Draft

Policy Guidance Document

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Prepared for Distribution by the

Resource Recovery Partnership

Mission

To promote the development of sound public policy across Canada that recognizes all resource recovery technologies as valued options for the end-of-life use of waste resources and non-recycled and non/composted materials and their essential role in achieving zero waste.

Introduction

This Policy Guidance Document has been prepared by the Resource Recovery Partnership for use in consultations with stakeholders across academia, industry and government. In the pursuit of sound public policy, we have recognized that there are challenges with consistency in terminology across different jurisdictions and understand that it is critical that we share a common frame of reference to collectively advance our understanding. This perspective was the impetus for the initial development of the ***Primer – Developing an Advanced Resource Recovery Framework to Support a Waste Free Ontario***.

An Advanced Resource Recovery Framework

An Advanced Resource Recovery Framework refers to a waste management framework that includes all available waste management options including traditional waste management approaches and those more advanced or complex approaches that extract a broad range of end-of-life value from waste materials.

The pursuit of Zero Waste requires that all options be available for consideration and are not limited in scope as solutions to the unique waste management challenges of different communities are developed.

Further discussion and definitions for reference purposes are included in the companion document to this Policy Guidance document, entitled *"A Discussion Paper – Developing an Advanced Resource Recovery Framework for Canada"*. It can be downloaded at

http://resourcerecoverypartnership.ca/rrp-discussion-paper-developing-arr-framework/

Through consultations with stakeholders during the Resource Recovery Partnership Conference in June of 2018 and, over the last 12 months, through one on one meetings with entrepreneurs, industry, associations, researchers and government representatives at all levels, the Resource Recovery Partnership (RRP) has been collecting and distilling all of the feedback and ideas received for optimizing the end of life value from all waste resources including non-recycled wastes and bring us closer, as a Canadian society, to zero waste.

This consultation process has helped continue to shape the Mission and Guiding Principles and Responsibilities outlined below.

Where We Begin

The achievement of a sustainable economy requires the commitment and investment of all stakeholders. One common element received at all levels of consultation was that there is a collective responsibility at all levels of society to achieve a sustainable economy and that there must be a sense of urgency in pursuing sustainable change.

The RRP recognizes that within the diversity of Canada, there are many communities that face challenges beyond the solutions that a traditional waste management system can offer, such as

those who live in remote areas, do not have access to traditional markets, have limited financial means or other circumstances unique to their jurisdiction. Alternative, more advanced or emerging resource recovery technologies offer flexible and scalable solutions, along with additional benefits such as distributed power, to enhance the lives of many communities which do not have practical access to large scale, capital intensive recycling processing facilities and international markets.

Alternatively, other communities have mature recycling programs that are reaching the marginal limits by which they can drive out increased diversion. The daily challenges of evolving, complex and advanced packaging technologies for example, place further burdens on these traditional diversion systems.

It is with this perspective of the broad ranging diversity and scale of challenges that the RRP has prepared this policy guidance document.

Process and Timeline

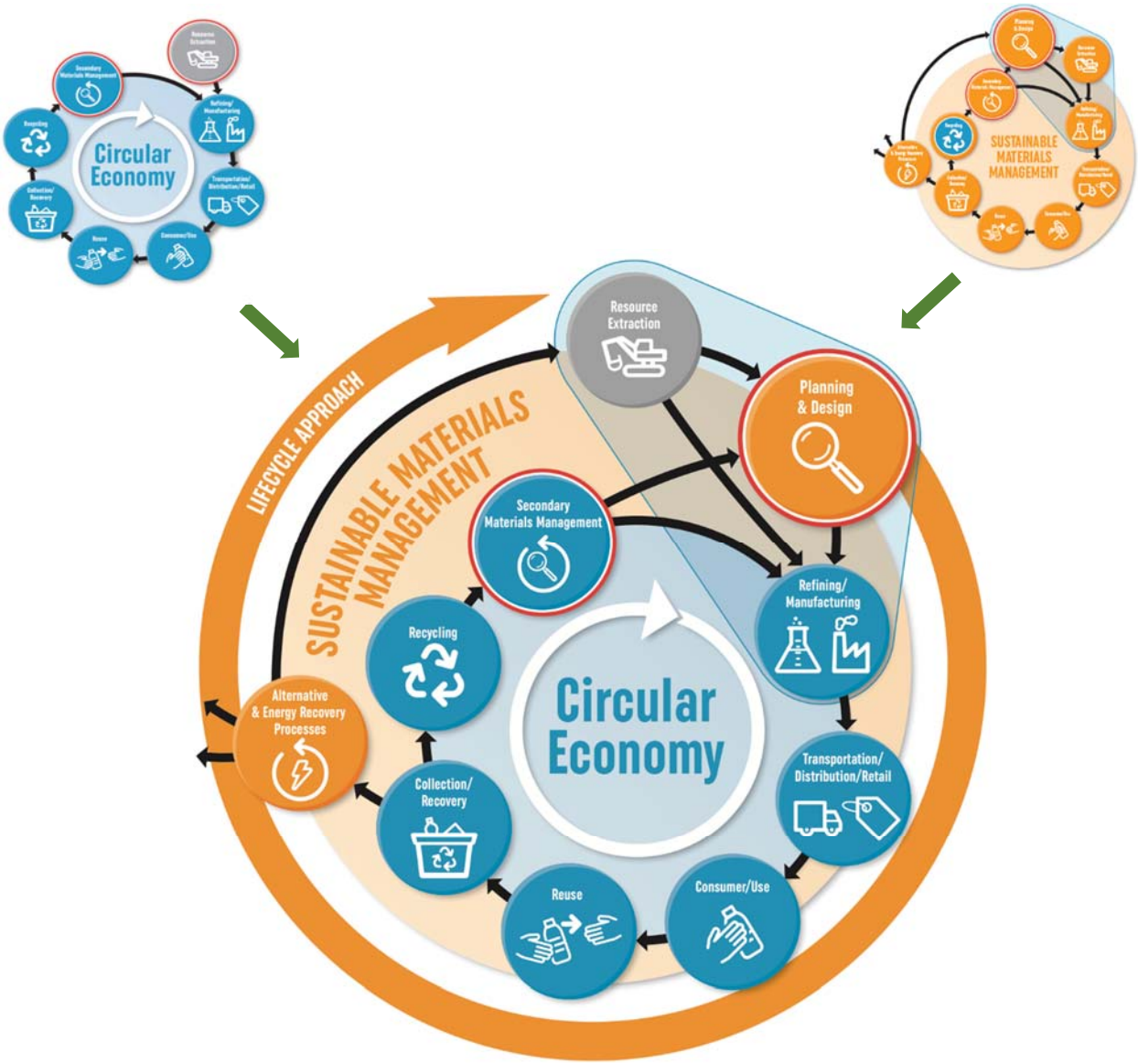
The Resource Recovery Partnership has engaged in numerous discussions, consultations, and outreach across private and public sectors to ensure that its approach to developing sound public policy around Resource Recovery including existing and emerging technologies as an essential component of a Zero Waste strategy, is comprehensive and effective.

The Advanced Resource Recovery Framework

A guiding component of the vision for achieving Zero Waste society is the philosophy that the benefits of Circular Economy (CE) & Sustainable Materials Management (SMM) are complimentary and are equally essential to achieving Zero Waste.

The integration of CE and SMM embraces the complete Life Cycle Analysis (LCA) approach to taking into consideration the full impact of goods consumed in Canadian society, including the end of life management burden of these materials. These are components of a truly Sustainable Economy.

Figure 1. The Sustainable Economy Model



In Section 2.2 of the companion document entitled ***Discussion Paper – Developing an Advanced Recovery Framework for Canada***, a conversation was initiated with a focus on waste prevention and maximizing the benefits of resources generated in various waste streams as part of a broader advanced resource recovery framework. These ideas have been expanded upon in the following sections to provide further clarity to the fundamental ideas behind an advanced framework.

Advanced Resource Recovery Framework Principles

1. Support reduction, reuse, recycling and recovery as key priorities.
2. Prioritize end-of-life applications based upon an established hierarchy.
3. Utilize 'Recovery' within a sustainability framework circle. Consider the complimentary approaches of Circular Economy and Sustainable Materials Management to achieve the highest possible environmental and economic performance. (see diagram on CE & SMM Framework)
4. Increase options to divert more waste resources from landfill which include all 4 R's – reduce/waste prevention by design; reuse; recycle/composting; and recovery (waste conversion, pyrolysis, energy from waste, gasification, etc. and other emerging resource recovery technologies and processes).
5. Resource recovery must be recognized as diversion as it is essential to achieving Zero Waste and resource conservation.
6. New technologies must be economically, environmentally and socially sustainable.
7. Use a holistic life cycle approach to optimize the highest value output from collected and recovered waste resources.
8. Consider and recognize the unique challenges of communities' and jurisdictional needs which are diverse across Canada.
9. Government(s) recognize flexibility is required within a defined framework to address challenges and opportunities that exist across Canada. Industry, through extended producer responsibility (EPR) and other responsibility programs, should be allowed to determine the most appropriate options to achieve Zero Waste within the defined framework.
10. A regenerative economy must use science based, quantitative processes that take into consideration all the burdens identified by the Life Cycle Analysis (LCA).
11. Scalability and flexibility must be part of the solution for all jurisdictions.

Roles and Responsibilities

In the development of an advanced resource recovery framework policy, certain key messages were consistently communicated to the ARRP and have helped form the basis of the Responsibilities outlined as follows.

Government

1. Lead by example – implement internal purchasing standards maximizing the recycled content of products and /or reduction by design.
2. Educate society on the importance of all waste and resource management approaches.
3. Reduce the complexity of approvals required to test, validate and commercialize new technologies.
4. Incent companies to overcome barriers to entry into the recovery market, such as financial risk, access to pure research, access to feedstocks and regulatory hurdles.
5. Provide clear guidelines and outcome-based standards to allow for the market to respond in the most competitive and cost-effective manner.
6. Prioritize the adoption of the 4Rs – Reduce; with expanded diversion options that include the traditional three R's, Reuse, Recycle; including advanced recycling technologies – e.g. molecular recycling, and Recover; e.g. energy from waste, waste conversion, fuel replacement, in order.
7. Create a market pull for recycled and recovered products by promoting/mandating minimum recycled/recovered content in all new products and applications where technically possible through preferred procurement practices in the private and public sectors.
8. Encourage the evolution of the feedstock as commodities during initial stages and as markets mature, let demand dictate end use applications.

Industry

1. Industry should support sustainability and seek to optimize environmental and economic performance.
2. Industry should lead through innovation within the framework provided by government.
3. Industry should collaborate with academia and government and all stakeholders.
4. Industry should include a full lifecycle analysis when producing products.
5. Industry should be responsible for the full life cycle cost of their products.
6. Industry should increase domestic recycling and processing capacity to retain greater volumes of upgraded resource feedstock value in Canada rather than shipping it overseas.

Society

1. Balance the priorities of innovation, sustainability and environment.
2. Take into consideration unintended consequences by basing policy decisions on fact and science.
3. Strive for continuous improvement, not perfection – to ensure positive momentum is occurring.
4. Maximize the value of source separated materials to ensure end of life use is optimized.
5. Commit to using products that contain recycled, recreated and repurposed materials.

Resources

The Resource Recovery Partnership is located at resourcerecoverypartnership.ca

Documents referenced in this Guidance Document can be downloaded here https://resourcerecoverypartnership.ca/resources/ .

To join the Resource Recovery Partnership, please click https://resourcerecoverypartnership.ca/contact-us/ to be directed to our website for registration.

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