

# **A CANADA-WIDE STRATEGY FOR SUSTAINABLE PACKAGING**

**Canadian Council of Ministers of the Environment**

**October 2009**

**PN 1501**

## **PREFACE**

Packaging is necessary to preserve and transport products, but the materials are often used just once, and manufacturing packaging consumes significant quantities of energy and resources. In recent years governments across Canada have become increasingly concerned about packaging waste and resource use. Consumer demand for greener products and reduced packaging has also increased. At the same time, retailers have begun to push for more sustainable packaging, both to reduce supply chain costs and to meet consumer demand for green products and packaging. Across the supply chain, businesses are increasingly embracing sustainability as a strategic objective and business imperative.

Responding to these concerns, the Canadian Council of Ministers of the Environment (CCME) has developed a strategy to reduce packaging waste in Canada and promote more sustainable packaging choices. This strategy builds on the larger Canada-wide Action Plan for Extended Producer Responsibility (EPR) to make producers responsible for end-of-life management of products and packaging. This document addresses the need for a strategic approach to packaging and proposes a number of additional measures to move Canada toward more sustainable packaging choices and systems.

The implementation of The Canada-Wide Strategy for Sustainable Packaging will be done within the jurisdictional authority of each government.

## **EXECUTIVE SUMMARY**

In 2005, the Canadian Council of Ministers of the Environment (CCME) established an Extended Producer Responsibility (EPR) Task Group with a mandate to provide guidance on the development and implementation of EPR programs in Canada. Packaging, which makes up a significant portion of the waste stream in Canada, was identified as a first priority.

To this end, the EPR Task Group developed the following two documents:

- *A Canada-wide Action Plan for Extended Producer Responsibility*; and
- *A Canada-wide Strategy for Sustainable Packaging*.

The Canada-wide Strategy for Sustainable Packaging is part of the broader Canada-wide Action Plan for Extended Producer Responsibility, which provides guidance to provinces and territories as they develop EPR programs.

### **Purpose**

The purpose of the Canada-wide Strategy for Sustainable Packaging is to build on the Canada-wide Action Plan for EPR to help create a more consistent Canada-wide approach to EPR for packaging and to support a shift by all packaging actors towards greater packaging sustainability.

The Strategy aims to increase awareness and information about packaging sustainability among all packaging actors and to promote reductions in packaging and more sustainable packaging choices at all stages of the packaging life cycle – from packaging design to waste management. CCME’s ultimate goal is to reduce the overall quantity of packaging materials generated and disposed throughout Canada, with an aspirational goal of zero-waste.

### **EPR for Packaging**

The Canada-wide Action Plan for Extended Producer Responsibility commits all jurisdictions to work towards the establishment of operational EPR programs for packaging (among other things) within six years, and sets out general principles and guidance for provincial/territorial regulators and program developers in regulating, developing, designing and implementing consistent EPR programs across Canada.

The Strategy builds on the EPR Action Plan by providing additional guidance for EPR requirements as they specifically relate to packaging. The Strategy aims to provide a harmonized approach to EPR program requirements for packaging across Canada by providing guidance on key program elements for EPR for packaging, including steward fees, targets, data collection and reporting. A Canada-wide approach to EPR for packaging can help to create a level playing field for industry, ease regulatory burdens on industry, and place provinces and territories in a better position to drive sustainable packaging design and reduction.

## **Supporting Measures**

EPR provides an effective tool for: shifting the costs for end-of-life management onto those responsible for the packaging; improving end-of-life management of packaging; and providing incentives for producers to incorporate environmental considerations into the design of their products. However, EPR requirements alone may not be sufficient to drive producers and other packaging actors to meet CCME's broader goals for packaging sustainability.

To drive further reductions in packaging and improved sustainability, this Strategy sets out nine supporting measures aimed at increasing awareness of sustainable packaging options, providing incentives for packaging actors to make more sustainable choices, and supporting the development of better systems to optimally recover packaging materials:

- Establishment of an *industry-government working group* to provide a forum for greater dialogue and to facilitate implementation of the other supporting measures included in the Strategy.
- Negotiated *industry agreements* with interested industry sectors to reduce packaging and improve its sustainability.
- Development of a Canada-wide *standard and certification program for compostable packaging*.
- Exploration with industry of the potential development of a Canada-wide *labelling system for recyclable packaging*.
- Exploration with industry of opportunities for implementation and expansion of *reuse systems*.
- Adoption of Canada-wide *sustainability indicators and metrics* that can be used to assess the sustainability of packaging over its entire life cycle.
- Development and implementation of industry-led *educational initiatives, best practices and industry recognition programs* that promote sustainable packaging design.
- Exploration with stakeholders of the establishment of a *packaging ombudsman* to address consumer complaints regarding excessive packaging.
- Exploration with industry of the potential development of an *index* used to measure on packaging sustainability across Canada.

CCME recognizes that, while producers bear the primary responsibility for managing packaging, there continues to be a role for CCME and its member governments to support industry as they transition to full EPR, as well as to assist all packaging actors in achieving greater packaging sustainability. Therefore, the Strategy sets out roles for both government and industry in implementing each of the supporting measures.

## **Table of Contents**

<b>PREFACE</b> .....	<b>i</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>ii</b>
<b>1. INTRODUCTION</b> .....	<b>1</b>
The Canada-wide Action Plan for EPR.....	1
The Canada-wide Strategy for Sustainable Packaging.....	1
<b>2. PACKAGING</b> .....	<b>3</b>
<b>3. EPR FOR PACKAGING</b> .....	<b>4</b>
Why EPR for Packaging? .....	4
Application of EPR Requirements to Packaging .....	5
EPR Program Elements for Packaging .....	5
<b>4. SUSTAINABLE PACKAGING FRAMEWORK</b> .....	<b>8</b>
What is Sustainable Packaging? .....	8
Vision .....	9
Goals .....	9
Packaging Actors .....	10
<b>5. SUPPORTING MEASURES</b> .....	<b>11</b>
A. Industry-Government Working Group.....	11
B. Industry Agreements .....	12
C. Canada-wide Standards and Certification for Compostable Packaging	13
D. Canada-wide Labelling System for Packaging Recyclability .....	14
E. Reuse Programs.....	16
F. Sustainability Indicators, Metrics and Related Tools for Packaging.....	16
G. Industry Education and Recognition Programs .....	17
H. Excessive Packaging Ombudsman .....	18
I. Shopping Basket Index.....	19
<b>6. IMPLEMENTATION TIMELINES</b> .....	<b>21</b>
Timeline for EPR Requirements .....	21
Timeline for Supporting Measures .....	21
<b>APPENDIX A – The Canada-wide Action Plan for EPR</b> .....	<b>22</b>
<b>APPENDIX B – Packaging Management Programs in Canada</b> .....	<b>25</b>
Government-Led Packaging Management Programs in Canada:.....	25
Overview of Packaging Management Programs in Canada.....	25

## **1. INTRODUCTION**

In 2005, CCME established an Extended Producer Responsibility (EPR) Task Group with a mandate to provide guidance on the development and implementation of EPR programs in Canada, with packaging as a first priority.

From 2007 to 2009 the Task Group engaged stakeholders and consultants in a variety of activities that culminated in the development of two documents:

- *A Canada-wide Action Plan for Extended Producer Responsibility*; and
- *A Canada-wide Strategy for Sustainable Packaging*

### **The Canada-wide Action Plan for EPR**

The Canada-wide Action Plan for Extended Producer Responsibility commits all jurisdictions to work towards the development of operational EPR programs for packaging (among other things) within six years. EPR programs will require producers to take financial and/or physical responsibility for their packaging at the end of the packaging's life cycle, shifting responsibility away from municipalities.

More information on the EPR Action Plan can be found in Appendix A.

### **The Canada-wide Strategy for Sustainable Packaging**

To build on the EPR Action Plan, the Canada-wide Strategy for Sustainable Packaging was developed to help provide additional guidance for EPR requirements as they specifically relate to packaging, and to support shifts toward more sustainable packaging.

### **Provide Canada-wide Guidance for EPR for Packaging**

The EPR Action Plan sets out general principles and guidance for provincial/territorial regulators and program developers in regulating, developing, designing and implementing consistent EPR programs across Canada. The Canada-wide Strategy for Sustainable Packaging provides further guidance for EPR requirements as they relate to packaging.

Building on the EPR Action Plan, the Strategy aims to provide a more consistent approach to EPR program requirements for packaging across Canada. A Canada-wide approach to EPR for packaging can help to create a level playing field for industry, ease regulatory burdens on industry, and place provinces/territories in a better position to drive sustainable design and reduction.

### **Promote Packaging Sustainability and Reduction**

EPR requirements provide an effective tool for: shifting the costs of end-of-life management onto those responsible for the packaging; improving end-of-life management of packaging; and providing incentives for producers to incorporate environmental considerations into the design of their products. However, EPR

requirements alone are not sufficient in meeting CCME's broader goal to achieve more sustainable packaging.

Therefore, the Canada-wide Strategy for Sustainable Packaging sets out a number of complementary measures to build on the Action Plan's EPR requirements for packaging and support improvements in sustainability. The supporting measures set out in this Strategy are intended to increase awareness and information about packaging reduction and sustainable packaging choices, provide incentives for producers and consumers to make more sustainable choices, and support the development of better systems to optimally recover packaging materials.

## 2. PACKAGING

Packaging serves many functions, such as:

- Protecting goods during transportation (preventing loss through breakage)
- Increasing the lifespan of perishables (preventing loss through spoilage)
- Preventing theft of smaller products
- Providing information about the products
- Enhancing the appearance of products
- Providing a convenient means for consumers to take away products (such as take-out food containers provided by restaurants and retailers)

### **What is packaging?**

Packaging refers to all materials, fabricated containers and other components used in the containment, protection, movement and display of products or commodities.

Packaging can be made from a variety of materials, including paper (milk cartons, corrugated containers), plastic (water bottles), glass (jars and bottles), aluminium (pop cans, foil packaging) and steel (canned foods).

However, packaging also presents major challenges:

- Most packaging serves its function for only a brief period of time before reaching the end of its life and becoming a waste.
- The management of packaging waste entails significant costs – usually incurred by municipal waste managers and, by extension, taxpayers.
- Current recovery rates for packaging are very low, with most packaging waste ending up in a landfill. Statistics Canada (2006) data indicates the national recycling rate is 22 per cent.<sup>1</sup> The household recycling rate of all materials in Canada is 29 per cent, with the non-residential recovery rate even lower.
- Certain types of packaging are difficult or impractical to recycle. Some materials cannot be recycled at all; others may only be “downcycled” (i.e., recycled into lower-value uses); while other materials (such as composite packaging, plastic films, styrofoam, etc.) are technically recyclable, but often end up in landfill because they are difficult and/or too costly to manage.
- The production of packaging also creates negative environmental impacts, such as using valuable virgin materials, water consumption, energy use, and greenhouse gas emissions.

---

<sup>1</sup> Statistics Canada. 2006. Waste Management Industry Survey: Business and Government Sectors, Catalogue no. 16F0023XIE.

### **3. EPR FOR PACKAGING**

The Canada-wide Action Plan for EPR commits each jurisdiction to work towards:

- The development of EPR framework legislation and/or regulations within six (6) years of the adoption of the EPR Action Plan; and
- The establishment of operational EPR programs for all packaging within six (6) years of the adoption of the EPR Action Plan.

Given the unique circumstances of geography, population and infrastructure in the northern Territories, EPR for packaging may not be an appropriate instrument. Territorial jurisdictions will review whether EPR programs, stewardship programs or other supporting measures are best to achieve the desired outcomes for packaging in the north.

Where non-EPR product stewardship requirements for packaging already exist, these programs will be examined in the context of the Action Plan within a six (6) year timeline.

#### **Why EPR for Packaging?**

The EPR Action Plan provides the rationale for applying the principles of EPR. EPR shifts the costs associated with end-of-life management from taxpayers to those most closely linked with the packaging (producers and consumers). Shifting responsibility also ensures that the entity that has the greatest ability to influence the environmental impacts of packaging (the producer) bears the costs associated with their choices. EPR encourages producers to consider end-of-life management and incorporate environmental considerations during the design phase. For example, EPR can provide incentives for producers to use materials with greater potential for reuse and cost-effective recycling, and to reduce packaging waste before it is created.

Packaging, which makes up a significant portion of the waste stream in Canada, was identified as a priority material by the CCME. In addition, a number of jurisdictions already have programs in place for packaging and could benefit from Canada-wide guidance to encourage more consistent EPR program requirements. Jurisdictions without existing packaging programs will benefit from the national guidance as they develop programs, while industry will benefit from increased consistency in program requirements and program structure across jurisdictions.

## **Application of EPR Requirements to Packaging**

The EPR requirements set out in the Action Plan apply to packaging from both the residential and industrial, commercial and institutional (IC&I) sectors. The requirements apply to all types of packaging used for non-hazardous products,<sup>2</sup> including:

- Packaging comprised of paper, glass, metal, plastics or any combination thereof
- Service packaging (such as in-store packaging and take-away food containers)
- Industrial and bulk packaging
- Transportation and distribution packaging

Where EPR programs for packaging provide support for municipal recycling systems, printed materials should also be included in the EPR programs.

## **EPR Program Elements for Packaging**

The EPR Action Plan sets out general principles and guidance for provincial/territorial regulators and program developers in regulating, developing, designing and implementing EPR programs. This section provides further guidance for EPR requirements as they relate to packaging with the aim of creating greater consistency of EPR program requirements for packaging across Canada.

## **Flexibility in Meeting Producer Responsibilities**

The Action Plan encourages provinces/territories to provide producers with flexibility in meeting the overall objectives of EPR. For instance, producers may discharge their obligations as producers by acting individually, by involving a contracted service provider, or through collective recovery programs. These recovery programs may, at the producer's discretion, involve retail or municipal partners. EPR requirements should encourage take-back initiatives, with or without supporting refundable deposit systems.

## **Steward Fees**

The Action Plan states that where collective schemes with steward fees are implemented to meet EPR requirements, program developers should set fees that recognize and reward producers for minimizing the environmental impact of the packaging they produce. This can be accomplished by setting higher fees for packaging with a greater environmental impact. Program costs used to calculate fees will also need to capture the cost of managing both the disposed packaging as well as the recovered packaging.

## **Packaging Targets**

The Action Plan states that EPR programs should include measurable targets by product category to ensure waste reduction, waste diversion and proper end-of-life management.

A consistent set of indicators to measure the performance of EPR programs for packaging in each province/territory would support harmonized requirements and enable Canada-

---

<sup>2</sup> Packaging used for hazardous products requires special handling. These are usually managed separately from packaging for non-hazardous products under 'municipal hazardous and special waste' EPR programs.

wide assessment of packaging waste. Therefore, the Strategy recommends that each province/territory set its own targets for the following key performance indicators:

- *Collection* – % of packaging sold that is collected through the EPR program (measured annually by weight)
- *Diversion* – % of packaging sold that is diverted from disposal through reuse, recycling or composting (measured annually by weight)

Each province/territory should also include material-specific targets for collection and diversion rates as well as overall targets for the EPR program.

In addition, to track the success of the EPR programs in meeting the CCME's broader sustainability objectives, jurisdictions are encouraged to track and set targets for other performance indicators such as:

- *Packaging reduction* – amount of packaging materials (by weight) introduced into the market relative to annual sales of packaged products
- *Recycled content* – % of packaging materials introduced into the market that is recycled content
- *Recyclability* – % of packaging materials (by weight) introduced into the market that are recyclable
- *Compostability* – % of packaging materials (by weight) introduced into the market that are compostable
- *Product to packaging ratios* – the average relationship between the weight or volume of a product and the weight of its packaging
- *Avoided greenhouse gas (GHG) emissions* – the total amount of greenhouse gas emissions reduced or avoided through the packaging EPR program

Establishing targets for these additional indicators could help to drive improvements in overall packaging sustainability beyond what may otherwise be achieved through EPR. For example, while EPR requirements can be expected to result in increased use of secondary (i.e., recovered) materials by producers, targets for recycled content could be effective at driving higher demand and better markets for secondary materials, thereby reducing reliance on virgin materials and potentially decreasing lifecycle energy use and greenhouse gas emissions.

### **Data Requirements and Reporting**

Each EPR program should include reporting requirements to establish baselines, track performance and measure progress towards the program targets.

Each province/territory will gather and report its own data. Jurisdictions are encouraged to move toward harmonized data and reporting indicators. This Strategy recommends that each jurisdiction's EPR program collect information on:

- Quantity of packaging, by weight, introduced into the marketplace (i.e., generated)
- Quantity of packaging, by weight, that is collected through the EPR program
- Quantity of packaging, by weight, that is diverted (i.e., reused, recycled, composted)

This information should be collected and reported for each specific material category. Jurisdictions may also wish to collect additional information on other sustainability factors, such as recycled content and GHG emissions.

In implementing the EPR requirements, CCME and its member governments will work with industry organizations across Canada to help achieve a more consistent approach to EPR reporting. CCME governments will also support industry organizations towards the longer-term goal of establishing a one-window reporting portal, which would reduce regulatory burdens for producers and allow for easier management of data and measurement of national progress towards packaging sustainability.

## 4. SUSTAINABLE PACKAGING FRAMEWORK

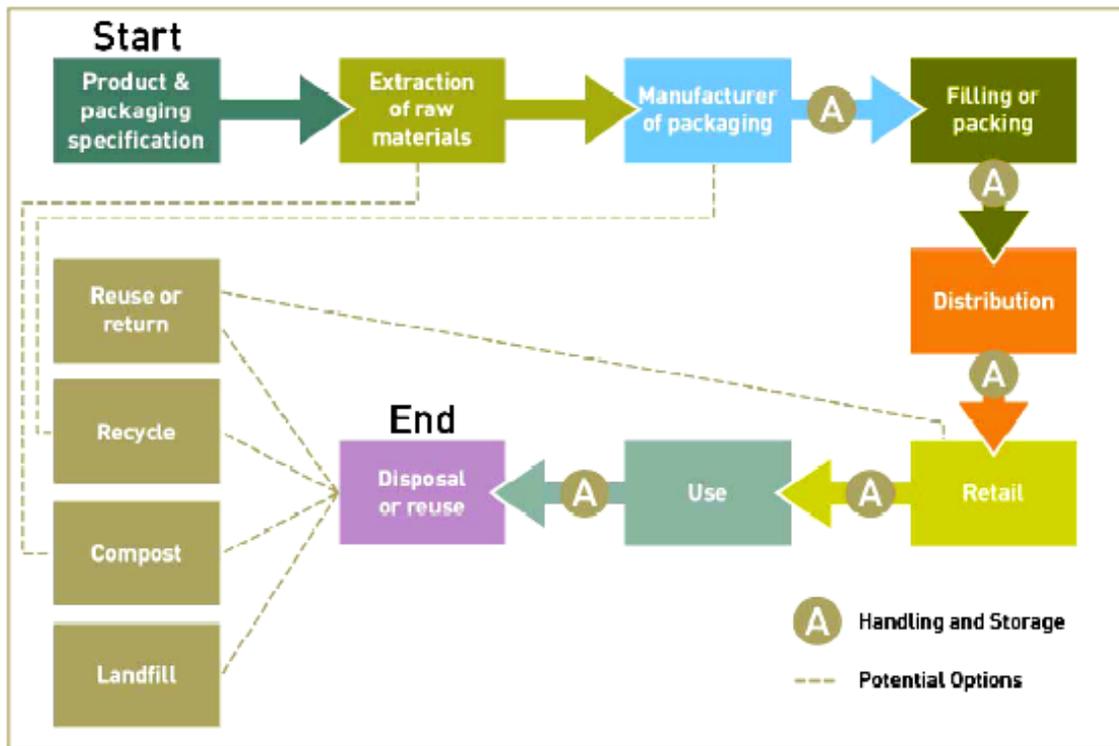
### What is Sustainable Packaging?

Historically, approaches to packaging management have focused only on end-of-life issues – mainly reductions in the weight or volume of packaging sent for disposal.

A sustainability-based approach creates a framework for decision-making that considers a broader set of factors, such as resource consumption (i.e., use of energy, water and virgin materials), greenhouse gas generation, toxicity, and the impacts on human health and the environment throughout the packaging's life cycle.

A sustainability approach considers the effect of the entire life cycle of packaging – from acquiring the raw materials for the packaging, to its manufacture, transportation and consumption, through to disposal and/or reuse and recycling as raw material for future products and packaging.

Figure 1: The Packaging Life Cycle



Source: Waste & Resources Action Programme. For more information see <http://www.wrap.org.uk>.

Sustainable packaging is not an easy goal. Packaging design often requires difficult trade-offs; for example, efforts to increase packaging recyclability – a typical goal in packaging management – may actually result in other impacts, such as greater overall energy use. Decisions about designing sustainable packaging may be further complicated by other non-environmental factors, such as: Does the packaging ensure the product is protected?

Does it meet all health and safety standards, laws and regulations? Does the redesign add costs? Packaging designers must weigh a number of factors when they are evaluating options for packaging sustainability.

### **SPC's Definition of Sustainable Packaging**

To provide a consistent understanding of what is meant by “sustainable packaging”, CCME has adopted the definition for sustainable packaging developed by the Sustainable Packaging Coalition (SPC).

The SPC definition states sustainable packaging:

1. Is beneficial, safe and healthy for individuals and communities throughout its life cycle
2. Meets market criteria for performance and cost
3. Is sourced, manufactured, transported, and recycled using renewable energy
4. Maximizes the use of renewable or recycled source materials
5. Is manufactured using clean production technologies and best practices
6. Is made from materials healthy in all probable end-of-life scenarios
7. Is physically designed to optimize materials and energy
8. Is effectively recovered and utilized in biological and/or industrial cradle-to-cradle cycles

The SPC developed this definition of sustainable packaging as a vision to strive for, and therefore is directional rather than prescriptive. The definition, which considers the impacts of packaging throughout its life cycle, has been recognized by a number of industry members across Canada and the United States.

### **Vision**

*CCME envisions a Canada where packaging is safe and of benefit to people, the economy and the environment, and where zero waste is created throughout the packaging life cycle.*

In an effort to move toward CCME's vision for sustainable packaging in Canada, this Strategy encourages all actors in the packaging lifecycle to reconsider the way packaging is produced, designed and evaluated. This Strategy aims to increase awareness about packaging sustainability among all packaging actors and, through the supporting measures, to provide incentives to reduce packaging waste and support more sustainable packaging choices at all stages of the packaging life-cycle.

Through a harmonized approach across the country, an emphasis on resource efficiency and continuous eco-innovation, and a producer- and consumer- driven demand for sustainably packaged products, Canada can become a world leader in sustainable packaging.

### **Goals**

CCME's goals with respect to packaging are to:

- Extend producer responsibility for packaging design, recovery, reuse, recycling and disposal
- Optimize packaging design to reduce negative effects throughout the packaging's life cycle (including production, use, transportation and end-of-life management)
- Reduce the overall quantity of packaging materials generated and disposed, with an aspirational goal of "zero waste"
- Encourage all packaging actors to make more sustainable packaging choices

## **Packaging Actors**

While EPR shifts the primary responsibility for packaging onto the producers, the Strategy recognizes that there are a number of other actors in the packaging life cycle that play an important role in reducing packaging waste and achieving greater packaging sustainability. Participation from all actors is necessary to achieve the goals of this Strategy. For example:

- *Federal Government* – can regulate federal requirements (e.g., labelling), facilitate research and analysis, implement national standards where appropriate
- *Provinces and Territories* – can introduce EPR and other supporting requirements for managing packaging waste (such as landfill bans and surcharges), enforce EPR and other regulatory requirements, and set policy direction
- *Municipalities* – in the interim, can establish their own initiatives to divert packaging waste from disposal, and later, as full EPR is implemented, can assist producers through participation in EPR programs where desired by both parties
- *Waste Managers* – can support businesses and consumers in efforts to reuse and recycle packaging waste
- *Producers* – can make packaging and design decisions that are more sustainable, improve end-of-life management, and support take-back of packaging
- *Retailers* – can identify opportunities for improvements, influence suppliers to provide more sustainable packaging through purchasing decisions, and facilitate take-back of packaging
- *Consumers* – can influence packaging design through purchasing decisions, and improve recovery rates of packaging through participating in diversion programs
- *Non-Governmental Organizations* – can promote packaging reduction and sustainability through research and education

This list of potential roles is non-exhaustive; it is merely included to provide examples of the types of roles that each actor may play.

## **5. SUPPORTING MEASURES**

The establishment of EPR program requirements is the primary action being undertaken by CCME member governments to address packaging in Canada. By shifting responsibility for the full life cycle of packaging onto producers, EPR requirements will provide new incentives for producers to reduce packaging and better manage their packaging waste. However, EPR requirements alone may not be sufficient to drive producers to achieve CCME's broader goals for sustainable packaging. Additional supporting measures are needed to drive further action to improve packaging sustainability.

CCME recognizes that, while producers bear the primary responsibility for managing packaging, there continues to be a role for CCME and its member governments to support industry as they transition to full EPR, as well as to assist all packaging actors in achieving greater packaging sustainability. For example, CCME can coordinate actions that require a Canada-wide and cross-industry approach. Canada-wide implementation of many of the supporting measures can help improve the efficacy and consistency of the measures, reduce administrative costs and burdens for industry, and increase the impact of the measures to influence packaging redesign.

This section sets out nine supporting measures aimed at increasing awareness of sustainable packaging, providing incentives for all packaging actors to make more sustainable choices, and supporting the development of better systems to optimally recover packaging materials. As jurisdictions across Canada transition towards full EPR for packaging, CCME will support producers and other stakeholders in achieving reductions in packaging and greater packaging sustainability.

### **A. Industry-Government Working Group**

<p><b>Key Action:</b> <i>CCME will establish an industry-government working group to guide implementation of EPR and the Strategy's supporting measures.</i></p>
--

#### ***Description***

As EPR programs are developed across the country, a Canada-wide dialogue between industry and government can help to achieve a more consistent approach to EPR program requirements for packaging across jurisdictions. Similarly, in the interim years as provinces and territories transition towards full EPR, collaborative efforts by industry, government and other stakeholders to implement the supporting measures set out in this Strategy can mutually benefit all actors.

An industry-government working group could provide a forum for greater dialogue and partnership between government and major industry producers (or "stewards") under the various packaging EPR programs. Such a working group could:

- Discuss ideas, concerns and issues related to EPR and sustainable packaging

- Share information about industry and government initiatives to eliminate duplication and identify opportunities for collaboration and partnership
- Explore opportunities for early actions by industry to improve packaging sustainability
- Identify priority supporting measures (such as the Ombudsman, shopping basket index, recyclability labelling, etc.) and develop approaches to implementing these measures, including identification of key roles, processes and timelines
- Provide feedback to CCME and its member governments on issues related to EPR and packaging

### ***Actions***

The CCME will establish a Canada-wide industry-government working group with industry representatives from major packaging producers. Representatives of CCME's EPR Task Group will also participate in the working group. The members of the working group will work together to develop a mandate and terms of reference for the group. Other stakeholders with an interest in improving the sustainability of packaging (such as NGOs) may be invited from time to time to participate in certain activities or discussions of the working group as appropriate.

## **B. Industry Agreements**

<p><b>Key Action:</b> <i>CCME will pursue agreements with interested industry sectors to reduce packaging and improve its sustainability.</i></p>
---

### ***Description***

There is significant interest among leading manufacturers to improve packaging design and management. Similarly, many retailers have begun to push for more sustainable packaging to both reduce transportation and display costs and meet consumer demand for green products and packaging. Across the supply chain, businesses are increasingly embracing sustainability as a strategic objective and business imperative.

Agreements between CCME and specific industry sectors can provide an opportunity to build on the momentum already present among industry leaders in moving towards more sustainable packaging.

As the nation transitions to full EPR, agreements with industry associations to address packaging can be used to encourage industry to take early actions on packaging. Such agreements could also help to pilot innovative ideas and showcase the sector's ability to affect packaging reduction and effective recovery throughout the supply chain.

Industry agreements may include the following commitments by industry:

- Data collection and development of baselines
- Targets (e.g., for packaging reduction, diversion, etc.)
- Actions aimed at packaging reduction and improved management (e.g. pilot programs)

- Consumer education
- Integration of sustainable design
- Annual public reporting on specified performance indicators

### ***Actions***

CCME will pursue an agreement with an interested industry partner, which would include targets and commitments for industry-led actions to reduce packaging and increase sustainability. CCME will monitor the success of efforts and report on the progress of objectives and targets set out in the agreement. Based on the success of the first industry agreement, CCME will explore options to negotiate further industry agreements with other industry sectors.

## **C. Canada-wide Standards and Certification for Compostable Packaging**

<p><b>Key Action:</b> <i>CCME will help fund the development of a Canada-wide standard and certification program, including clear visual identification, for compostable packaging.</i></p>
---

### ***Description***

Biodegradable and compostable plastic packaging has become more common in recent years. However, plastics marked “biodegradable” or “degradable” are not necessarily compostable, and can contaminate the finished compost product. At the same time, some plastics that are truly compostable are either recycled or disposed by consumers, or screened out by composting facility operators and sent to landfill because of the difficulty in distinguishing compostable from non-compostable plastics.

While the Canadian Standards Agency’s *Environmental Claims: A Guide for Industry and Advertisers* provides some direction on the appropriate use of self-declared environmental claims of compostability and degradability, a Canada-wide compostability standard would provide greater guidance to help producers ensure that claims of compostability are accurate and compliant with the federal Competition Bureau’s labelling requirements.

In addition, clear visual marks identifying packaging as certified compostable would:

- Help guide sustainable purchasing decisions – without clear labels it can be extremely difficult for consumers to determine if packaging is truly compostable.
- Help consumers and end-of-life managers identify how to properly manage the packaging at the end of its life. Proper end-of-life management helps to increase diversion rates of truly compostable packaging, while reducing contamination of both the compost stream (with non-compostable materials) and the recycling stream (with compostable/degradable materials).
- Enable producers of certified compostable packaging to distinguish their packaging from other less sustainable packaging.

### ***Actions***

CCME will help fund the development of a national standard and certification program for compostable packaging by the Bureau du normalisation de Quebec (BNQ). This

program will assist producers and consumers in selecting more sustainable packaging materials and will facilitate the better end-of-life management of compostable packaging waste.

Once the standard is developed, manufacturers or importers of compostable products will be able to apply to BNQ for certification and, if certified, may use the BNQ mark of certification on their packaging to distinguish it from other uncertified packaging products. The standard and certification program could also form the basis for future actions to reduce packaging waste, such as working with industry groups (e.g., the fast food industry) to pilot the use of certified compostable packaging for food products.

The compostability mark will provide clarity to consumers for those packaging products that are certified truly compostable. However, because the certification will be voluntary, consumers may still be faced with a variety of other products claiming compostability or other forms of degradability. Therefore, CCME will work with industry to explore the development of an education campaign to increase consumer awareness of the certification program and related visual marker for compostable packaging. Greater awareness of the certification would allow for better end-of-life management of compostable materials and help to avoid contamination of both composting and recycling systems.

#### **D. Canada-wide Labelling System for Packaging Recyclability**

<p><b>Key Action:</b> <i>CCME will explore with industry the development of a clear labelling system for recyclable packaging.</i></p>
--

##### ***Description***

The symbol currently used to identify the recyclability of packaging – the Mobius loop – is one of the most recognized labels in North America. However, this symbol can be misleading, particularly when applied to plastic packaging. A number of marked products, although technically recyclable, are not accepted in many recycling systems. For example, of the seven resin codes for plastics, only #1 and #2 are accepted in most Canadian recycling programs.

A more meaningful designation of “recyclability” relies on a number of factors – not just the type of materials used, but also the construction of the packaging (e.g., composite packaging is difficult to recycle), the cost and availability of recycling technology, consumer access to a recovery system, and the end-market demand for the recovered materials.

A clear and easily understandable labelling system that identifies recyclability could:

- Help consumers make sustainable purchasing decisions by enabling them to identify, at the point of purchase, whether the packaging is recyclable in their local recycling program.
- Help consumers and waste managers identify how to properly place the packaging into the appropriate waste streams at the end of its life. This can help to both

increase diversion rates of recyclable packaging and reduce contamination of the recycling stream, which can, in turn, help reduce operational costs and improve the quality of recovered materials.

- Drive producers to shift towards more recyclable packaging to maintain a greener public image.

Without clear, meaningful labels to identify recyclable materials, contamination of the recycling stream is a common occurrence. For example, the introduction of degradable plastics, which look identical to standard plastics, into the recycling stream can contaminate whole batches of otherwise recyclable plastics. Contamination drives up the cost of the recovery program and potentially decreases the quality of the end product.

A harmonized Canada-wide approach to recyclability labels would facilitate national consistency in labelling claims and minimize confusion among industry and consumers. A Canada-wide recyclability label would also support the Canadian Standards Agency's *Environmental Claims: A Guide for Industry and Advertisers* by providing greater guidance on the appropriate use of self-declared environmental claims (i.e., labels) of recyclability.

### ***Actions***

CCME will work with the industry-government working group and other appropriate stakeholders to explore the development of a Canada-wide labelling program for recyclable packaging. "Recyclable" in this context could be defined by access to existing recycling facilities for that particular product, rather than whether the material can be theoretically recycled. For example, a labelling system recently developed by Britain's Waste & Resources Action Programme and British Retail Consortium helps consumers identify the likelihood that products will be recycled based on the percentage of authorities currently collecting the material (e.g., "widely recycled" indicates 65% of jurisdictions will accept it). A recyclability label of this sort would require the collection of data about the existence of recycling facilities to support the labelling system.

The use of recyclability labels would initially be voluntary. However, a voluntary system may have limited effect as producers would likely only label their recyclable products, but would not voluntarily label their products as "non-recyclable". Therefore, in the longer-term, the federal and provincial/territorial governments would consider the appropriateness of introducing mandatory labelling requirements in which all packaging, including non-recyclable packaging, must be clearly labelled.

To support the implementation of new recyclability labels, CCME would work with industry, non-governmental organizations and other stakeholders in the development of an education and awareness campaign to help ensure that consumers have a clear understanding of the new recycling labels and how they apply to their local recycling systems.

## **E. Reuse Programs**

**Key Action:** *CCME will explore with industry opportunities for industry to implement or expand reuse systems.*

### ***Description***

Reuse of packaging may not be an option for all packaging categories; however, where appropriate, reuse can offer significant reductions in packaging waste as well as reductions in the use of resources (such as energy and virgin materials). For example, the establishment of reuse systems for pallets and other transport packaging was responsible for a significant portion of the reductions achieved through CCME's 1990 National Packaging Protocol.

The potential benefits of a reuse system depend on a number of factors, such as the impacts of the current waste management system, travel distances required for reuse, the volumes of units available, and the potential number of re-uses of the packaging. An analysis must be done on each proposed reuse system to evaluate its benefits and feasibility.

### ***Actions***

CCME will explore opportunities with industry to implement or expand reuse systems. Where appropriate, government may provide administrative and/or financial support through partnership on studies to evaluate potential reuse systems or support of reuse pilot projects and reuse systems initiated by industry.

CCME will also work with industry to identify and evaluate barriers to reuse and refill systems. Where regulatory barriers (such as prohibitions on offering beverages such as wine in bulk for consumer refill) exist, or where regulatory intervention would support implementation (such as regulations requiring containers over a certain capacity to be refillable), government will explore, and where appropriate, implement regulatory changes.

## **F. Sustainability Indicators, Metrics and Related Tools for Packaging**

**Key Action:** *CCME will adopt Canada-wide sustainability indicators and metrics that can be used to assess the sustainability of packaging over its entire life cycle.*

### ***Description***

“Sustainability indicators” are a set of indicators that can be used to assess the overall sustainability of a package during its entire life cycle. For example, indicators could include packaging volume, recycled content, recyclability, carbon footprint, energy consumption, water consumption, etc. A “metric” is a standard method of measurement for each indicator that ensures the scientific integrity of the measurement methodology and its consistent application.

Sustainability indicators and metrics have a number of useful applications, including:

- Assisting producers/designers in evaluating different packaging options and making better decisions for sustainable packaging design.
- Informing the development of targets and measuring progress towards packaging sustainability goals.
- Supporting more consistent reporting practices for packaging design by producers.
- Supporting the development of packaging assessment tools or “scorecards” to assist major purchasers (government, retailers, etc.) in making green purchasing decisions.

A number of governments, organizations and industries around the world have developed their own sustainability indicators, metrics and scorecards. However, there is no standard set of packaging sustainability indicators for use across Canada. A uniform, Canada-wide set of sustainability indicators could assist all actors in the packaging life cycle – governments, producers, consumers – in taking consistent actions nationwide.

### ***Actions***

CCME, in consultation with industry and other stakeholders, will work on adopting clearly defined indicators and metrics for Canada that can be used to assess the sustainability of packaging over its entire life cycle.

To ensure that CCME is not duplicating efforts and is advancing the sustainability of packaging as efficiently as possible, CCME will begin by reviewing indicators and metrics already developed by other organizations around the world. In consultation with industry and other stakeholders, CCME will adopt a set of indicators and metrics (either based on existing indicators with any necessary revisions or newly-developed indicators) that are best suited for the Canadian context.

In the longer-term, CCME will continue to explore with industry potential applications of the sustainability indicators and metrics that require government action, such as the potential development of government procurement guidelines that consider packaging.

## **G. Industry Education and Recognition Programs**

<p><b>Key Action:</b> <i>CCME encourages the development of industry-led educational initiatives, best practices guidance and industry recognition programs that promote sustainable packaging design, and will work with industry to identify roles for government cooperation.</i></p>
--

### ***Description***

The design stage offers the greatest opportunity for packaging reductions. Accordingly, it is important to ensure that product and packaging designers understand how to design packaging for sustainability and that they have sufficient incentives to do so.

Educational programs for product and packaging designers can include:

- Guidelines, such as the Sustainable Packaging Coalition’s *Design Guidelines for Sustainable Packaging*
- Sector-based educational materials, including examples of packaging best practices for individual sectors
- Websites for industry with online access to educational resources on sustainable packaging design
- Educational courses, such as the Packaging Association of Canada ‘Essentials of Sustainable Packaging’ one-day course and Wal-Mart’s ‘Sustainable Packaging’ tradeshow

Recognition programs can also provide models of best practices for other producers, as well as provide incentives for producers to improve the sustainability of their own packaging. Recognition programs can include:

- Award programs, such as the Packaging Association of Canada’s ‘Sustainable Packaging Leadership Awards’, which highlight innovative new packaging design
- “Top Runner” programs, such as Japan’s Top Runner program for energy efficiency. A Top Runner program searches for the best product on the market in relation to a particular criterion (e.g., recycled content), and then stipulates that all products in that category must meet the standard of the top runner model within a certain number of years. To encourage manufacturers to meet (or exceed) the target, products can be publicly named or labelled as leaders or non-achievers.

### ***Actions***

CCME encourages industry to build on its current initiatives and develop further education and recognition programs for industry members.

CCME will also work with the industry-government working group to identify program areas that could benefit from government support and explore opportunities for government partnership with industry and other stakeholders in the development of education and recognition programs (such as CCME co-sponsorship of a sustainable packaging award, guidance materials for smaller businesses, etc.).

## **H. Excessive Packaging Ombudsman**

<p><b>Key Action:</b> <i>CCME will explore with stakeholders the establishment of an ombudsman to address consumer complaints of excess packaging.</i></p>
--

### ***Description***

Packaging that is much larger or heavier than the product, that contains more layers than seems necessary to protect the product, is difficult to open, and/or cannot be recycled, is often seen as unnecessary overpackaging. While there may be legitimate reasons why some of this packaging is necessary, the issue of excessive packaging is often frustrating for consumers.

Consumers require an effective outlet to ask producers questions about the type and quantities of packaging used, and to voice their concerns and frustrations about

packaging that they deem excessive. Producers, too, may benefit from having a forum to hear customer packaging concerns.

A potential tool to address these issues could be the establishment of a 'Packaging Ombudsman'. A packaging ombudsman could:

- Receive and respond to consumer concerns regarding excessive packaging;
- Link consumer complaints with packaging producers to help obtain responses and ensure producer accountability;
- Provide a forum for dialogue between consumers and producers to identify and discuss packaging related issues;
- Provide information regarding packaging sustainability to assist consumers in making sustainable purchasing decisions and assist industry in identifying opportunities to reduce packaging and improve its sustainability;
- Publish an annual report for the public outlining the consumer complaints received and the industry responses to those complaints;
- Based on information collected, provide recommendations for specific program areas (e.g., product classes or material types) that require action by government and/or industry, potentially through an annual report.

A packaging ombudsman would not have regulatory authority to take enforcement actions or require industry to respond to complaints. However, the release of an annual report, and the potential publicity that may result, could be a key tool for a packaging ombudsman to influence industry and effect changes in packaging.

### ***Actions***

CCME will work with industry and other stakeholders to explore options for establishing an independent ombudsman for packaging related issues.

CCME will work with industry associations and non-governmental organizations to assess potential entities that could perform the role of an independent ombudsman and to explore possible sources of funding to finance an ongoing office of the ombudsman. Where the establishment of a packaging ombudsman appears viable, CCME will work with stakeholders and the proposed entity to help develop a mandate and structure for the ombudsman's role.

## **I. Shopping Basket Index**

<p><b>Key Action:</b> <i>CCME will explore with industry the potential development of a 'shopping basket' approach to measure progress on CCME's packaging goals.</i></p>
---

### ***Description***

As EPR programs are established across Canada, each province/territory will develop packaging targets, collect data and track progress in its jurisdiction. Data gathered through EPR programs will provide important information on the progress achieved on packaging waste diversion; however, it will be several years before even baseline Canada-wide data will be generated under the EPR programs.

One packaging assessment tool that has been used in other jurisdictions is a ‘shopping basket’ index, which can provide an earlier source of data and can also provide a better gauge of real reductions in packaging and increased packaging sustainability as they are experienced by consumers.

A shopping basket index tracks a fixed set of goods (e.g., a representative cross-section of 30 common household goods) over time and assesses how much packaging the shopping basket of goods contains and what types of materials are used.

A shopping basket database can provide detailed data on packaging use based on both qualitative and quantitative facts. The shopping basket tool may include assessment of several key performance indicators – such as recyclability, compostability, reusability, product-to-packaging ratio, recycled content, and packaging related labelling – to help measure progress towards CCME’s packaging sustainability goals.

### ***Actions***

To achieve a better understanding of the nature of packaging in Canada and to measure progress on packaging sustainability from a consumer perspective, CCME will work with industry to explore the possible development of a Canada-wide packaging shopping basket tool, as well as other potential sources of data.

CCME will work with industry to identify the potential role for government to assist with the development of the tool and the collection of packaging sustainability data. CCME will continue to encourage industry to publicly report on the status of packaging sustainability in Canada as measured by the packaging shopping basket tool or other means.

## **6. IMPLEMENTATION TIMELINES**

### **Timeline for EPR Requirements**

The Canada-wide Action Plan for EPR commits each jurisdiction to work towards:

- Developing EPR framework legislation and/or regulations within six (6) years of the adoption of the EPR Action Plan; and
- Establishing operational EPR programs for all packaging within six (6) years of the adoption of the EPR Action Plan.

Given the unique circumstances of geography, population and infrastructure in the northern Territories, EPR for packaging may not be an appropriate instrument. Territorial jurisdictions will review whether EPR programs, stewardship programs or other supporting measures are best to achieve the desired outcomes for packaging in the north.

Where non-EPR product stewardship requirements already exist, these programs will be examined in the context of the Action Plan within a six (6) year timeline.

### **Timeline for Supporting Measures**

CCME will begin working on the following early actions in the short-term (i.e., within 0-2 years) to help support the transition to EPR for packaging:

- Industry-Government Working Group
- Industry Agreement
- Canada-wide Standards and Certification for Compostable Packaging
- Sustainability Indicators, Metrics and Related Tools for Packaging

The timelines for the remaining supporting measures will be determined in consultation with the industry-government working group and other stakeholders based on the identified priorities and available resources of both government and stakeholders:

- Canada-wide Labelling System for Packaging Recyclability
- Reuse Programs
- Industry Education and Recognition Programs
- Excessive Packaging Ombudsman
- Shopping Basket Index

## **APPENDIX A – The Canada-wide Action Plan for EPR EXECUTIVE SUMMARY**

### **Introduction**

In 2006, Statistics Canada data showed Canadians generated almost 1,100 kg of municipal solid waste per person, up 8 per cent from 2004. This represents about 35 million tonnes, of which just over 27 million tonnes was sent for disposal in landfills and incinerators and another 7.7 million tonnes was diverted as recyclables or organics. Nationally the rate of diversion from landfill and incineration was 22 per cent, with the highest rate of diversion for a provincial jurisdiction being 41 per cent. Since the rate in 2004 was also 22 per cent, this suggests little or no progress in enhancing the extent or effectiveness of waste recycling and organics programs over that period. Despite efforts by all levels of governments over the last three decades, Canada's performance lags behind other G8 and Organization for Economic Cooperation and Development (OECD) countries when it comes to municipal solid waste diversion and disposal.

### **Extended Producer Responsibility**

A waste management approach that has developed in response to these issues is the concept of the producers of products being responsible for their end-of-life management. Similar to the OECD, CCME defines Extended Producer Responsibility (EPR) as:

*an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of its life cycle.*

Through the Canada-wide Action Plan (CAP) for EPR, the Canadian Council of Ministers of the Environment (CCME) and its member jurisdictions have committed to working towards the development and implementation of EPR programs. CCME has provided guidance on strengthening the use of EPR as an environmental risk-management tool, and has prepared a plan to promote harmonization and consistency of programs across the country.

### **Objectives**

The CAP seeks the adoption by producers of full life-cycle cost accounting for their products. This would see the costs of the end-of-life management of products treated similarly to other factors of production and incorporated into wholesale and retail product prices. Successful EPR shifts the expenses associated with product end-of-life management from taxpayers to producers and consumers and reduces the amount of waste generated and going to disposal. In addition, the CAP seeks to reduce the toxicity and environmental risks from products and product waste and to improve the overall life-cycle performance of products, including reducing associated greenhouse gas emissions.

### **Implementation of the Canada-wide Action Plan for EPR**

Under the terms of the Action Plan, Canadian jurisdictions commit to working towards the development of EPR framework legislation and/or regulations to allow for action on the following identified priority products and materials.

### **Phase 1**

Jurisdictions commit to working towards managing the following products and materials in operational EPR programs within six (6) years of the adoption of the CAP:

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

Existing product stewardship, non-EPR programs, which were established before the adoption of the CAP will be reviewed within the context of the CAP within six (6) years of the adoption of the CAP.

Jurisdictions will seek within two (2) years of the CAP's adoption to identify a more detailed phased implementation plan for the product categories and products listed in Phase 1.

### **Phase 2**

Jurisdictions commit to working towards incorporation into operational EPR programs, within eight (8) years of the adoption of the CAP for each of the following product categories, of specific identified products and materials as further elaborated upon by CCME:

- Construction materials
- Demolition materials
- Furniture
- Textiles and carpet
- Appliances, including ozone-depleting substances (ODS)

Jurisdictions will seek, within two (2) years of the adoption of the CAP, to publish a detailed list of products to be managed through EPR programs for each of the above, Phase 2, product categories.

### **Territories**

Given their unique circumstances of geography, population and infrastructure, it must be recognized that EPR may not be an appropriate instrument for all products or product categories in the northern Territories. EPR programs, stewardship programs or a variety of supporting measures may therefore be necessary to achieve the desired outcomes across all product categories.

Within six (6) years of ministerial concurrence Territorial jurisdictions will review their progress toward the development of EPR frameworks for all product categories and provide an update to CCME which will include a determination of whether EPR will be pursued for each of the remaining Phase 1 and Phase 2 categories.

### **Tracking Performance of the Priority EPR Programs**

CCME, with stakeholder input, will identify protocols, responsibilities and timelines for producing a national annual status report on the performance of the priority EPR programs. A number of key performance indicators have been identified to measure progress in the national annual status report. These include: kilograms per capita captured or recovered; dollars per kilogram captured or recovered; per cent of waste captured, per cent of waste recovered; and avoided greenhouse gas emissions.

Performance indicators may be adjusted to recognize the unique circumstances of particular products and product categories.

### **Model EPR Program**

In order to facilitate the creation of consistent and harmonious EPR regulations and programs, the CAP outlines a number of common elements that set out recommendations and guidance for all EPR programs to ensure common interpretation and application. These elements include the responsibilities of designated producers and producer responsibility organizations, the relationship to stewardship plans, the establishment of targets and reporting mechanisms, the raising of funds and design for environment considerations. The EPR program elements are designed so that through a successful EPR program and the regulations which mandate it, cost and management signals are given to producers to improve the life-cycle performance of their products knowing that at some point in the future they will be responsible for the collection, recycling and the environmentally sound management of products that would otherwise be discarded.

### **Supportive Policies and Regulations**

In a complex and competitive national and global business market, signals to producers from a relatively small market like Canada may not be strong enough alone to influence new environmentally conscious product design and supply chain management. The environmental objectives of EPR may therefore need to be supported and reinforced by other measures, such as: eco-labelling; restrictions on toxic substances; recycled content standards and regulations; green procurement policies; environmental performance/voluntary agreements and a variety of other potential standards, bans, guidelines and educational tools.

### **A National Harmonized Approach**

The purpose of the CAP for EPR is to extend the principle of producer responsibility across the country in a consistent and harmonized way with maximum impact across the national marketplace. By shifting the responsibility for the end-of-life management of products to the manufacturer and/or importer of that product, effects will be felt throughout the product life cycle. This provides incentives to producers and importers to design their products with less environmental risk, reduced use of toxic and hazardous substances, enhanced ease of product disassembly and with other factors reducing their products' overall environmental footprint.

## **APPENDIX B – Packaging Management Programs in Canada**

This appendix discusses a variety of packaging management programs undertaken by provincial and territorial governments across Canada, as well as certain industry-led programs relating to packaging.

### **Government-Led Packaging Management Programs in Canada:**

<b>Provinces/Territories</b>	<b>Beverage Container Refund</b>	<b>Multiple Material EPR Requirements</b>	<b>Plastic Bags Initiatives</b>
Newfoundland & Labrador	■		
Nova Scotia	■		
New Brunswick	■		
Prince Edward Island	■		
Quebec	■	■	◇
Ontario	■	■	◇
Manitoba	■	■	■
Saskatchewan	■		
Alberta	■		
British Columbia	■		◇
Northwest Territories	■		
Nunavut			
Yukon	■		

<b>Legend</b>
■ Government initiative
◇ Government-industry voluntary initiative

### **Overview of Packaging Management Programs in Canada**

#### *Beverage Container Refund Programs*

Regulations for beverage-related packaging are the most prevalent packaging management programs in the country. Various forms of a deposit-refund program currently exist in each province or territory in Canada except Nunavut. For example, Nova Scotia, New Brunswick and Prince Edward Island operate a harmonized beverage container deposit-return program that returns half the fees to consumers with the rest being used to fund the program. An additional example is the Beer Store’s management of beer packaging in Ontario, which operates an extensive refillable packaging program that recaptures approximately 98 per cent of glass beer bottles used.

#### *Extended Producer Responsibility/Product Stewardship Initiatives*

British Columbia’s recycling regulation makes the producers (manufacturer, distributor, importer) responsible for the life-cycle management of their products, including financing the collection and recycling of discarded products. Packaging addressed includes paint, oil and beverage containers. In Quebec and Ontario, the government requires producers to compensate municipalities for up to 50 per cent of the net costs of

municipal packaging recovery and reclamation programs. Manitoba enacted a regulation in December 2008 to establish an EPR framework for packaging and printed paper, which will allow for a similar program.

#### Other Provincial Initiatives

Other regulatory examples include packaging audit and reduction work-plan requirements for certain Ontario manufacturers, packagers and importers of packaged food, beverage, paper or chemical products. In Nova Scotia there is a disposal ban on beverage containers, corrugated cardboard and steel/tin/glass food containers.

Voluntary plastic bag reduction initiatives are also becoming more prevalent. Quebec has a voluntary code of good practices to promote reduction, reuse and recycling of shopping bags promoted through education and awareness campaigns. In Ontario, a plastic bag reduction task group was created in 2007 to engage industry leaders to reduce the number of plastic bags distributed in that province by 50 per cent over the next five years. In 2008, industry leaders from British Columbia followed suit, committing to reducing the distribution of plastic bags by 50 per cent over five years. Other jurisdictions are considering placing fees or bans on the sale of plastic bags.

#### Federal Initiatives

Federal government packaging initiatives are primarily for the purposes of consumer protection. For example, federal legislation establishes labelling requirements and restrictions in terms of environmental claims as well as nutritional content and language use. In addition, the federal government is taking action to assess the potential impact of approximately 23,000 substances of potential concern that may be used in product manufacturing, including packaging, on human health and the environment. This program asks industry to provide information on 15 to 30 high-priority substances every six months. Using this information, the federal government assesses the toxicity of the chemicals and recommends appropriate risk-management measures.

#### Municipal Efforts

A number of municipalities have undertaken innovative initiatives to encourage more sustainable packaging and reduce packaging waste. The City of Ottawa has been operating an extensive return-to-vendor product-stewardship program known as *Take it Back!* for more than 10 years. In 2008, more than 500 retailers and charities voluntarily participated in the program, accepting 131 specific products, including a wide range of packaging materials for proper disposal, reuse or recycling. More recently, the cities of London and Waterloo have established procurement policies to restrict the purchase and sale of bottled water at municipal functions and facilities in an effort to reduce environmental impacts and waste management costs associated with bottled water. Other cities, such as Metro Vancouver, have launched campaigns to encourage the consumption of tap water in place of bottled water. The City of St. John's, Newfoundland, has a commercial corrugated cardboard landfill ban. The City of Toronto has also put forward a proposed plan to address in-store packaging, such as plastic bags and hot drink cups. The plan proposes requirements for retailers to provide a 10-cent discount to consumers who use a reusable bag and to ban the sale of bottled water in municipal facilities.

*Voluntary Industry Initiatives*

In recent years, many voluntary initiatives to reduce packaging have been undertaken. One initiative recognized for promoting change throughout the packaging industry is Wal-Mart's Packaging Scorecard. The Scorecard evaluates the sustainability of product packaging used by Wal-Mart suppliers based on factors such as product-to-packaging ratio, the amount of renewable energy used to manufacture the packaging and the recovery value of the raw materials. Wal-Mart also developed software to help suppliers understand how improvements can be made to redesign packaging for sustainability. This initiative is one of several Wal-Mart will be introducing to reach its goals of 5 per cent reduction over five years.

The Packaging Association of Canada (PAC) has a number of initiatives aimed at increasing the sustainability of packaging on behalf of its members. The association has developed a course on sustainable packaging design and is in the process of developing S-PAC, a sustainability rating system for packaging. PAC has also introduced Sustainable Packaging Leadership Awards and has formed a strategic partnership with Wal-Mart to train Wal-Mart executives and buyers, as well as manage the Wal-Mart Sustainable Packaging Exposition.

A variety of businesses have established deposit-return programs to support refill systems, particularly for beverages. For example, in Ontario the Beer Store operates a highly effective system in which bottles are reused 12 to 15 times on average. The 18.5-litre bottles of water produced by Canadian Springs are reused approximately 55 times thanks to a \$10 per bottle deposit. In 2009 the company will also be introducing deposits on smaller-format bottles to ensure recycling, if not reuse.

Businesses also support consumers in other ways who wish to make changes to reduce packaging. For example, major coffee chains across the country offer a discount for customers who provide refillable mugs. National grocery stores have also promoted reusable grocery bags, charging a fee for each plastic/paper bag and/or providing incentives for people who bring their own reusable bags or boxes.

A number of businesses, particularly Small and Medium Enterprises (SMEs), are also very innovative when it comes to waste reduction and source separation of waste. For example, Corporation Service Company (Yarmouth, Nova Scotia) was recently recognized by RRFB, Nova Scotia's Mobius Environmental Awards as "Small Business of the Year," in part because it sends 80 per cent of its waste to recycling.