

December 19th, 2023

#### Memorandum

# Re: Recycling of ICI Packaging and Paper Products in B.C.'s Rural and Remote Communities – INTERIM OPTIONS REPORT

In November 2022, the Ministry of Environment and Climate Change Strategy (the ministry) contracted Elevate Consulting Inc (the consultant) through a competitive bid process. The contract was intended to support facilitation of a working group to understand the current state challenges, emerging trends, and key success factors impacting the recovery and recycling of Industrial, Commercial and Institutional (ICI) sector packaging and paper products in rural and remote communities and to identify potential interim opportunities to increase recycling of packaging and paper products from the ICI sector. Along with supporting data collection, this contract and summary report is one step in the Province's work to develop a long-term policy approach for ICI packaging waste by 2025, as outlined in the Extended Producer Responsibility (EPR) five-year action plan.

The ministry received the draft summary report, developed by the consultant, in fall 2023. The process used by the consultant is outlined in the attached report, starting with interviews of representatives familiar with the challenges of these sectors in rural and remote communities. Based on the information gathered through the interviews, the initial scope and direction of the working group were defined, and a working group established. The consultant facilitated six working group discussions to identify shared interests and identify potential interim options.

This report is not a mandate or final ministry policy. Rather, a summary of the process and results of the working group and will be considered when developing the ministry's policy approach regarding ICI packaging.

The ministry extends a thank you to all working group participants and other representatives who contributed their time and expertise to inform the development of this report, and their ongoing commitment to improve ICI sector diversion and recycling in B.C.

Email: env.mail@gov.bc.ca

Website: www.gov.bc.ca/env



Recycling of ICI Packaging and Paper Products in B.C.'s Rural and Remote Communities

**INTERIM OPTIONS REPORT** 

Updated: December 19th, 2023



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# LAND ACKNOWLEDGEMENT

We acknowledge with respect and gratitude that this report was produced on the unceded traditional territory of the lək wəŋən Peoples from the Songhees and Xwsepsum (Esquimalt) First Nations. p'áləc'əs (Songhees Point) is one of the traditional place names for the City of Victoria. These lands have been stewarded by these First Nations Peoples since time immemorial. We thank the nations for allowing us to work, live and walk the path of reconciliation with them.

We endeavour to honour the reconciliation process not just in words but in action.





# INTRODUCTION

#### **OVERALL CONTEXT**

In 2021, the B.C. Ministry of Environment and Climate Change Strategy (the Ministry) released the Extended Producer Responsibility Five-Year Action Plan, which identified an action to evaluate opportunities and policy options to increase recycling of packaging and paper from the industrial, commercial and institutional (ICI) sector. In addition, the ministry also recognized an urgent need to identify and implement interim solutions that could mitigate some of the present challenges faced by the ICI sector regarding the management of recyclable materials until a broader policy solution could be developed.

The action plan also recognizes that rural and remote communities have unique challenges in accessing recycling services and markets resulting in considerable volumes of these materials going to landfill.



In alignment with this action plan commitment, the Environmental Standards Branch within the Ministry embarked on an initiative to identify potential interim opportunities to improve diversion and recycling of packaging and paper products (PPP) from the ICI sectors in B.C.'s rural and remote communities. To support this work, the Ministry convened a cross-section of rural and remote industry stakeholders, associations, local governments, Indigenous communities and interested parties to form a time-limited working group, focused on identification and evaluation of potential opportunities to increase PPP diversion within rural B.C.'s ICI sector.

It should be noted that expansion of B.C.'s extended producer responsibility regulatory framework into the ICI sector was not contemplated as part of this specific initiative.

To support this work on interim opportunities for B.C.'s rural and remote communities, the Ministry retained the services of Elevate Consulting who supported the initiative in a facilitation capacity. This included gathering of data through a series of informational interviews and research; development of a working group terms of reference; convening and facilitating working group meetings; deliverable development; and general project management and communications.

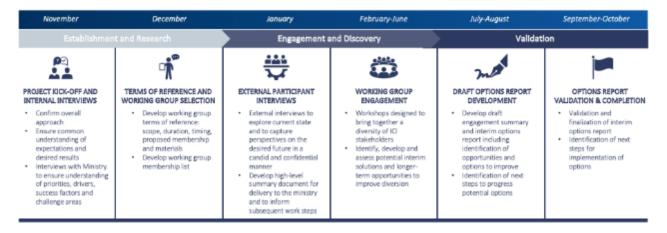


# **APPROACH**

The initiative commenced in November 2022, with the formation of the core project team and development of a detailed project plan.

## **Project Plan**

The project plan outlined the initiative approach over the course of 12 months, from November 2022 to October 2023. A high-level summary of that project plan is detailed below:



## **ENGAGEMENT PHASE 1: EXTERNAL INTERVIEWS**

Elevate Consulting conducted a series of informational interviews with representatives from across the sector to better understand the current state challenges, emerging trends, and key success factors impacting the recovery and recycling of ICI sector PPP in rural and remote communities. In total, there were 17 unique operations, associations, and organizations interviewed throughout late January into early February 2023.

Most of the interviews were with regional districts in B.C.'s northern and southern interior regions, due to feedback from local governments, regionalized constraints related to limited recycling options, increasing transportation costs in a low-price commodity market, and the geographical challenges of large regional areas with low density populations, distant from urban centres. Regional districts are responsible for developing Solid Waste Management Plans under the *Environmental Management Act* and local governments are responsible for the development and implementation of strategies to reduce the disposal of waste.

The interviews provided information on PPP recycling for the ICI sector within rural and remote communities, with particular focus on:

- Uncovering key challenges and issues,
- Exploring the ideal future state and local visions for success,
- Identifying potentially impactful internal and external trends,



- Hearing examples of what's working well in rural communities, and
- Considering potential interim solutions to improve diversion of ICI PPP materials.

The findings from the interviews reflect the interviewees' perspectives and do not necessarily reflect the province's interpretation of the current state. All feedback provided by interviewees was captured, including responses that were out of scope for discussions related to interim options to improve diversion of ICI PPP materials (see Appendix A for more information on the interviews).

# **Key Challenges**

Respondents were asked to identify areas where they perceived challenges or issues regarding PPP for the ICI sector in rural and remote communities. Additionally, the interviews aimed to uncover:

- Specific nuance related to rural and remote communities and the management of ICI PPP materials.
- Key barriers and challenges impacting increased diversion and/or reduction/reuse of ICI PPP.

The key challenge areas to address can be grouped into four main themes:

- Geographic distances and sparse population density indicate the need for a tailored, nuanced solution for rural and remote communities.
- Fluctuations in the volatile commodity markets tend to directly impact the management of PPP from rural and remote communities.
- Cross contamination issues increase in areas with lacking infrastructure to properly manage PPP.
- Small businesses within rural and remote communities are disproportionately impacted by PPP recycling challenges.

A summary of responses is included in figure 1.



#### Key challenges impacting PPP recycling for the ICI sector in rural B.C.



 Province wide, uniform solutions can be challenging due to variations in population density and geographic distances



 Economies of scale and volatile commodity markets impact profitability/affordability of private sector collection and processing of recyclable materials



 Lack of infrastructure, increasing transportation costs and contamination issues prevent effective storage and handling of ICI PPP



Regional districts, local government and small business view the policy or funding support received as
insufficient, unlike the corporate-led industrial or larger commercial sector



Regional districts are subsidizing ICI sector recycling which is unsustainable long-term



• Small businesses in rural and remote communities are disproportionately impacted, typically resulting in increased ICI PPP materials in landfills



• Lack of competition in hauling and processing services inflate costs



• Separation of the management of residential and ICI packaging has compounded the challenges of recycling in rural and remote communities



• Information to fully evaluate solutions is important



#### **Ideal Future**

Respondents were asked to identify signifiers for success in this initiative, and what would be different about the management of ICI recycling in rural and remote communities compared to today. Four key focus areas identified for an ideal future were:

- Improved partnerships and collaboration.
- Increased investment and financial support.
- New and enhanced infrastructure.
- Reduction of recycling materials in landfills.

A summary of responses is included in figure 2.

2

#### Ideal future for ICI PPP materials in rural and remote communities.







 Improved partnerships between communities and for-profit industries to co-manage handling and processing of ICI PPP



• Increased grants/funding to support delivery of ICI PPP recycling programs



• Improved infrastructure in rural and remote communities to support handling and transportation of ICI PPP



• Enhanced reuse of recyclable materials through policies



Increased supports for small businesses to encourage proper management of PPP materials



Balance of incentives and regulatory tools for the private sector



• Residuals management of materials

#### **Current Successes**

Respondents were asked to identify what is currently working well regarding PPP recycling within the ICI sector in rural and remote communities. Additionally, the interviews aimed to uncover:

- Examples of programs or services that exist which would be relevant for this initiative to consider and/or leverage; and
- What specific material types and/or corners of the ICI sector should be prioritized.

A summary of responses is included in figure 3.



3

#### Successful initiatives and concepts which could be leveraged for interim solutions.



 Some large organizations in the ICI sector are managing their PPP effectively due to corporate and/or regulatory obligations



Some regional districts are leading solutions through infrastructure and partnerships to manage programs



 First Nations communities, non-profit organizations and small business alliances are providing local storage, compacting and transportation initiatives



ICI PPP framework providing solutions and opportunities as tools which can be replicated in other regions



Adoption of indirect alternative solutions with low implementation cost and effort

## **Emerging Trends**

Respondents were asked to share their observations on current or emerging trends that are impacting the ICI sector in rural and remote communities. Additionally, the interviews aimed to uncover:

- Potential synergies that exist, which could present solutions; and
- What opportunities trends might offer, and conversely what challenges they present.

A summary of responses is included in figure 4.

4

#### Current and emerging trends that will impact PPP recycling within the sector.



 Small business owners desire to be strong environmental stewards, yet are constrained by labour challenges and increasing costs



· Global economic changes are increasing transportation costs and impacting resource availability



• Changing commodity markets are influencing service providers



• Demographic changes and shifting citizen expectations related to recycling services and waste reduction



· Policy direction and target setting

The information collected from these interviews with a broad cross-section of rural and remote industry stakeholders, associations, local governments, and interested parties provided important context to inform the scope and focus of an ICI PPP Rural Working Group, which would be brought together for focused discussion on identification and evaluation of potential opportunities to improve PPP diversion within rural B.C.'s ICI sector.



### ENGAGEMENT PHASE 2: THE ICI PPP RURAL WORKING GROUP

To support the identification of potential interim opportunities for B.C.'s rural and remote communities, the Ministry recognized a need to bring together a cross-section of representatives who have a stake in the diversion of PPP materials from the ICI sector. It was recognized that their experience, expertise, and perspectives would be critical to understanding common challenges faced by the sector to be able to identify potential suitable interim options.

# **Purpose of the Working Group**

The Rural and Remote Communities ICI PPP Working Group ('working group'), collaboratively undertook a series of meetings with the intent to identify and assess interim options to increase diversion of ICI PPP for rural and remote communities. For the purpose of identifying interim options, the expansion of B.C.'s EPR framework into the ICI sector was not within scope for the working group. Options developed and confirmed by the working group were intended to be provided to the B.C. Ministry of Environment and Climate Change Strategy for consideration by Ministry staff.

## **Scope of Working Group Discussion**

#### In-Scope

- Focus on options for PPP diversion from commercial businesses in North-Central B.C.
- Build a shared understanding of the desired future state for diversion of ICI PPP from landfills in rural and remote communities (i.e., outside of B.C.'s largest population centres).
- Review and validate the 'current state' for the North-Central rural and remote ICI sector, with a
  focus on identifying barriers and challenges in the ICI sector for the reduction and reuse of PPP
  materials, including consideration of: storage, collection, and transfer (including processing/
  transport).
- Identify relevant and achievable interim options (implementable within 0-5 years), in alignment with the top levels of the pollution prevention hierarchy: reducing, reusing, and recycling. This included localized options, pilot projects, cross-community collaborations, etc.

#### Out-of-Scope

- Options requiring amendment to the Recycling Regulation.
- Options related to urban constituencies, or options intended to address urban-focused issues.
- Options requiring provincial regulatory or legislative changes to implement.
- Waste management issues unrelated to PPP and the rural and remote ICI sector.
- Recommendations for current EPR program (and associated collection facilities and services).

Several working group members identified at the initial kick-off meeting, and during the working group sessions, that the working group scope (restricted to the development of interim options) was overly limiting. It was noted that the scope excluded opportunities to discuss policy or regulatory amendments, which several members view as a necessary component to address their areas of concern regarding ICI packaging diversion.



These members also identified that, while they would focus on generating options within the scope of the Terms of Reference for the purpose of group participation, they felt a provincial regulatory solution for the ICI sector is necessary.

# Membership

Working group membership consisted of the following organizations and their designated representatives:

Organization	Representative(s)
B.C. Ministry of Environment, Environmental Standards Branch	<ul> <li>Unit Head, Clean Communities, Environmental Standards Branch</li> <li>Senior Policy Analyst, Clean Communities, Environmental Standards Branch</li> </ul>
Indigenous Zero Waste Technical Advisory Group	<ul> <li>Director and Heiltsuk Tribal Council's Capital Project Manager</li> <li>Director and Tla-o-qui-aht First Nation Public Works Manager</li> </ul>
Waste Management Association of B.C.	<ul><li>Executive Director</li><li>Director, Business Development</li></ul>
Regional District Bulkley-Nechako	Waste Diversion Coordinator
Regional District Cariboo	Manager of Solid Waste
Regional District Peace River	Solid Waste Services Manager
Retail Council of Canada	Director, Government Relations (BC)
Williams Lake Chamber of Commerce	Executive Director

Changes to working group membership occurred during the course of the engagement:

- Regional District Fraser-Ft George elected to be removed after working group session 3, citing capacity challenges.
- Smithers Chamber of Commerce were a member of the working group at the outset, however elected to be removed after working group session 1, citing capacity challenges.

# **Engagement Schedule and Objectives:**

1) Working Group Session 1 – March 17, 2023, 1:00-4:00pm (Virtual, MS Teams) SESSION OBJECTIVES



- Overview of the ICI PPP regulatory and policy framework.
- Review and discuss ICI PPP interview findings.
- Review and validate Working Group Terms of Reference (ToR).
- Hear from each constituency about their priorities for ICI PPP.
- Build an interest-based approach to defining the shared problem.

# 2) Working Group Session 2 – April 19, 2023, 9:00am-12:00pm (Virtual, MS Teams)

SESSION OBJECTIVES

- Explore the desired future state of PPP for ICI in rural and remote communities.
- Examine potential obstacles and consider the pre-conditions required to achieve desired outcomes.
- Explore stakeholder context: Retail Council of Canada and Waste Management Association of B.C., to understand operational considerations and alignment.

#### 3) Working Group Session 3 – May 8, 2023, 1:00-3.30pm (Virtual, MS Teams)

SESSION OBJECTIVES

- Validate the shared problem statement.
- Validate the desired outcomes.
- Uncover potential interim options.

#### 4) Working Group Session 4 – June 7, 2023, 1:30-4:00pm (Virtual, MS Teams)

SESSION OBJECTIVES

- Continued discovery of potential interim options.
- Review options and assess against stakeholder interests.

#### 5) Working Group Session 5 – June 21, 2023, 1:00-3:30pm (Virtual, MS Teams)

SESSION OBJECTIVES

- Review options and assess against stakeholder interests.
- Confirm options to be advanced.

#### 6) Working Group Session 6 – September 13, 2023, 1:30-4:00pm (Virtual, MS Teams)

SESSION OBJECTIVES

Working Group review of options report and assignment of next steps as required.

#### Conflict Resolution and Escalation

The working group strived for consensus. Members sought first to resolve any conflicts by entering into good faith discussions with each other, which included engaging subject-matter experts to provide clarity and information regarding the issue in question. If the group was unable to reach consensus for an option, the view of each party was noted in subsequent materials provided to the Ministry.



#### OPTIONS DEVELOPMENT PROCESS: BUILDING SHARED OUTCOMES

At the outset, the core project team identified two key mechanisms for Working Group success:

- the need to develop an outcomes framework to support the strategic direction of the working group and the initiative overall; and
- the need to approach challenges and solutions within this complex environment through an interest-based, dialogue-driven approach to options development and assessment.

# **Building an Outcomes Framework**

Prior to the development of the interim options (the focus of this work), the working group determined the outcomes to be achieved, or the desired future state should be for this working group to be successful in its efforts. To do this, they developed an outcomes framework.

An outcomes framework is a resource to help groups and organizations link what they do (activities) with what they want to achieve (outcomes). The goals and focus areas (the high-level strategy) are typically accompanied by a roadmap (priority activities) which will detail the specific pieces of work the group intends to undertake (or recommend) to deliver on the focus areas and to ultimately advance the desired future state.

## **Applying an Interest-based Approach:**

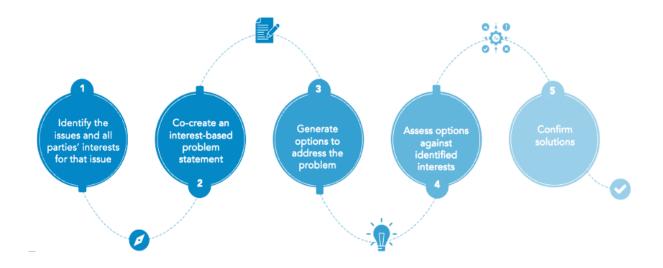
The challenges facing the effective management of ICI PPP in rural and remote B.C. are complex, the impacts on each constituent are varied and so too are each of their priorities. Recognizing that these complex and at times competing factors would impact the development of options, the project team elected to employ an interest-based approach to dialogue with working group members.

Interest-based dialogue shifts the focus away from advocating for a particular solution, and instead focuses on exploring the underlying needs and interests that are driving each party to advocate for a particular outcome.

An interest-based approach uncovers the underlying interests of all parties involved in a given issue, to understand what is driving their interest in the issue. This allows parties to jointly develop solutions that they may not have been able to arrive at independently, changing the dialogue from 'solving your problem' to 'solving our problem'. The approach adopted by the working group, to engage in multi-party, interest-based solutioning is summarized in figure 2.



Figure 1 High-level Summary of Interest-Based Approach



Once the working group identified all parties' interests, co-developed a common problem statement, and generated draft options to address the problem, the group then assessed the draft options against identified interests.

If one or more participants did not feel that their interests could be addressed through the option provided, it was removed from the list. Once each of the options was assessed against identified interests, the list of remaining options provided the group with a suite of choices that could be blended, combined, and built upon to develop solutions that meet the interests of all parties and collectively advances the desired outcomes for ICI PPP.



# SHARED PROBLEM STATEMENT & OUTCOMES FRAMEWORK

#### SHARED PROBLEM STATEMENT

Through the working sessions and informational interviews, participants collectively identified key shared issues related to the diversion of PPP materials for the ICI sector within rural and remote B.C. As a means to better scope and support the development of options development, the diversity of identified issue areas was amalgamated into a common problem statement. This provided the working group a starting point to consider opportunities to move from the current state to the desired future state:

Rural and remote areas of British Columbia are uniquely challenged with effective management and diversion of ICI PPP materials, predominantly due to distance from major centers/markets and associated increased costs, a lack of accessible infrastructure, a lack of facilities, services and subject matter experts, and a lack of readily available, affordable options.

As a result, regional districts in rural and remote areas of the province continue to see increasing volumes of ICI PPP materials at landfills, increasing their operational demands and overall costs. The rural and remote ICI sector is also impacted by a lack of available options for diversion of PPP materials.

#### BUILDING THE SHARED OUTCOMES FRAMEWORK

Outcomes frameworks are made up of four key components with the vision and desired outcomes describing what it is that the group would ultimately like to see for the future of ICI PPP in rural and remote B.C. (i.e., the "WHAT"). The focus areas represent the thematic areas that will need focused action and attention to achieve the vision and desired outcomes (i.e., the "HOW"). In some cases, the themes identified in the focus areas may require action, resourcing, and investment beyond the scope and mandate of the options ultimately identified by working group. This is to provide clarity and support for action that may be considered by various parties in the future.

#### **Vision Statement:**



An aspirational, inspirational statement that describes what one ultimately hopes to accomplish if they are successful in fulfilling their purpose. This is what we want to create for the future, the ultimate outcome overall.



#### **Desired Outcomes:**



The results one wants to achieve as they work toward their vision. These should be concrete statements of what we expect to attain or demonstrate progress toward.

#### **Focus Areas:**



Broad thematic focus areas, or strategies, that one needs to act on to achieve their desired outcomes. Options that are developed should align to one or more focus areas.



# **Guiding Principles:**

Overarching principles guide an organization or group in all that it does, and inform decision-making and implementation of options.



## RURAL AND REMOTE ICI PPP OUTCOMES FRAMEWORK



B.C.'s rural and remote communities are enabled and supported to effectively divert ICI PPP materials from their landfills and have strong, solutions-oriented relationships with participants across the sector value-chain in delivering practical, cost-effective solutions



#### Partnerships and Collaboration

Effective partnerships and collaboration between producers, consumers, collectors and governments to co-manage handling and processing of ICI PPP materials

#### Investment and Resources

Communities have access to diverse funding sources, grants and resources to improve delivery of their recycling programs and to encourage diversion of ICI PPP materials

#### Infrastructure and Solutions

Development of infrastructure and related solutions to support the processing, handling and transportation of ICI PPP materials are effectively incentivized

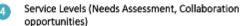
#### The Pollution Prevention Hierarchy

Residual ICI PPP materials are increasingly diverted from landfill, with effective reuse, reduction, recycling options and practices supporting the pollution prevention hierarchy



#### Local Government Considerations and Opportunities

Explore current and new applications of local government tools which could be adopted/implemented in other regions to support diversion of waste



Conduct research within the sector to understand the key challenges, the needs of stakeholders, and what the priorities need to be (e.g., waste audits etc.)

Pilot Projects and Partnerships across the Value Chain Engage with sector stakeholders interested in participating in pilot programs aimed at leveraging partnerships to effectively manage and divert waste in

#### Facilities and Infrastructure

rural and remote regions

Identify potential and existing facilities and infrastructure across the province and within neighbouring provinces/states which could support effective waste management



#### Building Understanding and Subject-Matter Expertise/Capacity

Identify gaps and explore options to expand waste management expertise and capacity across rural and remote B.C.



#### Incentives, Funding, & Investment

Explore the range of financial opportunities (local, provincial, federal, international) available to the sector to support effective waste management and to improve diversion



- Options should support and align with one or more of the desired outcomes
- Options should be focused on interest-based, mutual-gain solutions (consider all parties impacted, and the potential consequences for those parties
- Not all parties need to be represented in all options (i.e., some options may not be relevant for all)
- All parties should be able to see opportunity or potential benefit in at least one option, to ensure all parties see benefit in advancing discussion on options.
- Options put forward for discussion must be within scope of what this working group is tasked with (no regulatory or policy changes)



# INTERIM OPTIONS EXPLORATION

The interim options and complementary activities were developed within the guidelines and scope established in the Working Group Terms of Reference. It was noted by working group members that many felt provincial regulatory change is necessary to manage ICI packaging waste. Some working group members identified that interim opportunities could present some inherent challenges given the short time-frames available and a hesitancy to commit resources in an uncertain regulatory environment.

Additionally, it was noted that the viability of the options presented below may be limited due to capacity, timing, cost and a sense of uncertainty in the ICI and waste management community due to the potential changes signaled in the Advancing Recycling EPR 5-year Action Plan.

# SUMMARY OF PRIMARY INTERIM OPTIONS DEVELOPED THROUGH WORKING GROUP DIALOGUE

#### **KEY OPTIONS HIGH-LEVEL SUMMARY**

The following five key options were developed by the working group as potential interim options to support the management and diversion of ICI PPP materials within rural and remote B.C. Initial development began as a 'blue-sky' exercise exploring all opportunities without restriction or limitation. Each opportunity was discussed and examined in detail to better understand the specific requirements and considerations of each, then assessed against the interests of each stakeholder. The following is a summary of the key options the working group developed with a recommendation as to whether the option should be progressed further or not. It is assumed that each option would include a cost-benefit analysis after any trial is completed. Appendices B and C contain additional information about the options that were identified by the working group.

Description	Working Group Recommendation		
Option 1: Commercial Collection System Pilot			
Establish a pilot program where small businesses and their respective regional district partner with a large business to enable diversion of their PPP material.	Explore partnerships and next steps to progress forward.		
Option 2: Local Infrastructure			
Identify existing infrastructure within each municipality, and partner with the owner/organization to support the effective management of ICI PPP materials across the region and/or multiple regions.	Progress forward and combine with Option 3.		



Option 3: Direct Hauler Pilot				
Establish a pilot program for the collection, management and transportation of PPP materials out of rural and remote locations through a partnership between a direct hauler and a regional district.	Progress forward and combine with Option 2.			
Option 4: Voluntary Contribution Model				
Establish a model whereby interested parties can contribute to a collective fund where the sum of contributions would enable a regional recyclable waste collection program for ICI materials.	Do not progress at this time. Viability of option unclear and potential interest from stakeholders uncertain.			
Option 5: Local Government Regulation				
Evaluate new applications of local government tools to support the diversion of waste from landfills and promote proper management of recyclable materials. Tools may include tipping fees, disposal bans, reporting requirements and other local government regulations, and would be implemented in conjunction with other interim options.	Do not progress at this time. Working group members identified that a provincial approach may be more appropriate.			

#### **COMPLEMENTARY ACTIVITIES: A HIGH-LEVEL SUMMARY**

In addition to the development of the options identified above, the working group uncovered a range of complementary activities that would also support or impact the management and diversion of ICI PPP in rural and remote B.C.

These complementary activities would not stand alone, rather they would be combined or added to support a key option. The following is a summary of each of the complementary activities with a working group recommendation around viability and next steps:

Description	Working Group Recommendation	
Complementary Activity 1: Undertake waste audits or surveys		
Undertake a waste audit to understand what is currently being recycled or survey on ICI PPP materials in rural areas/regional districts. This would involve leveraging any survey work already underway, and then conducting new audits or surveys. This could take the form of a formal waste management survey, or an informal audit, undertaken at the regional, municipal or landfill level.	Identified as required support to assess the implementation of recommended interim options.	
Complementary Activity 2: Focus on outreach to small businesses re ICI – current state		



Aim to reduce confusion and raise awareness among the small business community related to their PPP materials. Initially conduct a survey to understand what would encourage small business participation, and then deliver targeted education/information sharing to foster opportunities that improve diversion.

Identified as required support to assess the implementation of recommended interim options.

#### Complementary Activity 3: Improve utilization of existing infrastructure (Provincial initial focus)

Approach existing processing facilities across the province and look at opportunities to expand feed stock (e.g., is there an opportunity for Prince George paper mill taking feed stock from the northern region).

Required to support Option 2: large-scale infrastructure, may be most appropriate if led by Province.

#### Complementary Activity 4: Collection opportunity for communities without depots

Local government, regional districts and PROs collaborate to create a common and secure drop point/collection location within a community that currently has no depot.

Could support the implementation of Option 2: Local Infrastructure and Option 3: Direct Hauler Pilot.

#### **Commentary Activity 5: Concentration of certain materials**

This is intended as a lens to be applied to any of the options, where implementation would focus on specific materials to reduce complexity (e.g., materials with standardized recycling practices, materials with commodity value). Cardboard (OCC) was identified as a material that has the potential to have value.

Identification of materials to support the implementation of Option 1: Commercial Collection System Pilot.

#### Complementary Activity 6: Support additional infrastructure within existing small/private depots

Encourage and support small/private depots to develop additional infrastructure to better service the needs of ICI PPP generators, through investment and expansion of facilities.

Effort and resources required to implement activity unlikely to match desired output, as expansion of infrastructure requires significant investment

#### **Complementary Activity 7: Processors and/or bailers**

Involve processors and bailers to understand if there are additional options and determine the levels of interest in supporting pilot projects. Required to support Option 2: Local Infrastructure, should be led by the Province and Regional Districts.

#### ADDITIONAL CONCEPTS EXPLORED BY WORKING GROUP

Throughout the course of this initiative, the core project team and the working group identified a range of additional considerations through discussions that were out-of-scope for this work but were deemed important to the working group and their constituents. These discussions are included for further consideration beyond the scope of this work.



#### Classification of Materials – Residential vs ICI

The working group identified challenges related to the collection and acceptance of materials, associated with the Residential EPR packaging program.

- First Nations Some First Nations communities have identified challenges with residential PPP not being accepted in the current PPP EPR program. Some communities have been able to resolve this, however it was still identified as a concern by working group members. The remoteness and size of some First Nation communities provides additional challenges and considerations when managing PPP for recycling.
- Small Businesses often purchase the same "off the shelf" products from supermarkets or retailers, that all consumers can purchase. These materials are collected through B.C.'s EPR program when disposed of by residents at their home, without additional cost to the resident. However, these small businesses are required to pay to have the materials collected for recycling. As a result, small businesses may dispose of PPP waste at home, combining it with their residential recycling.
- Defining Residential vs Commercial Material some retail locations have both commercial and
  residential sales however only some businesses distinguish between these two end-markets.
  There is difficulty in the system ensuring that the vendors and the purchasers are not paying
  embedded costs for services that they can't access.



# **Appendix A – Interviewees**

#### Organizations Interviewed:

- Waste Management Association
- Indigenous Zero Waste Technical Advisory Group
- BC Restaurant & Food Services Association
- Clean Farms

#### Local Governments Interviewed:

- Peace River Regional District
- Fraser-Fort George Regional District
- Bulkley-Nechako Regional District
- Cariboo Regional District
- Columbia-Shuswap Regional District

- RecycleBC
- Retail Council of Canada
- Williams Lake Chamber of Commerce
- Parks Canada (referred for interview by Recycle BC)
- Central Kootenay Regional District
- Eastern Kootenay Regional District
- Kitimat
- Cowichan Valley Regional District



# Appendix B – Recommended Options for Implementation

The options presented are not intended to be all encompassing and applicable to all scenarios. Some jurisdictions/locations will be better suited to some options than others, and in some cases, an option may not be viable at all in a certain scenario. This working group recognizes that to successfully implement these recommended interim options, a significant amount of local time and resources will be required.

#### 1) COMMERCIAL COLLECTION SYSTEM PILOT

<u>Option Description:</u> Establish a pilot program where small businesses and their respective regional district partner with a large business to enable diversion of their PPP material. This pilot would focus on mutual-benefit opportunities to leverage the large businesses waste management program to transport PPP material that the small business operator would not otherwise be effectively able to divert from landfill. It is suggested that the initial pilot focus on a material type with commodity value.

#### What Challenges Will This Option Address?

This option would address the following key challenges impacting PPP recycling for the ICI sector in rural and remote B.C., that were identified through the interviews and subsequent working group exploration:

- Lack of infrastructure, increasing transportation costs and cross contamination issues prevent effective storage and handling of PPP.
- Regional districts, local government and small business view the policy or funding support received as insufficient, unlike the corporate-led industrial or larger commercial sector.
- Many regional districts are paying for recycling to provide options for ICI materials. This represents a significant contribution and is viewed as unsustainable.
- Small businesses in rural and remote communities are disproportionately impacted, typically resulting in increased PPP materials in landfills.

#### Outcomes Framework Alignment:

- Alignment to Desired Outcomes:
  - o Partnerships and Collaboration.
  - o Infrastructure and Solutions.
  - o The Pollution Prevention Hierarchy.
- Alignment to Focus Areas:
  - o Pilot Projects and Partnerships across the Value Chain.
  - o Facilities and Infrastructure.
  - o Building Understanding and Subject Matter Expertise/Capacity.



#### **Key Parameters and Requirements for Option 1 (commercial collection system pilot)**

#### Key Stakeholders:

- Participating regional district.
- Participating large business partner(s) (with support from Retail Council of Canada).
- Participating small businesses partner(s).
- Provincial government (Ministry of Environment and Climate Change Strategy).

#### Requirements:

Retail Council of Canada will require certainty and clarity on several key areas to be able to effectively engage and approach members with an ask:

- Identify the community partners willing to be involved.
- Clarification from the province and participating regional districts on how much time the large business partner(s) have for a pilot (when provincial regulation may occur).
- What, if any, financial support will be provided by the province/regional districts.
- Which corporate environment will be most appropriate for a pilot (e.g., grocery stores, department stores, restaurants etc.).
- Potential/anticipated volume of product based on currents state volumes.

The commodity material type is to be determined through collaboration between large business and the respective regional district:

- Regional districts can provide a lens on what commodity type has most value, will have the greatest impact and/or will be most successful for a pilot.
- Large business partners may want to dictate commodity type dependent on corporate mandate or other priorities.
- Discussions in the working group identified OCC and hard plastics as the main materials that would work at this time, given that it can have value for recycling.

Detailed parameters are required to implement program, starting with a narrow focus and expanding over time:

- Parameters of program to be developed in collaboration with candidate large business partner (this forms part of the incentive to participate).
- Consider adverse, remote location for pilot.
- Materials received must be clean and dry to be accepted.
- While it would be ideal if there was a processor in either the community or north-central B.C., an aggregator willing to participate in acceptance and transfer (to processing facilities) of various materials would be a benefit.



#### Roles and Responsibilities of Stakeholders:

- Regional District in partnership with the participating large business partner, and supported by the province, are required to:
  - Co-develop the concept, measures of success and a 'terms-of-reference' describing scope, intent, duration, and desired outcomes for the pilot.
  - o Manage stakeholder communications and interactions.
  - Develop and provide education to participating small businesses on clean material streams and clear directions for participation.
- The Retail Council is required to:
  - o Develop connections and identify willing large businesses partners.
  - o Support the large businesses in implementation, where feasible.
- The participating large business partner(s) is required to:
  - o Identify an appropriate waste management plan that aligns with their current practices/corporate policy, then in partnership with the regional district develop a suitable process and initiates the pilot program.
  - o Provide guidelines for the effective management of incoming PPP material within the pilot.
- Small businesses who elect to participate in the pilot program are required to follow the guidelines established by the large business partner and regional district.
- The province is required to play a project advisor role, contributing by:
  - o Supporting partnership development.
  - o Reviewing and advising on project scope/timeline.
  - o Playing a shared role in evaluation of pilot outcomes.

#### Regional District, Stakeholder and Material Selection:

- Initial focus for pilot should be on one specific subset of PPP material/commodity (material type to be determined by large business and regional district based on capacity, need and infrastructure).
- The candidate large business would likely have bailing and compacting facilities on-site, as well as backhauling, as part of their waste management plan.

#### **Key Considerations for Option 1 (commercial collection system pilot)**

#### Benefits/Impact:

- Small businesses would have access to an affordable and accessible solution for the management of their recyclable waste.
- Regional districts could realize a significant reduction in ICI recyclable waste reaching landfills.
- The participating large business could realize multiple benefits including lowering of recycling program costs, alignment to corporate mandates and positive public relations. Examples could include:
  - o Income from the selling of collected commodities that have value on the open market.



- o Environmental, Social and Corporate Governance (ESG) reporting.
- o Positive community relations and perception.
- o Demonstrating recovery of PPP as part of their commitment to environmental practices.
- This type of program would have significant potential for expansion in scope, material type and geography once the pilot phase is complete. The pilot would be analyzed, measured, and reported on to provide learnings and recommendations for expansion and future versions. This could include, for example, expanding to be able to collect additional material types, and of similar programs/opportunities in other regional districts or municipalities.

#### **Challenges and Risks:**

- Competition law may impede business partnerships.
- Commodity selection will be key to success. Hard plastics, Old Corrugate Cardboard (OCC) and mixed paper have value on the open market, whereas soft plastics and box board often have limited or no value.
- Many small businesses (especially small restaurants) buy the same 'off the shelf' products that all consumers can purchase. These materials are collected through B.C.'s EPR program when disposed of by residents at their home. However, the packaging is not collected from commercial businesses who must pay to recycle the material.
- May work for one material type, whilst many other material types are still sent to landfill (where there are no options for diversion). There is a need to determine if the program can proceed with just economically viable material type(s).
- Potential hesitancy from large business partner(s) to participate due to:
  - o Overall cost to implement and operate investment risk.
  - o Required effort and capacity for pilot to be effective.
  - o Timelines for implementation given potential upcoming updates to EPR in 2025, as signaled in the EPR 5-year plan.
  - o Unclear incentives for participation from large businesses (at the local community level)

#### Potential Costs:

- Typical costs could include: storage, bailing, transportation and processing of materials.
- Long-term funding may be required after the pilot program (pending pilot outcomes).
- Commodity value is key to success, with both volume and clean streams being crucial elements.
- Ownership of material and resulting value of the commodity will need to be determined and factored into the program.

### 2) DIRECT HAULER PILOT TO SUPPORT LOCAL INFRASTRUCTURE UTILIZATION

#### Option Description:

Part One: Establish a pilot program for the collection, management and transportation of PPP materials out of rural and remote locations through a partnership between a direct hauler and a regional district.



This pilot would be initiated by the province and/or a regional district and driven by a current or new B.C. direct hauler or PRO service provider.

Part Two: Identify existing infrastructure that exists within each municipality, and partner with the owner/organization to support the effective management of ICI PPP materials across the region and/or multiple regions. Infrastructure includes but is not limited to transportation, bailing, storage and processing facilities that support waste diversion for recyclable materials.

#### What Challenges Will This Option Address?

This option would address the following key challenges impacting PPP recycling for the ICI sector in rural and remote B.C., that were identified through the interviews and subsequent working group exploration:

- Province-wide, uniform solutions can be challenging due to variations in population density and geographic distances.
- Economies of scale and volatile commodity markets impact profitability/affordability of private sector collection and processing of recyclable materials.
- Lack of infrastructure, increasing transportation costs and cross contamination issues prevent effective storage and handling of PPP.
- Regional districts are subsidizing ICI sector recycling which is unsustainable long-term.
- Lack of competition in hauling and processing services inflate costs.

#### Outcomes Framework Alignment:

- Alignment with Desired Outcomes:
  - o Partnerships and Collaboration.
  - o Infrastructure and Solutions.
  - o The Pollution Prevention Hierarchy.
- Alignment with Focus Areas:
  - o Local Government Considerations and Opportunities.
  - o Pilot Projects and Partnerships across the Value Chain.
  - o Facilities and Infrastructure.

# Key Parameters and Requirements for Option 2 (direct hauler pilot to support local infrastructure utilization)

#### Stakeholders:

- Participating regional district (with support from the Province)
- Participating direct hauler.
- Participating owners of participating facilities with infrastructure.
- Recipient ICI constituents
- IZWTAG



#### Requirements:

Detailed parameters are required to implement this program and should be informed by sector data, potentially starting with a narrow focus and expanding over time:

- Direct discussions with current waste management entities to understand their perspectives and concerns, and potential future waste management entities for their input from experiences elsewhere in the world.
- Results of audits within the district are required to establish targets and measure success, including a reporting mechanism.
- The program requires high-level data from constituents across the ICI sector within the participating regional district to understand type and volume of materials collected.
- Development of a business case, combined with materials from neighboring regions, is necessary to attract private sector partners. If profit and viability can be demonstrated, then a partner would be able to justify the securing of infrastructure and human capital.
- Discussions

An understanding of material types coupled with education and behavioral change across the ICI sector are fundamental to success:

- Clean material streams are necessary.
- Waste management education, clear direction for participation and behavioral change across the ICI sector will contribute to success of the program (e.g., practices around material sorting and preparation).
- Specific locations may consider which material types to target, and this may vary based on location (local decision) or on availability of material types.
- Awareness of where materials land at end-of-life a key consideration for reporting purposes is.

A common and clear understanding of the program, roles and responsibilities is necessary for implementation and long-term viability:

- Agreement is required between the regional district and direct hauler on the pilot scope and objective.
- Organizations that manage/own identified infrastructure require development of a clear and concise agreement that details the scope of the program and outlines clear roles and responsibilities.

Capacity is imperative to the success of this option, for both direct haulers and potential infrastructure solutions:

- The ICI sector in the lower mainland currently pays for this type of service, making the program more cost effective for Regional Districts.
- Leveraging learnings from the lower mainland, this could be an incentive for investment by increasing capacity to be able to support this option.



 While it would be ideal if there was a processor in either the community or north-central B.C., an aggregator willing to participate in acceptance and transfer (to processing facilities) of various materials would be a benefit.

#### Roles and Responsibilities of Stakeholders:

- The participating regional district with support from the province is required to:
  - o Co-develop the concept, measures of success and a 'term of reference' describing scope, intent, and desired outcomes for the pilot.
  - o Formally request haulers for service (recycling) for specific communities.
  - In collaboration with participating direct hauler, co-develop the overall direct hauling concept.
  - o Identify infrastructure opportunities and develop partnerships with owners/organizations/ local governments who manage those facilities.
  - o Manage stakeholder communications and interactions.
  - o Support private organizations to be communal centres (i.e., not building new infrastructure).
  - Province predominantly to provide support in identification of infrastructure and support strategic connections provincially.
- The participating direct hauler is required to:
  - o Collaborate with the province and regional district to develop the overall concept.
  - o Identify an appropriate waste management plan that suits desired outcomes, then develops the specific process and drives the pilot program.
- The participating owners/organizations/local governments of identified facilities are required to:
  - o Identify what they can contribute, the costs associated, and then develop a process to integrate into the pilot program.
- The recipient ICI constituents within participating regional district(s) are required to:
  - o Participate in the pilot following established guidelines/mandate as developed and communicated by the regional district.

#### Regional District, Stakeholder and Material Selection:

- Regional district selection should consider:
  - O This option will be best suited to less isolated municipalities that have the capacity to operate landfills, influence diversion and manage relationships with other infrastructure operators.
- Direct hauler selection should:
  - o Recognize that this might include any size hauler, PRO or processor that would be willing to participate, which may also include organizations that do not currently operate in B.C.
  - o Consider all available providers, not simply the large and established service providers.
- Material selection should consider:
  - o Begin with materials already being managed (i.e. by Recycle BC collectors/facility). Within this scope the separation of EPR materials and commercial materials is achievable.
  - o This option could work for certain materials (i.e., boxboard, cardboard, hard plastics), however problematic materials such as soft plastics are often more costly to manage, particularly in many rural and remote B.C. communities.



o Specific locations may consider which material types to target, and this may vary based on location (local decision) or on availability of material types (e.g., volume of large HDPE jugs).

#### Key Considerations for Option 2 (direct hauler pilot to support local infrastructure utilization)

#### Benefits/Impact:

- A pilot of this nature would require security and confidence for all stakeholders that materials are being managed as expected (e.g., tracing where materials are diverted to).
- This option fills a large gap in current available options to manage materials.

#### **Challenges and Risks:**

- The volume of materials generated by the ICI sector is potentially quite large, and this creates challenges for both storage and transportation. Participating infrastructure partners and direct haulers may require caps on volume and requirements for separation of materials to be able to be effective, which could leave a large portion of material without a solution.
- Contracting with a singular direct hauler in a specific location may impact the future of competitors/other direct haulers, and so any implemented program requires consultation with local service providers, and strategies to mitigate negative impacts.
- For large waste management companies there may be no incentive to participate, and typically they are not searching for additional material to manage. On the surface, there might be no obvious cost-benefit for private business, as there may be limited options for revenue.
- Operational challenges would impact success, particularly as contractors who provide service to RBC would also be included in initial discussions.
  - o Would also need to consider potential competition issues.

#### Potential Costs:

- Typical could include: storage, bailing, transportation and processing of materials. However, this will be greatly impacted by whether participating partners are non-profit or for-profit organizations.
- Expenses related to the use of infrastructure need to be identified, with consideration of fair compensation for time, space etc.
- This option requires the consideration of the availability and cost of staffing.
- Long-term funding may be required after pilot program (pending pilot outcomes).
- Commodity value is key to success, with both volume and clean streams being crucial elements.
- Ownership of material and resulting value of the commodity will need to be determined and factored into the program.



# Appendix C – OPTIONS DETERMINED NOT TO PURSUE AT THIS TIME

#### 1) Voluntary Contribution Model

<u>Option Description:</u> Establish a model whereby interested parties can contribute to a collective fund, where the sum of contributions would enable a regional recyclable waste collection program for ICI materials. The contribution models would be specific/tailored to defined geographic regions and would be made available as a voluntary option for stakeholders from across the ICI sector within that region.

#### Outcomes Framework Alignment:

- Alignment to Desired Outcomes:
  - o Partnerships and Collaboration.
  - o Infrastructure and Solutions.
  - o The Pollution Prevention Hierarchy.
- Alignment to Focus Areas:
  - o Pilot Projects and Partnerships across the Value Chain.
  - o Facilities and Infrastructure.
  - o Incentives, Funding and Investment.

<u>Recommendation:</u> The working group recommends that this option not progress at this time. Viability of option unclear and potential interest from stakeholders uncertain. A similar example of this model is currently in operation in Peace-River Regional District, where challenges identified include determining who is paying/receiving payment, and the overall cost associated with the option.

#### 2) Local Government Regulation

<u>Option Description:</u> Evaluate new and creative applications of local government tools to support the diversion of waste from landfills and promote highest level management of recyclable materials. Tools may include tipping fees, disposal bans, reporting requirements and other local government regulations, and would be implemented in conjunction with other interim options to manage ICI sector recyclable materials.

#### Outcomes Framework Alignment:

- Alignment to Desired Outcomes:
  - o Investment and Resources.
  - o The Pollution Prevention Hierarchy.
- Alignment to Focus Areas:
  - o Local Government Considerations and Opportunities.
  - o Service Levels (needs assessment).

<u>Recommendation:</u> The working group recommends that this option not progress at this time. It will be better suited at a longer-term provincial level versus short-term regional level as it would likely not result in the material volumes necessary to create a financially viable model.