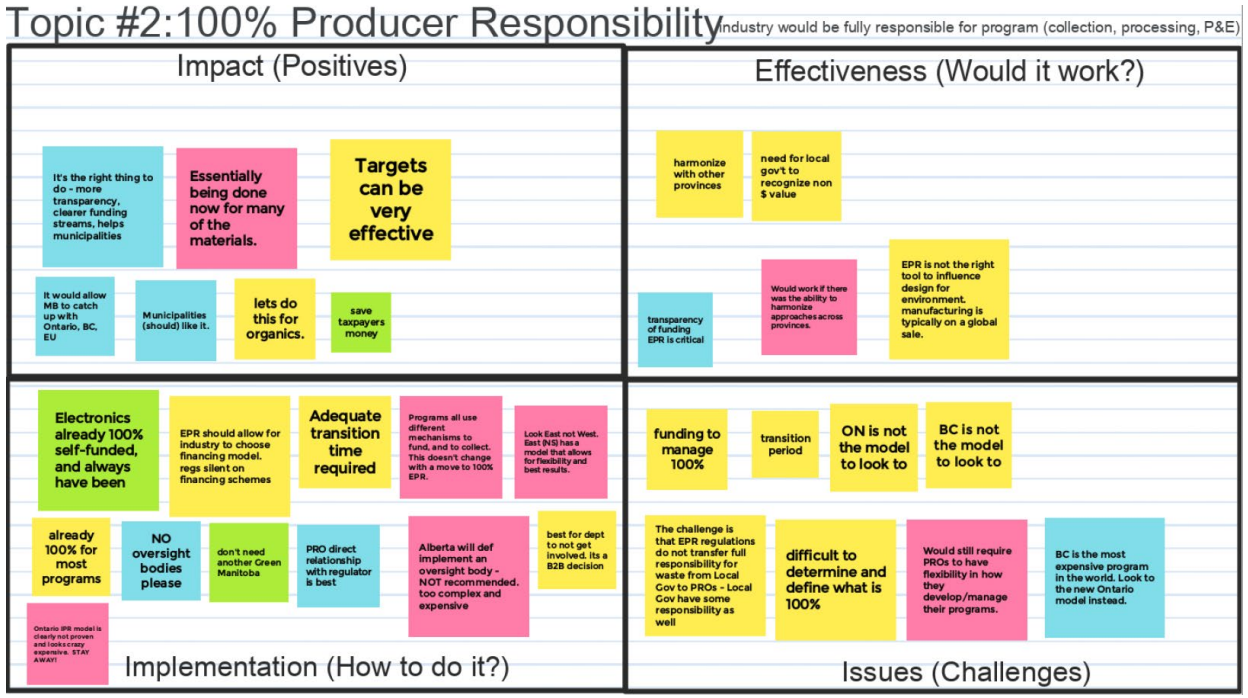
- Lack of program transparency
- Lack of recycling access in the north
- PROs focus on recycling; not reduction
- Northern consultant point person – very useful
- Option for one umbrella organization to represent all 12 programs
- Strategy needs a strong circular economy approach

Topics for Discussion– Workshop #1

Landfill Bans	100% Producer Responsibility	Expanded Designated Materials List	Enhanced Targets and Metrics

Jamboard Exercise - Workshop #1





Jamboard Exercise - Workshop #1

Topic #1 – Landfill Bans

- Impacts (Positives)
  - Increased diversion
  - Increased awareness and education
  - Promote circular economy
- Effectiveness (Would it work?)
  - Yes it would
  - Would work best if aligned with convenient diversion alternatives
- Implementation (how to do it)
  - Provincial regulation – across entire province, not differing by municipality
  - Public awareness (P&E)
  - Do in collaboration with PROs
  - For organics keep focus on consumers
- Issues (Challenges)
  - Municipalities may not like it
  - Enforcement
  - Not a popular move for politicians

Jamboard Exercise - Workshop #1

Topic #2 – 100% Producer Responsibility

- Impacts (Positives)
  - It's the "right thing to do"
  - Increased transparency, clearer funding
  - Assists municipalities
  - Would allow MB to catch up to other provinces
  - Could save tax payer's money
- Effectiveness (Would it work?)
  - Would work best if harmonized with other provinces
- Implementation (how to do it)
  - Industry should select funding model
  - Adequate transition time would be required
  - Learn from other provincial models
  - All programs are funded differently, this would remain in 100% EPR
  - Oversight bodies or umbrella organizations not recommended
  - Accessibility is the most important factor, can't make people recycle, but you can provide them the option to recycle.
- Issues (Challenges)
  - Requires substantial funding to operate a 100% EPR model
  - Misconceptions from municipalities that this will mean all responsibilities and/or costs shifted away to industries
  - Differing approaches to a 100% model

Jamboard Exercise - Workshop #1

Topic #3 – Enhanced Targets and Metrics

- Impacts (Positives)
  - Creates a level playing field
  - Targets can be very effective in shifting change
- Effectiveness (Would it work?)
  - Targets may not actually increase diversion
  - Re-use and reduction should be included
  - Programs can't force people to divert materials, ease of use and education are important
  - Hard numbers may not be most relevant, trends and ranges
- Implementation (how to do it)
  - Targets should be material-specific for best results – not universal
  - Differentiation between durables and single-use/disposables
  - Regulators and PROs should have direct interaction for accountability
  - Aspirational and flexible targets would be best
  - Should be combined with other measures such as landfill bans
  - Look at accessibility and convenience instead of just recovery rates

Jamboard Exercise - Workshop #1

Topic #3 – Enhanced Targets and Metrics

- Implementation (how to do it) – CONT'D
  - Partnerships are vital
  - Setting targets can be effective – may need to be flexible
  - Additional oversight bodies not ideal
  - PROs should always be there to work with municipalities
  - Waste has to be a priority locally. Can't provide for communities if they aren't recycling in the first place.
- Issues (Challenges)
  - Issues with enforcement of regulations
  - Recovery rates not always the best indicators (such as for durable goods that may last decades)
  - Important to remember that if a target is not met it does not necessarily mean the program isn't working (for example re-sale/repair of items)
  - Some metrics for measuring targets are unproven/inaccurate

Jamboard Exercise - Workshop #1

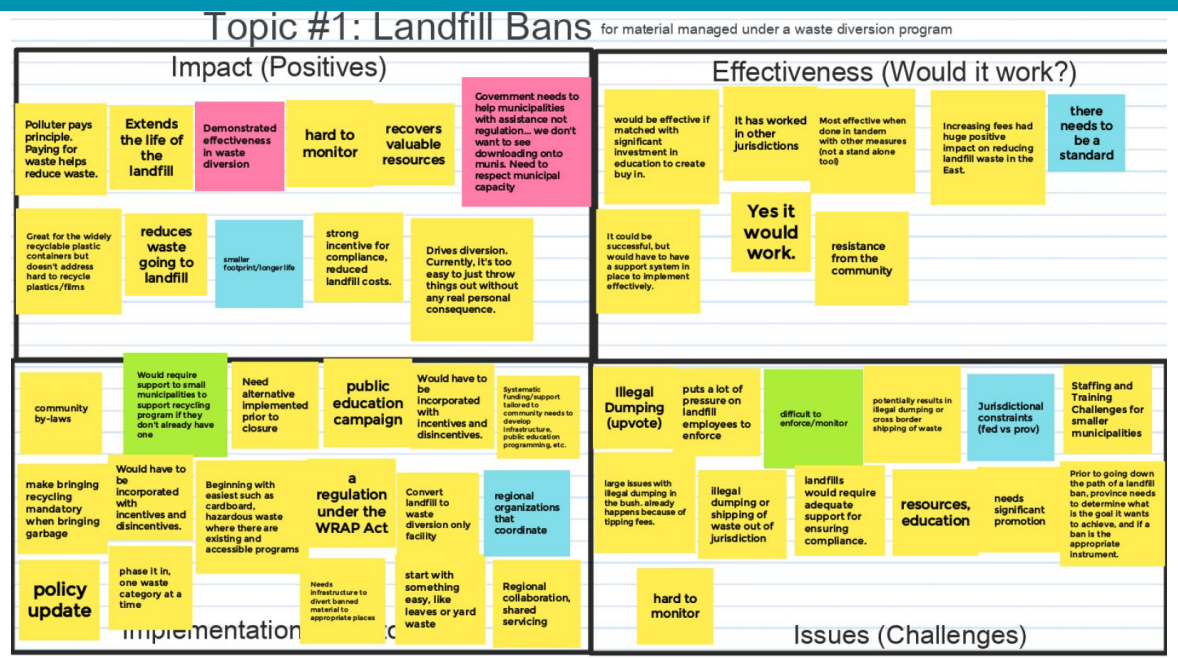
Topic #4 – Expanded Materials Lists

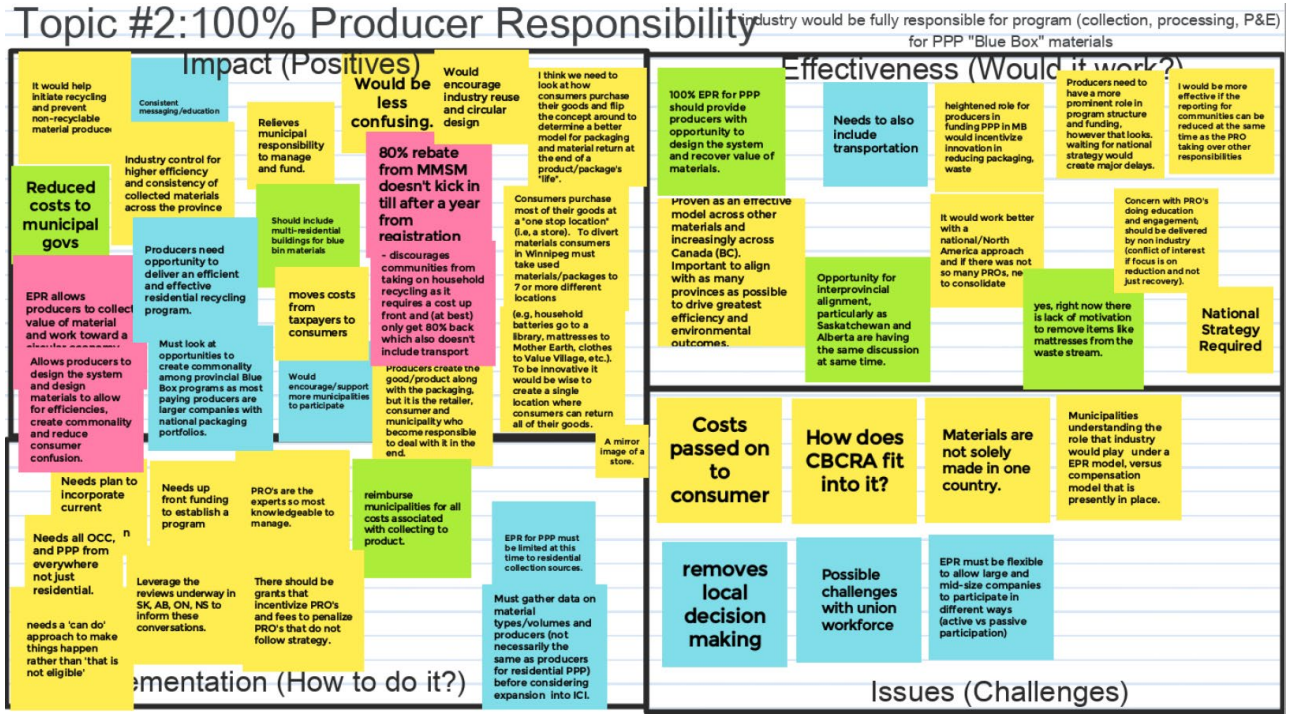
- Impacts (Positives)
  - Could help address contaminants and issues with recycling bins
  - Organics and items with contaminants would be good targets
- Effectiveness (Would it work?)
  - If focus is placed on what and why
  - Collection can be a challenge
- Implementation (how to do it)
  - Should be done in collaboration with PROs and industry stewards
  - Requires updated regulatory framework
  - Priority should be on items that contaminate the recycling stream and toxic materials
  - Should harmonize with other provinces
  - If done with consultation
  - Where possible, do through existing stewards – add to existing programs
  - Requires adequate implementation/transition time
- Issues (Challenges)
  - Is there a market for new materials?
  - Processing technologies

Key Topics for Discussion - Workshop #2

Landfill Bans	100% Producer Responsibility	Expanded Materials	Levies (user pay)	Organics and CR&D Diversion	Program Accessibility – Regional Collaboration

Jamboard Exercise – Workshop #2





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Jamboard Exercise - Workshop #2

Topic #1 – Landfill Bans

- Impacts (Positives)
  - Increased diversion
  - Increased awareness and education
  - Increases life of landfills
- Effectiveness (Would it work?)
  - Yes
  - Doesn’t address hard to recycle items
- Implementation (how to do it)
  - Would require education/awareness
  - Most effective when done in tandem with other measures
  - Regulatory and policy updates
  - Begin with easiest items (yard waste, cardboard)
  - Funding for infrastructure, education, programming
  - Regional collaboration/shared services
  - Overall direction and goals for province need to be established prior to landfill bans

Jamboard Exercise - Workshop #2

Topic #1 – Landfill Bans

- Issues (Challenges)
  - Hard to monitor/enforce
  - Could increase illegal dumping
  - Community resistance
  - Many landfills not adequately staffed

Jamboard Exercise - Workshop #2

Topic #2 – 100% Producer Responsibility

- Impacts (Positives)
  - Would promote/increase recycling, increase diversion
  - Reduced costs for municipalities – shift to producers/consumers
  - Allows producers to design systems that create efficiencies, increase consistency and reduce consumer confusion
  - Would encourage circular economy
- Effectiveness (Would it work?)
  - Yes - It's a proven model elsewhere in Canada – learn from other jurisdictions
  - Would work best with a national approach
- Implementation (how to do it)
  - Ease and simplicity are key
  - Consult PROs and producers to design systems
  - Learn from other provinces
  - Requires enforcement and penalties
  - Requires flexibility
- Issues (Challenges)
  - Costs passed on to consumers
  - Removes local decision making
  - Municipalities may not fully understand funding models

Jamboard Exercise - Workshop #2

Topic #3 – Expanded Materials Lists

- Impacts (Positives)
  - More materials = increased diversion
  - Increases landfill lifespan
  - ICI materials, white goods, cigarette butts, mattresses, plastics/films, furniture, packaging materials etc.
- Effectiveness (Would it work?)
  - Yes
  - Need infrastructure for collection and markets/uses for materials
  - If aligned with national efforts
- Implementation (how to do it)
  - Start with easy items
  - Try to ensure local or on-site processing
  - Funding for transport/processing
  - Work with large producers of single-use items to find alternatives
  - Regional collection hubs
- Issues (Challenges)
  - Increased costs of transport etc.
  - Separating ICI from residential is difficult
  - Need hard data to inform decisions

Jamboard Exercise - Workshop #2

Topic #4 – Higher Landfill Levies

- Impacts (Positives)
  - Effective tool to encourage diversion and market response
  - Could motivate change in industries such as CRD
  - Could generate more funds for municipalities to fund diversion programs and Education
- Effectiveness (Would it work?)
  - Yes
  - Does not impact “upstream” issues and amounts of good produced
  - Might make people consider their actions more
- Implementation (how to do it)
  - Must be paired with alternatives and convenient programs
  - Differential fees according to products could help
  - Would need to find the right price to not shift to illegal dumping
  - Major promotion and education required.
- Issues (Challenges)
  - Increases in illegal dumping/burning etc.
  - Seen as an increased “tax” by some
  - Not all landfills are equipped with equipment (scales) and staff

Jamboard Exercise - Workshop #2

Topic #5 – Organics and CR&D Diversion

- Impacts (Positives)
  - This is an “absolute must” – huge potential impact on diversion rates
  - Reduction in methane, landfill savings, produces compost, potential waste to energy
- Effectiveness (Would it work?)
  - Yes
  - Has been successful elsewhere
- Implementation (how to do it)
  - Look to other cities/provinces for lessons
  - Partnerships with industries and major producers (food prep, landscaping, institutions, greenhouses)
  - Focus on re-use of CR&D materials when possible
  - Education and promotion are essential
  - Use incentives for construction industry
  - Require CR&D haul-outs in northern/remote communities
- Issues (Challenges)
  - Ensue composting is done with quality/end user in mind
  - Safety concerns for composting in northern areas – bears, wolves etc.
  - Is there more supply than demand for organics?

From Workshop #1:

- There is a great deal of potential for diversion with organics.
- Can be difficult to identify a responsible producer

Jamboard Exercise - Workshop #2

Topic #6 – Program Accessibility – Regional Collaboration

- Impacts (Positives)
  - Takes strain off smaller communities
  - Economies of scale
  - Saving on costs for infrastructure and facilities
- Effectiveness (Would it work?)
  - Yes, especially for rural areas
- Implementation (how to do it)
  - PROs would require info on regional assets
  - Mixed loads more than regional hubs
  - Collaboration between municipalities and northern/indigenous communities/WMR
  - MARR would be a great venue to plan for regionalization
- Issues (Challenges)
  - Transportation costs
  - Lack of regional support at government level
  - Large distances
  - GHGs from transport

From PRO Workshop #1:

- Hub idea has potential but also drawbacks.
- Best way to get producers out is get it on trucks. In some places we use trailers originating from Winnipeg to save costs. Doesn't make sense to handle things twice (Thompson and then Winnipeg)
- Backhauling takes advantage of the empty trucks that are returning from communities anyway, they are hauling goods north and then returning with waste items.

Key Takeaways:
‘Areas of Exploration’ for Discussion

Themes from both workshops

Key Takeaways – shared interests

- Increased diversion is important
  - Environmental goals
  - Landfill lifespan
- Programs should be easy to use and convenient
- Clear diversion alternatives should be offered and changes should be complimentary
  - (e.g: landfill bans must be implemented in conjunction with clear alternatives)
- Pro-active solutions to potential negatives should be included in changes
- Manitoba should incorporate key learnings from other provinces
- Education, promotion and awareness are key
- Collaboration and consultation

Key Takeaways – other items

- Collaboration and shared understanding – ensure all parties understand true implications of decisions
- Don’t forget about “upstream” considerations to generate less material, and reconsider use of materials that cannot be diverted
- Place emphasis on “reduce” and “re-use”
- PROs indicate that Manitoba’s framework is generally working well.
  - Relatively “new” (10 years) and much progress has been made
  - Has strengths compared to some other provinces

Key Topics for Discussion

Interactive Exercise

Interactive Exercise

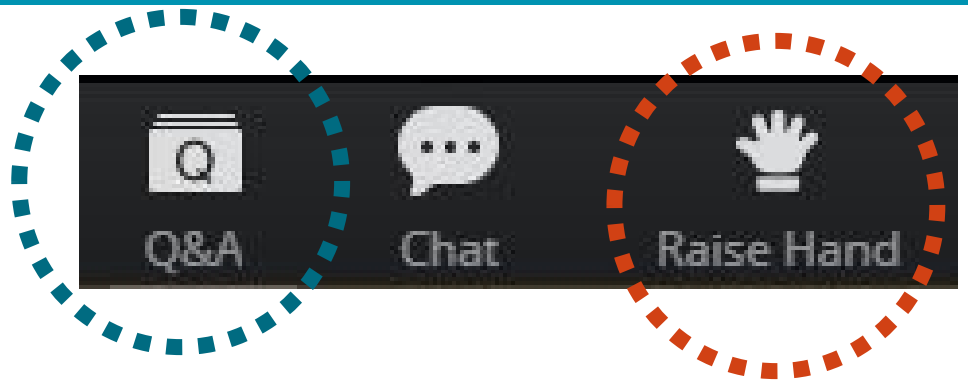
- Please open a window in Jamboard. We emailed you a link to our board.
- We will provide an overview and run an interactive exercise.

- Review each “Topic for Discussion” using the following lenses:
  1. What are potential barriers to implementation and/or potential issues?
  2. What is the best way to implement and overcome barriers/issues?

Key Topics for Discussion

FOCUS ON IMPLEMENTATION AND OVERCOMING CHALLENGES

Questions/Comments



THANK YOU

If you have any questions related to today's session, please contact:
jpratte@landmarkplanning.ca

If you have any questions about the Review process or technical components, please contact:
jbertrand@dillon.ca

If you have any questions for Manitoba Conservation and Climate, please contact:
jennifer.chambers@gov.mb.ca

APPENDIX D-6

March 23 Feedback

WASTE DIVERSION AND RECYCLING FRAMEWORK REVIEW: FINAL WEBINAR SUMMARY

Date: March 23, 2021

This is a summary of verbal comments received during the March 18th Manitoba Waste Review Webinar for Municipalities, industry groups and NGOs. This pertain to verbal and Q&A discussions only and should be considered in concert with the Jamboard interactive exercise component of the meeting.

ATTENDEES:

- Manitoba Conservation and Climate: Blair McTavish, Rhian Christies, Jennifer Chambers, Matt Popowich, Kenzie Caldwell, Kelly Kuryk, Tara Prakash, Ashley Gaden
- Project Team: Jeannie Bertrand, Lori Andrews, Sara Sadowy, Jeff Pratte, Brendan Salakoh, Evan Allan

STAKEHOLDERS:

- Adrian Vannahme - CBCRA
- Amy Smith – Green Action Centre
- Bernardo Pasco – City of Flin Flon
- Beth McKechnie – Green Action Centre
- Chris McTaggart – Town of the Pas
- Chris Parker – Winpak, Winnipeg Division
- Christa Rust - CBCRA
- Cody Cameron – Municipality of Harrison Park
- Colin McKeana - CBA
- Darrell Aitken – City of Dauphin
- Deb Odegaard – Manitoba Association of Regional Recyclers and Flin Flon
- Dennis Neufeld - EPRA
- Glen Koroluk – Manitoba Eco-Network
- Graham Scellenberg – Keystone Agricultural Producers
- Ian Tesarski – RM of Rockwood
- James Reitlo – City of Flin Flon
- Karen MeInychuk - MMSM
- Kathy Cass - PCA
- Ken Friesen - CBCRA
- Kristen Romily - Call2Recycle
- Lindsay Hargreaves – City of Brandon
- Mannie Cheung – PCA
- Meagan Hatch -
- Mike Gordichuk – City of Winnipeg
- Michelle Saunders – Food, Health and Consumer Products of Canada
- Mike Fernandes – StrategyMakers Consulting
- Moira Geer – City of Winnipeg

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- Randy Webber – Independent Consultant
- Ron Benson - MARRC
- Sarah Wallace – MMSM
- Stefanie Vieira – Association of Manitoba Municipalities
- Tiffany Desjardins – HRAI

Topic #1 - Landfill Bans

- "Landfill bans" as a potential solution to waste issues are more effectively discussed as possible components of a strategy for dealing with specific wastes. For example, a landfill ban on asphalt shingles or drywall (gypsum board) will have a very different implications than landfill bans on plastic packaging or banana peels.

Topic #2 - 100% Producer Responsibility

- Jeff's comment about "what does 100% EPR mean to you" is important...100% of what? For example, 100% EPR on just household OCC may have less of an impact than 80% EPR on OCC from both household and IC&I sources.
- Transition to EPR, specifically to packaging programs, full EPR, industry would assume full financial and operational oversight), part of national action plan towards zero waste, making sure this is a dialogue between industry and municipalities. Industry making sure access to materials in the marketplace and recovery materials and put through a circular economy. Incorporate recycled materials back into the market.
- Most of the used oil sites (MARRC) are located right at the landfill. Spend a lot of time with council and workers, hear a lot of feedback, the challenge is people's mindset. Some people see it as a dump and a nuisance ground – don't want anything apart of it. Have to get past mindset.
- You suggested earlier that you were interested in feedback on BC or Ontario programs. Happy to have that discussion but didn't think it was helpful for this audience. Opportunity today is for alignment among AB, SK, MB.

Topic #3 – PRO Targets and Goal Setting

- Appreciate Jeannie's remarks on this...Targets are only effective if there is adequate framework for provincial oversight and enforcement...and perhaps more importantly, mechanisms for ensuring public transparency and accountability.

Topic #4 – Higher Landfill Levies

- No additional comments.

Topic #5 – Organics Diversion

- No additional comments.

Topic #6 – CR&D Diversion

- New Home Construction waste holds significant opportunity. The scraps/waste from this stream (framing lumber, drywall, shingles) are generally uncontaminated and more easily separable than the same materials coming from Renovation or Demolition stream. MEIA New Home Waste Construction Diversion Study should be consulted in seeking recommendations on that stream. (Disclosure: I/StrategyMakers authored that study/pilot)

- In response to your comment, the Study I just referred to contains very detailed waste composition data for the new home construction waste stream.

Topic #7 – Program Accessibility

- No additional comments.

Open Floor Comments

- Just want to reiterate the importance of conducting a comprehensive waste characterization study for the province of MB as part of this review.
- The elephant in the room is organics management. The Province would have the greatest opportunity for GHG reduction and landfill tonnage reduction if organics waste was addressed comprehensively.
- A forum where municipalities can join the conversation. They have their boots on the ground and will be able to give the technical answers to a lot of these questions.

Interactive Engagement Exercise

Sticky note exercise: share your thoughts and ide

- What are potential barriers to implementati potential issues?
- What is the best way to implement and ove rriers/issues?

public resistance

funding source

Lack of recycling infrastructure

political will

funding support from the government both Federal and Provincial

Your sticky notes are anonymous

industry needs to be held accountable by government

transparency and inclusion with muncipalites

Topic #1: Landfill Ban for material managed under a waste diversion program

Challenges

- Municipalities may not like it
- Not a popular move for politicians
- Hard to monitor/enforce
- Could increase illegal dumping
- Community resistance
- Many landfills not adequately staffed

the change in operations comes at a financial cost to municipalities, while also resulting in reducing life expectancy of municipal waste disposal grounds.

landfill bans are needed to prevent escape of products from an EPR program. Without landfill bans may have negative impact to program performance metrics

Need an established alternate disposal method before the ban is implemented

"Landfill bans" as a potential solution to waste issues are more effectively discussed as possible components of a strategy for dealing with specific wastes.

For example, a landfill ban on asphalt shingles or drywall (gypsum board) will have a very different implications than landfill bans on plastic packaging or banana peels.

Need to establish a working recycling network to take the material

only implement when there is reasonable access to collections in the community

ditto

it will be huge challenge for the local government

Community education on the WHY for the ban and ALTERNATIVES

Cannot allow MRFs to be overwhelmed with items they cannot handle. Increases costs, lowers quality of output at MRF

ditto

Can only be done at a Provincial level

Work with restaurants and retailers (e.g. grocery, hardware) to create buy-in and united voice on community education

include incentives along with bans

ditto

include incentives along with landfill bans

The Province of Manitoba provide appropriate funding to municipalities to offset the downloaded responsibilities that ultimately result in a decrease to the life expectancy of municipal waste disposal grounds.

could the bans in Winnipeg be different than elsewhere in the porvince

Local decisions needed based on availability of alternatives in the community.

Landfill bans for established EPR programs are good policy

easier to implement for some stewarded materials

Implementation Ideas (How could it be done?)

Topic #2: 100% Pro… Responsibility

industry would be fully responsible for program (colle… P&E) for PPP "Blue Box" materials

Challenges

- Requi… funding to operate a 10… el
- Misco… municipalities that this … sponsibilities and/or costs shifted away t…
- Misco… ring approaches to …
- Stickin… palities ar…
- EPR r… t absolve mu… te or shift… ties ont… cers.
- Co… to co…
- Re… ecisio…
- Mu… y not … ers…

Re ICI separation - in small communities with only one option for recycling, Where are the schools, hospitals, businesses supposed to take theirs? and separating it in a small program isn't going to happen.

what does 100% EPR mean to you* is important...100% of what? For example, 100% EPR on just household OCC may have less of an impact than 80% EPR on OCC from both household and IC&I sources.

There is no data to support consideration of ICI at this time.

If the savings in the competitive EPR tires scheme in ON is any indication the competitive 100% EPR scheme there will be less expensive than in BC.

100% producer responsibility and are working well. compensation to municipalities and service providers should be left to the program and service provider as a business to business relationship. Gov't should not get

Must include all Corrugated cardboard regardless of source.

ditto

EPR Fees need to differentiate more environmentally friendly materials (less complex plastic packaging, bio sourced plastics for example)

We cannot let current MRF technologies define collection and sorting methods.

EPR for packaging is not appropriate for ICI sector. There are more appropriate policy tools to ensure those materials are collected and recovered.

100% responsibility has to be accompanied by aggressive targets.

because consumers ultimately pay for all EPR fees through the price of products the 100% scheme should ensure that it is a less expensive system than MMSM currently.

EPR does not work for organics (there is no 'producer')

An increase in industry funding must be accompanied by a change in roles and responsibilities.

financial support for startup or capital funding.

100% needs to include all northern communities.

EPR for packaging would require producers to assume full financial and operational control of residential recycling programs, which in turn recover those materials as industry works to a circular economy.

Municipalities do need to give up decision making here.

Just a reminder that most EPR programs are 100% funded now.

100% is fine but either way all communities should be ensured of PPP services

EPR need to work with current MRF/recycling infrastructure used by munici…

ditto

fiscally responsible as the costs are ultimately born by the consumers. 100% of producer responsibility doesn't necessarily mean paying what ever service providers or municipalities deem as costs. Costs need to …

Manitoba should follow the 100%-financed Individual Producer Responsibility model used i… Ontario and …

Ditto. Europe is miles ahead.

EPR fees need to be used for diversion and recycling. Many/most packages pay EPR fees now, but many are banned from Blue Box. Need alternative collection methods (Orange Bag), store drop off.

Some P&E funding should be made available to other entity's ie, NGOs, education orgs, independent of PRO P&E programs

Ditto and municipalities

transportation grant to help cover upfront costs in first year of PPP collection

regardless of framework, government must hold industry accountable and ensure consumers are paying, not through property taxes

Transportation costs are covered by some but not all PROs and should be.

define the difference between 80% and 100% besides an additional 20% funded by producers/consumers.

If producers pay 100% of the costs, they should be able to assume collection and material sorting responsibility

packaging for residential streams only is consistent with the National Action Plan Toward Zero Plastic Waste. Critical for industry to design programs to recover their materials and work toward national/global sustainability

National coordination is essential. The programs are already complex for importers of food and other items.

PPP means there will always be a cost to municipalities to recycle, especially in the first year.

need transparency and enforcement in any model

should include PPP from ICI as well as residential. keeping it separate is exceedingly inefficient and difficult for small programs.

Implementation (What would it look like?)

Topic #3: PRO T… and Goal Setting

increasing transparency… s and goals to increase…

To achieve goals on recycling we need to engage with the companies that will reprocess the waste for the circular economy. This needs to be economically viable.

…enges

Targets should be ambitious and enforceable. Current targets (except for beverage containers) are too low.

Producers need to be consulted about targets.

hard to pin point as ultimately it is the consumers choice as to what they want to do with the product, even if a program has great accessibility and awareness. needs to have some considerations when assessing performance against

Targets are only effective if there is adequate framework for provincial oversight and enforcement

…and perhaps more importantly, mechanisms for ensuring public transparency and accountability.

- Issues with enforcement of regulations
- Recovery rates not always the best indicators (such as for durable g… last dec…
- …ant to… …t if a target is not met it does not necessa… …rogram … …or example re-sale/repa…
- …metri… …g targets are unproven/inaccurate

agreed

We need targets for commercial waste (not just household waste)

ditto

any goals and targets must be reasonable and viewed as an suit of goals/targets when evaluating performance. should not be evaluate on any one particular target. Should be viewed as "trends" as opposed to "absolute numbers"

targets need to be funded if PROs want to deliver results - shortfalls in municipal funding create a barrier to increasing diversion

Targets and goal setting should be practical but designed to align with overarching targets in the National Action Plan Toward Zero Plastic Waste.

achievable and progressive, and aligned where possible, for packaging as an example, with other provincial programs. This coordination can take place with industry and through Canadian Council of Ministers of the

All recycling programs should have ambitious recycling targets

ditto

Province and municipalities need to better understand EPR to manage and enforce it properly

ditto

Overall the province should be looking at recycling rates not recovery rates

Targets need to be realistic.

targets and performance goals should be unique to each and every program as not all metrics apply to every program. should not be one size fits all

There should be material-specific targets (e.g. for cardboard, plastic, etc.)

If targets are not met, then stewards should be

ditto

ditto

program success such as increased accessibility eg. dangerous goods regulations and licensing requirements that become barriers to increased accessibility and collection volumes. Red tape

I believe only beverage containers have a target currently - targets should be focused on plastic material that are not beverage containers.

Programs can not be finned as they are all not for profits and the fine would be transferred back

They are technically non-profits but they are run by industry who sits on their board of directors.

agree

Compliance should be conducted by the ministry unless there is a national (or western) opportunity here. Public reporting in aggregate.

achievable. Need to consider market conditions and availability for collection. For example, given the pandemic purchasing of some items increased significantly, yet these items won't be

what transparency? please define. Isn't it a letter of understanding between the minister and PRO?

Targets should be product specific

Implement… What would be effective?)

Topic #4: Higher Landfill Levy

increasing the landfill levy to increase diversion (currently $10)

Challenges

- Not all landfills are equipped with equipment (scales) and staff
- Difficult to monitor
- May lead to illegal dumping/burning etc.
- Municipalities may not like this idea
- [illegible]"tax" by some

Manitoba needs to stay consistent with other provinces. We shouldn't burden Manitoba companies who stay here.

Toronto's levy's are 10x higher than here.

landfill fees should be a relation to the lifecycle cost of landfilling. Space around Toronto is much more expensive than in MB. Ditto for housing in Toronto.

Higher levies can help municipal funding

If levy is raised, does the money go to build other infrastructure to facilitate the circular economy? That would facilitate lower environmental impact.

there must a be a connection between higher fees and increased services, e.g. organics management.

---

requires political will

political will is bolstered by the public putting pressure on them. If the public truly cares about environmental protection then the politicians should follow

Needs to be done along with Provincial Education explaining the costs and increase so its not seen as a cash grab

as mentioned previously, might be more effective to only increase the levy on materials such as CRD and ICI

learn from higher levies in other jurisdictions in Canada

landfills without scales cannot show reductions from diversion programs so the tonnage that levies are charged on does not go down even with diversion making the burden larger for small communities.

differential levy for residential, industry, CRD

illegal dumping is significant. Not sure what can deter when there is lots of open unattended wild spaces.

Implementation (How could it be effective as a tool?)

Topic #5: Organics Diversion

addition of diversion programs specific to food waste

Challenges

- Ensure composting is done with quality/end user in mind
- Safety concerns for composting in northern areas – bears, wolves etc.
- Cost related to processing and hauling
- Is there more supply than demand for organics?

Residential organics collection can work well in urban or high population centres, but not aware that this is possible province-wide.

expensive program - customers will resist the program due to cost. without financial assistance from the government, might require an organics ban

Needs to start with restaurants then rolled out in Urban centers but requires strong political will

Don't see any down side to composting organic waste. Win-win-win. Animals are an issue in the north -- could look at set up the organics in a different area away from the rest of the landfill and community members.

this has been done in many cities across Canada. it only takes some money and political will.

There is growing confusion on plant based containers and whether they are recyclable. Adding in composting as a clear stream will reduce contamination in recycling facilities as all the new take out containers will actually have a home.

The output of organics processing is dependent on the technology in place currently - either aerobic or anaerobic. The outputs of each enable different opportunities, but not consistent.

Any organics recycling program has to be province-wide with same fees province wide.

Facilities built should meet international standards for compostable materials. There are ISO standards that are used in Europe and other areas

Food waste disposers should be included in the strategy

we shouldn't be gasifying organics or using WTE technology for organics

needs significant start up support - capital funding and expertise.

This is an important method for reducing GHG emissions from landfill. Infrastructure should also be able to process compostable packaging.

Should look at more opportunities in the food manufacturing, restaurant and retail sector

cost of collection needs to be addressed particularly if including household food waste as well as yard waste

invest resources for marketing end product for municipalities

increased marketing of benefits of the end product to agricultural community

The elephant in the room is organics management. The Province would have the greatest opportunity for GHG reduction and landfill tonnage reduction if organics waste was addressed comprehensively.

In some municipalities in other jurisdictions, using anaerobic digestion cities have been able to create sufficient biofuel to convert their municipal fleets.

explore policies/incentives to prevent food waste in the first place like ugly food markets, food coming from producers close by, local food preservation, more urban garden space

Implementation (How could we do it?)

Topic #6: CR&D Diversion

addition of diversion programs specific to construction waste

Challenges

- Vast distances in north and rural areas
- What else can be done with construction waste?
- Is there demand for recycled construction waste?

Requires an outlet for the materials diverted. Collecting and landfilling is a non-value added activity.

how much of demo materials can be reused? The restore may get lots of materials but there is lots left over

Manitoba is already a very expensive jurisdiction to build. We need to ensure it is not a significant cost to building industrial/commercial enterprises.

Need an industry in Manitoba to consume these materials (Gypsum or cement plants). Transportation is a cost that kills this type of effort.

New Home Construction waste holds significant opportunity. The scraps/waste from this stream (framing lumber, drywall, shingles) are generally uncontaminated and more easily separable than the same

materials coming from Renovation or Demolition stream. MEIA New Home Waste Construction Diversion Study should be consulted in seeking recommendations on that stream.

(Disclosure: I/StrategyMakers authored that study/pilot) The study contains very detailed waste composition data for the new home construction waste stream.

Think the Re-Store shows there is a definite demand for salvaged materials.

Ditto. Change building requirements!

Much of the waste from construction could be included in the HHW program if ICI was accepted.

Great opportunity for social enterprise development to sort materials on job sites and to advise on how to reduce waste. Already examples of such businesses elsewhere in Canada.

May involve making people and companies aware of the availability of salvaged materials from construction sites. Market may not exist because there hasn't been supply.

Manitoba must include commercial waste in EPR programs (mandate it)

Implementation (How to do it?)

Topic #7: Program Accessibility

How do we improve program accessibility for all communities?

Challenges

- Transportation costs
- Lack of regional support at government level
- Large distances
- New councils with new ideas every four years
- GHGs from transport
- May not be able to use same efficiencies as backhauling program - empty truck returning direct to Winnipeg

Agree

Alberta, Saskatchewan and Manitoba are all considering changes to EPR for packaging at the same time. Provinces have an opportunity to work with industry to create significantly aligned programs that

General comment: Consultation summary document should lay out next steps including direct engagement with producers.

General: A forum where municipalities can join the conversation. They have their boots on the ground and will be able to give the technical answers to a lot of these questions.

General comment: Require data on material volumes and regional assets before moving forward.

needs collaboration with various stakeholders including programs, province and feds to increase access to remote communities and indigenous communities. Province needs to be a leader in this area.

inherently be generated through the process of collection, transportation, processing and recycling which is the goal of EPR programs - collect and manage as much of the leftover products as possible, in some

programs accessibility requires local community participation and EPR is a priority for the community

success of EPR programs is dependent on a shared responsibility model - at an operational level as a minimum. requires support from consumers, local communities/gov'ts and the programs

other regulations need to be consistent and support EPR regulations and not act as barriers to improved and increased accessibilities

education & tailored resources

Any changes need to consider GHG impacts as the climate issue is real.

be very aware of the difference between large urban areas and smaller urban, rural and northern communities. Programs need to be flexible to allow for local realities

General Comment - just want to reiterate the importance of conducting a comprehensive waste characterization study for the province of MB as part of this review.

General: You suggested earlier that you were interested in feedback on BC or Ontario programs. Happy to have that discussion but didn't think it was helpful for this audience.

Opportunity today is for alignment among AB, SK, MB.

Implementation (What would be most effective?)

Appendix E

Minister of Conservation and Climate Mandate Letter

PREMIER OF MANITOBA

Room 204
Legislative Building
Winnipeg, Manitoba CANADA
R3C 0V8

March 3, 2020

Honourable Sarah Guillemard
Minister of Conservation and Climate
344 – 450 Broadway
Winnipeg, Manitoba R3C 0V8

Dear Colleague:

The people of Manitoba have given us the honour of a second mandate to move Manitoba forward. Our commitments are clear and ambitious.

All Ministers will work as a team to achieve the Five Point Guarantee as set out in our 2019 platform. We will work hard to create 40,000 new jobs, reduce taxes and invest in a health care system that delivers better care sooner. We will complete the construction of 20 new schools to provide better environments for our children to learn. We will deliver our Made in Manitoba Climate and Green Plan to achieve our vision of the cleanest, greenest and most climate resilient province.

We will build a better, more efficient, responsive and open government that provides quality services to communities throughout Manitoba.

Manitobans deserve a government that reflects their values: honesty, integrity and a commitment to hard work. I expect all ministers to work as a team to achieve our platform commitments and to hold themselves to the highest ethical standards. Manitoba became the most improved province in Canada in our first term. That record of achievement and success will provide a strong foundation for an equally ambitious second mandate. We are a government that

keeps its word. We have a record of public trust that cannot be compromised by conflicts of interest, complacency or entitlement.

As Minister of Conservation and Climate, you will lead the implementation of our Made in Manitoba Climate and Green Plan, including actions across its four pillars of climate, jobs, water and nature:

- Issuing a mandate letter for Efficiency Manitoba, emphasizing the need for continuous progress on reducing administrative costs, integrating them into our budgeting process and finding ways to collaborate on procurement, accommodations, and other matters of mutual interest;
- Challenging the imposition of the higher, rising federal carbon tax in Manitoba;
- Implementing measures to achieve the Carbon Savings Account for 2018 to 2022, and set the next emissions reduction goal for 2023 to 2027 to ensure Manitoba continues to bend the greenhouse gas emissions curve downward in a meaningful and measureable way;
- Measuring and reporting progress towards achieving the goals of our Made in Manitoba Climate and Green Plan, including public reporting of the impact of policies, programs and measures established, and leadership practices employed by our Government;
- Considering the advice and recommendations of the Expert Advisory Council and the Youth Advisory Council;
- Developing a renewed provincial energy strategy in concert with Manitoba Hydro's renewed strategic plan, that builds on Manitoba's clean renewable electricity assets;
- Launching Efficiency Manitoba's programs to save energy and reduce energy bills;
- Enhancing green transportation through:
    - Increasing biofuel mandates to the highest in Canada; and
    - Advancing the planning of low and no carbon transportation and infrastructure based on the advice of the Expert Advisory Council;
- Working with your colleague, the Minister of Crown Services, in responding to the recommendations of the Clean Environment Commission's Regional Cumulative Effects Assessment by developing clearer large area planning, environmental licensing and monitoring pathways to protect the environment while supporting sustainable economic development, reconciliation with indigenous communities, investment decisions and long-lasting jobs in Manitoba;
- Modernizing our environmental legislation, including the introduction of large area planning, integration of meaningful consultation, elimination of duplication in the review of forestry operations and clarification of the regulatory framework for cosmetic pesticides;
- Working with your colleague, the Minister of Agriculture and Resource Development, to focus our enforcement efforts on the most serious environmental, fish and wildlife infractions, and introducing innovative enforcement practices;
- With your colleagues, the Minister of Municipal Relations and Economic Development and Training, working with the private sector and municipalities to support the growth of

a local circular economy, driving innovation and green products while reducing waste sent to landfills. This should include reforming recycling and waste management, particularly plastics, organics, electronics and white goods, by setting ambitious municipal recycling and reuse targets and producer responsibility requirements;

- Eliminating the use of plastic bags in Manitoba;
- Implementing new funding opportunities for non-profit organizations interested in supporting implementation of the Made in Manitoba Climate and Green Plan, aligned with the new strategy being developed to build capacity and promote sustainability in the non-profit sector led by the Minister of Municipal Relations and focusing on being more results-oriented, streamlined and application-based to maximize our collective effects to address climate change;
- Renewing the provincial parks strategy to enhance visitor experience, modernize funding mechanisms for park services, and identify opportunities to attract private and philanthropic investment to upgrade facilities;
- Working with your colleagues, the Minister of Infrastructure, Economic Development and Training, Municipal Relations, and Agriculture and Resource Development, leading the development and maintenance of a provincial trail network for hiking, biking, snowmobiles and off-road vehicles, including funding mechanisms, tourism amenities and the reduction of regulatory barriers that restrict trail development;
- With your colleague the Minister of Municipal Relations and in concert with federal regulatory reforms, updating our provincial building codes to ensure they enhance resiliency and reduce carbon emissions;
- Accelerating our efforts to clean up abandoned mines, while holding responsible parties accountable;
- Leading the implementation of on-line licensing and permitting for landowners, hunters, anglers, outfitters, trappers, snowmobilers, and off-road vehicle enthusiasts;
- Reviewing our fire program to ensure value for money and given the effects of climate change;
- Continuing our work to enhance water quality within Manitoba's Great Lakes, including Lake Winnipeg; and
- Assisting your colleague, the Minister of Agriculture and Resource Development, in the development of a provincial Water Strategy.

You will work collaboratively with the public service, stakeholders and citizens to keep our promises. We are committed to ensuring all employees are treated with dignity and respect. There is no place for harassment of any kind in the civil service or any workplace, you must remain vigilant in ensuring there is no wrong door and not sit silent if you see others around you falling short of these standards.

We have established Ideas Funds across summary government to encourage front line service providers to come forward with innovative proposals to modernize and improve the way we deliver services Manitobans need. You will encourage your front line service providers to avail themselves of this opportunity.

Both with your department and the entities that receive our financial support, you will emphasize the need for continuous progress on spending within our budgets, reducing administrative costs and finding ways to ensure value for taxpayers' money.

As a member of Executive Council, you will continue to support our work to transform the public service, including the deployment of balanced scorecards to report on our progress and ensure Manitobans understand what we are doing and why we are doing it. As elected representatives of the people, we must always ensure that we remain transparent and accountable for our actions. Manitobans expect nothing less.

Sincerely,

Original signed by

Brian Pallister