Part 2: Introduction and basics

Extended Producer Responsibility in the Yukon: exploration and implementation considerations

2021

This document is Part 2 of the "Extended Producer Responsibility in the Yukon: exploration and implementation considerations" prepared by the Government of Yukon to fulfill the 2018 recommendation by the Ministerial Committee on Solid Waste to explore Extended Producer Responsibility. Part 2 discusses the Yukon's current waste reduction commitments and current issues with recycling, and provides an introduction to Extended Producer Responsibility.

1. Introduction

In April 2018, the Ministerial Committee on Solid Waste (MCoSW) published their Recommendations for Actions towards a Sustainable Solid Waste Management System for Yukon[1]. The MCoSW is made up of the Government of Yukon and municipal representatives. One of the critical recommendations under the User Pay theme was to explore Extended Producer Responsibility (EPR) with industry in a medium- to long-term timeframe of 2018 to 2022.

In 2020, the Yukon's climate change action plan, *Our Clean Future*, committed to implementation of EPR by 2025.

This report summarizes the findings of the EPR Exploration exercise conducted to fulfill the MCoSW recommendation.

The main objectives of exploring EPR in the Yukon are:

- to investigate potential challenges and opportunities when implementing an EPR system in the Yukon;
- to explore potential regulation mirroring BC's system to enable EPR harmonization across BC and the Yukon;

[1] Ministerial Committee on Solid Waste, "Recommendations for Action towards a Sustainable Solid Waste Management System for Yukon," (April 2018).

- to develop a conceptual design for EPR in the Yukon that considered priority materials, costs, infrastructure needs and legislative requirements;
- to determine which product types might be best suited to an existing stewardship approach (*Designated Materials Regulation*) vs. an EPR approach; and
- estimate a reasonable timeline for implementation given the limitations and opportunities for each product category.

The current regulated and non-regulated recycling programs and overview of the existing recycling infrastructure is included in Appendix A.

2. Current challenges with waste management

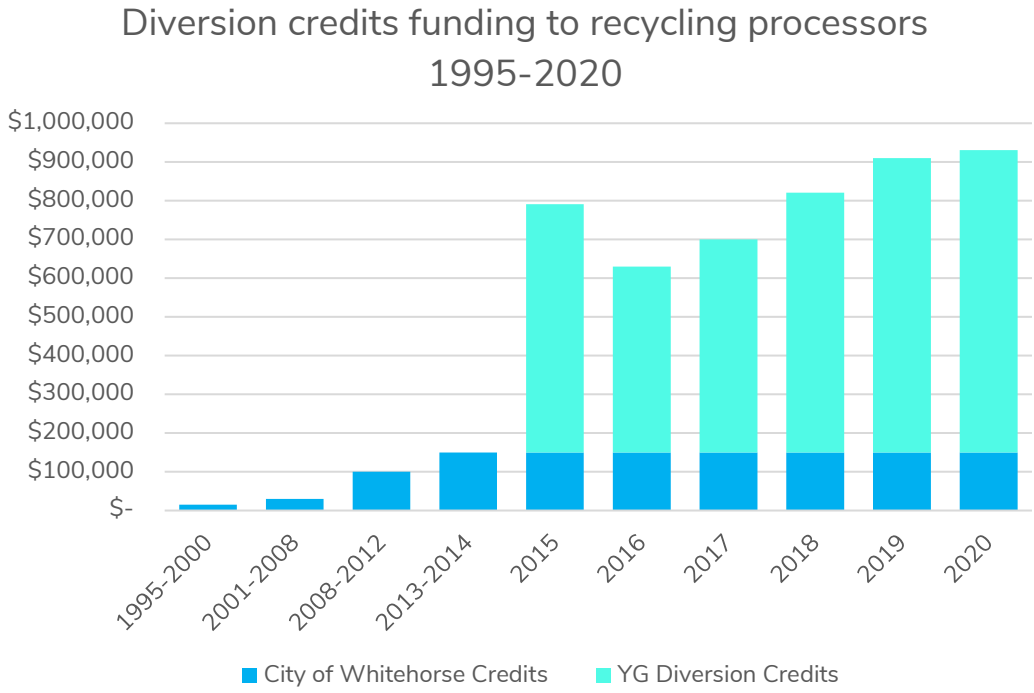
An integral part of the waste management system is end-of-life management for products and materials that are recyclable. A full assessment of recycling concerns for the Yukon can be found in the "Supporting a Sustainable Recycling System in the Yukon" report prepared for the Ministerial Committee on Solid Waste (2020). Further economic, social and environmental benefits of recycling are laid out in the MH Report "Assessment of the Impacts of Yukon's Recycling" (2021). The current challenges with the collection and processing of the recyclable materials in Yukon include:

- Fiscal vulnerability of the system to recycle non-refundable materials – Raven Recycling and P&M Recycling process these materials voluntarily and diversion credits funding model is not sufficient to ensure their long-term operation.

> *"…Raven has no desire to continue with a diversion credit system beyond the next 2 to 3 years. We don't think it is our responsibility to hold the financial risk of uncertain funding from governments, fluctuating markets and operations that require ongoing capital investments that we can't afford."* Raven Recycling, November 2019

  Disruption of recycling services would undermine recycling behaviour in the public.

- Diversion credits paid by the Government of Yukon and some municipalities are not a sustainable funding model for the Yukon's recycling programs for multiple reasons:
    - the credits are expensive, increasing in cost since their introduction in 2015 and costing the Government of Yukon $753,000 in 2019, $781,000 in 2020 and projected to be around $1,000,000 in 2021;



Based on Figure from Ministerial Committee on Solid Waste (MCoSW), July 2020, "Supporing a Sustainable Recycling System in the Yukon."

    - the Government of Yukon has no direct control over priority materials or volumes accepted by recycling processors; and
    - the costs are born broadly by all taxpayers rather than directly by waste generators, which is counter to the principle of user-pay.
- Continuing to divert recyclable materials and increasing diversion rates is essential to reduce costs associated with landfill operations and landfill liabilities.

Additionally, improved recycling in the Yukon offers opportunities to:

- Divert recyclable material from landfills in support of the *Our Clean Future*'s target to divert 40 per cent of waste by 2030.
- Increase social impacts in the community by providing additional jobs. Currently, about 70 jobs in the Yukon are tied to recycling.[2]
- Extend the life of the landfills and reduce environmental liabilities for the municipal and territorial landfills.
- Meet resident expectations for continued recycling services.

Modernizing waste management of recyclable materials in the Yukon will ensure its fiscal stability and reduce the financial demands on taxpayer funding. Additionally, continued and increased waste diversion will help to advance other socio-environmental goals such as reducing greenhouse gas emissions, creating additional employment opportunities, and working towards the national commitments of Zero Plastic Waste. Municipal, territorial and national governance bodies all support implementation of EPR.

3. Yukon commitments to waste diversion

3.1 Our Clean Future

In September 2020, the Government of Yukon published a climate change strategy, *Our Clean Future*[3]. The strategy outlines a variety of environmental targets and actions for the next decade. Action I14 is to "[d]esign and implement a system for EPR by 2025 that will make producers responsible for managing materials through the lifecycle of a product".

The strategy also sets out a target waste diversion of 40% by 2030. In 2020, the territory-wide diversion rate was 25%.

[2] Morrison Hershfield Ltd., "Assessment of the Impacts of Yukon's Recycling," (March 16, 2021).
[3] Government of Yukon, "Our Clean Future, A Yukon strategy for climate change, energy and a green economy," (2020).

3.2 City of Whitehorse targets

Building upon the 2013 Solid Waste Action Plan[4], the City of Whitehorse Sustainability Plan 2015-2050[5] sets out municipal solid waste diversion goals of 50% by 2020, 65% by 2030 and 90% by 2050 by minimizing waste generation and maximizing resource recovery through reducing, reusing, recycling and composting. In 2020, the City-wide diversion rate was 32%.

3.3 CCME commitments

The Canadian Council of Ministers of the Environment (CCME) is an intergovernmental forum for collective action on environmental issues led by provincial and territorial ministers of environment. In 2009, CCME approved a Canada-wide Action Plan for EPR (CAP-EPR)[6] under which jurisdictions committed to work towards the development of EPR framework legislation and/or regulations and established Phase 1 and Phase 2 priority material categories for EPR programs. The territories committed to reviewing their progress toward the development of EPR frameworks for all product categories.

As a result of the review, the Government of Yukon amended the *Environment* Act in 2014 to establish a duty for recovery for producers and importers, and authorize the Minister to regulate this duty. Future EPR regulation will identify duties for designing, implementing and administering programs, as well as the standards that must be met in programming.

In 2018, CCME endorsed the Aspirational Canada-wide Waste Reduction Goal of reducing average waste generation from 706 kg per person in 2014 to 490 kg by 2030

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[4] City of Whitehorse, "Solid Waste Action Plan," (August 2013): https://whitehorse.ca/departments/environmental-sustainability/waste-diversion/additional-information/solid-waste-action-plan-swap.

[5] City of Whitehorse, "City of Whitehorse Sustainability Plan, 2015-2050," (2015): https://www.whitehorse.ca/home/showdocument?id=5313.

[6] Canadian Council of Ministers of the Environment (CCME), "Canada-Wide Action Plan for Extended Producer Responsibility," (October 2009).

and to 350 kg by 2040. Yukon's per capita waste generation in 2020 was 920 kg. As part of efforts to achieve this goal, CCME approved in principle the Canada-wide Strategy on Zero Plastic Waste[7] the same year. The Phase 1 Action Plan under the Zero Plastic Waste Strategy recognized EPR as essential to achieve the goal of zero plastic waste.

3.4 National developments

In 2020, Environment and Climate Change Canada (ECCC) published and circulated for comment a discussion paper, *A proposed integrated management approach to plastic products to prevent waste and pollution*. The paper outlined the scope of proposed ECCC activities to reduce plastic waste including banning or restricting certain harmful single-use plastics as early as 2021, establishing performance standards on recycled content, and ensuring end-of-life responsibility by working with jurisdictions and industry to advance EPR in Canada. The Government of Yukon requested, as a matter of comment, a commitment from ECCC to continue work with the jurisdictions in advancing waste management initiatives, such as single-use plastic bans and EPR.

4. What is EPR?

EPR is an environmental/economic policy approach in which producers of products and packaging bear responsibility for ensuring those products and packages are properly managed at the end of their life-cycle (OWMA 2013[8]). This shifts the responsibility upstream toward the producer and away from local government, providing incentives to producers to incorporate environmental considerations in the design of products and packaging.

The cost of managing consumer waste has traditionally been borne by society as a whole (and, specifically, in the Yukon: municipalities and the territorial government).

[7] CCME, "Strategy on Zero Plastic Waste," (2018).
[8] Ontario Waste Management Association (OWMA), "Extended Producer Responsibility, Policy Paper," (June 2013).

Traditional waste management represents an environmental externality, as its cost is not reflected in the price of the product. This is not consistent with the concept of full-cost accounting where the price of a product should include its life-cycle costs. Incorporating full life-cycle costing in product prices sends a more accurate price signal to consumers in making their purchasing choices.

This philosophy is what led to the concept of EPR, first coined for the Swedish Environment Ministry in 1990 by Thomas Lindhqvist of Lund University. Subsequently, EPR was adopted as an end-of-life (EOL) packaging management system across Europe. It then spread as a new policy instrument for EOL to other products, including batteries, electronics, refrigerants (chlorofluorocarbons or CFCs), tires, appliances, vehicles, paint and others.

In Canada, national EPR workshops were held by Environment Canada starting in 1996, leading to an increased focus on producer responsibility, and, ultimately, to CCME's CAP-EPR in 2009, committing provincial/territorial governments to develop EPR legislation for a range of product categories.

EPR has since become a waste management policy tool of choice in most jurisdictions in Canada, providing for more financial and operational responsibility for the producers of products and packaging. In 2011, BC added Schedule 5 to its *Recycling Regulation*, requiring producers to assume physical and financial responsibility for household packaging and paper products. Now all provinces west of Quebec, except Alberta, have EPR systems for packaging and printed materials.

BC, specifically, has taken the most aggressive EPR approach, with programs for wide range of materials, including:

- used oil materials;
- beer and beverage containers;
- lead-acid and rechargeable batteries;

- cell phones;
- electrical equipment;
- electronic products (e.g., computers, gaming and musical equipment, electronic toys, etc.);
- small appliances and tools (e.g., countertop appliances, alarm clocks, irons, scales, hair dryers, power tools, exercise equipment, etc.);
- major appliances (e.g., refrigerators, freezers, air conditioners, washers, dryers, dishwashers, etc.);
- pharmaceuticals;
- packaging and printed paper (blue box materials such as paper, cardboard, containers made from plastic, aluminum, and steel as well as cartons, paper cups, glass bottles and jars, plastic bags, flexible plastic packaging, and foam packaging) – single-use products to be added to the category by 2023;
- outdoor power equipment (e.g., lawn mowers, chainsaws, power washers, wood chippers, etc.);
- household hazardous waste (including paints, solvents, pesticides, and other flammable liquids);
- thermostats;
- telecommunication equipment (e.g., modems, routers, remotes, etc.); and
- tires.

Ontario passed the *Resource Recovery and Circular Economy Act* in 2016 that requires Individual Producer Responsibility (IPR), rather than transferring responsibility to a Producer Responsibility Organization (PRO) that represents multiple producers. This is the most recent evolution of the EPR model in Canada, but it is unclear if jurisdictions other than Ontario will follow suit. This model has high administrative burden, but is thought to encourage free market competition. Taking into account small population and product volumes, IPR is not being considered in the Yukon.

4.1 Current product stewardship model vs EPR

The Yukon currently has several product stewardship programs to manage beverage containers, tires, e-waste and small appliances. Product stewardship is similar to EPR in that a product's full cost is incorporated in to the purchase price. However, product stewardship currently relies heavily on government administration and supplemental tax based funding. For example, the *Designated Material Regulation* (DMR), a product stewardship regulation, sets a fee to be charged to the consumer at the point of sale and that fee is then remitted to the Government of Yukon. The government then uses the collected funds to arrange for collection, processing and transportation of these materials to the recycling facilities. Currently, the fees charged under the DMR programs do not cover full costs to recycle and government taxes supplement the rest.

Under the proposed EPR framework, the producer is responsible for setting a fee (visible or built-in to the cost of the product), collecting the money, arranging for collection, processing and transportation of these materials to the recycling facilities, and ensuring the materials are recycled according to the rules (e.g., recycled into new materials instead of incinerated for energy recovery). The role of government in the EPR system is to create an outcomes based regulation to assign responsibility for waste management to the producers. They then coordinate with each other to provide collection services, process and recycle products to meet government stipulated recycling targets and service levels.

4.2 Current voluntary recycling vs. EPR

The packaging and printed materials are currently collected for recycling on voluntary basis by the recycling processors. The processors pay for the costs of collection, processing and transporting of these materials to the recycling facilities and then later are able to recoup some of the costs through diversion credits provided by the territorial and municipal governments.

Under the EPR framework, producers would take over these responsibilities as described in Section 4.1.

5. Existing EPR guidance

Phase 1 of CAP-EPR required jurisdictions to commit to working towards managing the following products and materials in operational EPR programs by 2015.

- Packaging.
- Printed materials.
- Mercury containing lamps.
- Other mercury-containing products.
- Electronics and electrical products.
- Household hazardous and special wastes.
- Automotive products.

Phase 2 saw jurisdictions committing to operational EPR programs by 2017 for the following materials.

- Construction materials.
- Demolition materials.
- Furniture.
- Textiles and carpet.
- Appliances, including ozone-depleting substances.

CAP-EPR recognized that the three territorial jurisdictions faced significant implementation challenges due to “unique circumstances of geography, population and infrastructure.” Given the challenges, CCME acknowledged that an EPR approach might not be an appropriate instrument for all product categories in the territories, leaving them to determine what was most appropriate for their jurisdictions under the circumstances.

To address these barriers, CCME launched a project in 2014 aimed at "identifying opportunities and sharing best practices for implementing EPR in northern and remote regions." To this end, CCME convened a workshop in spring 2015 for PROs and stewardship organizations to consider ways of advancing EPR and stewardship in the territories and remote parts of the provinces. In preparation for the workshop, CCME compiled a baseline information report on material flows and waste management systems for specified product categories in the regions of interest. This report showed a number of best practice examples in remote regions of provinces that could also apply to the territories, such as local innovation, the role of community champions, and collaboration between PROs. It is interesting to note the link between EPR and the implementation of successful initiatives in remote regions of the provinces, specifically collaborative efforts among PROs to provide means for cost sharing, solving logistical problems specific to extreme conditions and facilitating partnerships with communities. This suggests EPR is a driver for innovation in these regions, with the potential for the same in the territories.

The subsequent workshop in 2015 identified additional opportunities for EPR introduction in the territories. Specifically, successful models for future EPR program development will be built upon the success of existing pilots and best practices in remote areas of the provinces, while utilizing the extensive technical knowledge of program operators.

This will require collaboration between jurisdictions and PROs, as well as accessing insights from existing systems such as retail distribution and current service providers, to tackle challenges such as transportation logistics, limited capacity and accessibility in remote areas. The overall sense of collaboration at the workshop was expressed through a recurring "Recycling Without Borders" concept that speaks to the need for jurisdictional and organizational partnerships to advance increasingly harmonized EPR.

There is a recognized need that EPR policies provide adequate levels of accessibility to different geographic regions, including northern areas. The CCME EPR guidance document currently under development under the Phase 1 Action Plan of the Strategy on Zero Plastic Waste is expected to address accessibility needs.