

TECHNICAL MEMORANDUM



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TO: Brooke Carere, SLRD
Southern Advisory Committee

CC: Todd Baker, Morrison Hershfield

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RE: **WASTE DIVERSION OPTIONS FOR THE SOUTHERN SLRD**

Background

The Squamish Lillooet Regional District (SLRD) is updating its 2007 Solid Waste Management Plan. The new plan is intended to be a Solid Waste and Resource Management Plan (SWRMP) that provides a region-wide vision for solid waste management for the next 10-20 years and which links solid waste management goals, infrastructure and services with the other regional programs, plans and strategies. The plan is also intended to recognize that the materials referred to as solid waste are resources that have value, and that this value needs to be considered in the update the SWRMP.

The plan will be updated in two phases. The first phase focuses on an assessment of the current system for managing solid waste in the SLRD. The report summarizing the current system, entitled **Solid Waste and Resource Management Plan: Stage 1 Report**, is complete. This report provides a baseline for the development of an updated plan.

The second phase includes identification and assessment of various waste management options for inclusion in the updated plan. This phase will also include a public consultation program to obtain input on the selected options.

To facilitate the identification of options, three technical memos will be prepared by the consultants to provide a “long list” of options for consideration and discussion at the Advisory Committee meetings. The technical memos will cover the following elements of plan development.

Technical Memo #1: Solid waste diversion (i.e. the first 3Rs: Reduce, Reuse, Recycle)

Technical Memo #2: Residual waste management (i.e. solid waste disposal)

Technical Memo #3: Other Solid Waste Management Services and issues (e.g. demolition, landclearing and construction (DLC) waste management, bear-human conflict management)

Input from the Advisory Committee will be sought on each of the memos and this input will assist with the selection of options for inclusion in the updated plan. The options which are selected will be researched in more detail for their specific application within the SLRD, including estimated costs and their synergy with other plan

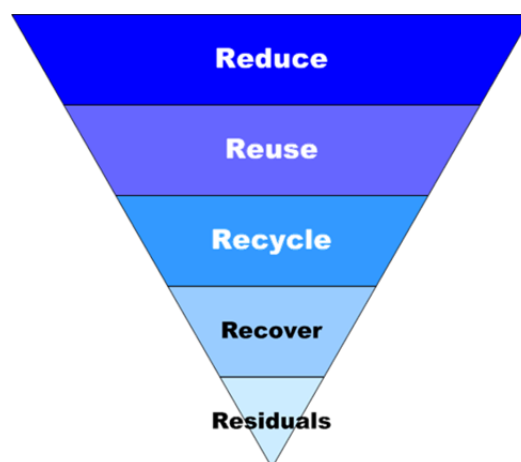
components. A final technical memo that details the preferred options will be prepared for review by the advisory committees prior to undertaking public consultation.

This is the first technical memo, focusing on waste diversion options.

Introduction to Waste Diversion Options

This memo presents a list of options addressing the first three tiers of the waste management hierarchy: reduction, reuse and recycling. This memo also includes options related to extended producer responsibility (EPR).

These options are presented for consideration at the March 5, 2014 meeting of the Southern Advisory Committee.



Reduction and Reuse

Reduction and reuse prevent waste from entering the waste management system and ultimately conserve resources. Although reduction and reuse are at the top of the waste management hierarchy, they are generally given the least amount of attention as local government mechanisms to manage waste. This is likely due to the impact of reduction and reuse programs being difficult to measure (compared to recycling programs) and therefore it is challenging to rationalize public expenditures in support of reduction and reuse programs.

Reducing waste is also directly correlated to the larger issue of reducing consumption. Tackling this issue at a local government level is particularly challenging due to the dominant consumer culture in Canadian society which is aligned with a global low price based consumer culture where goods are generally disposed and replaced rather than repaired.

Real change will ultimately have to be driven from the consumer level. This can be driven by consumer demand for more durable goods, and by the extended use of goods already in service. The SLRD and member municipalities can support the mindset change through encouraging the reuse of goods before they become waste. This is currently being done through:

- Whistler Reuse It and Rebuild It Centres
- Squamish Reuse It Fair (done in conjunction with Squamish CAN)
- Free stores at the all SLRD transfer stations (Pemberton, Gold Bridge, Devine) and the Lillooet Landfill

In addition, there are other reuse opportunities in the SLRD available through consignment and thrift stores, through on-line services such as Craigslist and Kijiji, and through many rental, repair and maintenance shops.

The SLRD and member municipalities can enhance their support of the "reduce and reuse" mindset shift through undertaking some of the following options.

1. **Develop campaigns to encourage reduction and reuse behavior.** Develop a regionally coordinated approach to reducing the use of single-use packaging such as plastic bags, coffee cups and water bottles that can be implemented by the SLRD, member municipalities and other interested organizations. Squamish's "Take Back the Tap" campaign that aimed to reduce single-use water bottles is a local example of a reduction and reuse campaign.

2. **Expand reuse events to other communities.** Squamish's ReUse It Fair is similar to a giant yard sale except that everything is free. In 2013, the fair diverted an estimated 90 tonnes of material that would otherwise be considered waste. Leftover goods are recycled, or landfilled if they cannot be recycled. The City of Nanaimo holds an annual Reuse Rendezvous where for one weekend each spring residents can put reusable goods out on the curb with a distinct tag for others to come pick up for free. Leftover items must be taken back in by the resident.



Squamish ReUse It Fair

3. **Maintain and expand the presence of ReBuild It and ReUse It Centres;** including:
 - o Maintain support of existing facilities in Whistler
 - o Establishing a Rebuild It Centre in Squamish
 - o Assess the potential for similar facilities in Pemberton and Lillooet
4. **Establish Equipment Libraries.** At the Pender Island Recycling depot, there is a full set of roughly 100 table settings (dishes, cutlery, glassware, coffee cups) for use by any member of the community. The materials are items that were donated to the depot (they don't all match!) and are stored in plastic crates so that they can be lent out in a manner similar to borrowing a book from a library. Another example of an equipment library is the Vancouver Tool Library, a cooperative tool lending library that loans a wide variety of tools for home repair, gardening, and bicycle maintenance. They also offer low-cost workshops on tool related skills and projects.
5. **Promote reuse/reduction mind-set.** Examples of activities that encourage people to learn about and practice reduction and reuse include:
 - o Conduct "repair your stuff" training workshops
 - o Promote organizations that rent and repair
 - o Promote gifts of experience over material goods (e.g. Metro Vancouver's "Make Memories, Not Garbage" campaign)
 - o Hold an annual art contest and display using reused/salvages materials

6. **Conduct a “Love Food Hate Waste”-style campaign.** In 2007, an organization called WRAP started Love Food Hate Waste (LFHW) which helps UK households tackle food waste. The program is designed to reduce the 7 million tonnes of food waste generated annually (60% which could have been eaten and over half of which is generated by households). LFHW partners with different groups (retailers and brands, local authorities, businesses, community and campaign groups) to develop campaigns and tools for specific audiences to change behaviour to reduce food waste. These campaigns focus on food waste thrown away by households. Strategies focus on why food is thrown away at different stages: planning, buying, storage, preparation and use different communications channels, either directly or through partners, to encourage behaviour change. Following a Love Food Hate Waste campaign in West London, avoidable food waste decreased by 14% in just six months. Additionally, for every £1 invested the municipality estimated that it saved up to £8 in avoided waste management costs (i.e. collection and composting).
7. **Encourage and support bear-aware backyard composting**
 - o **Provide information on how to “bear-aware” backyard compost.** Backyard composting can significantly reduce the quantity of yard waste and kitchen scraps that would generally require collection as source-separated organic material or garbage. Composting can be a bear-attractant, so it is critical in the SLRD that residents are aware of how to compost in a manner that does not attract bears. Working with local Bear Aware groups, information can be prepared and made available on-line through SLRD and municipal websites as well in hard copy at community centres and retailers such as garden centres and hardware stores.
 - o **Compost coaching.** The North Shore Recycling Program, for example, focuses on waste reduction, recycling and composting for three municipalities on the North Shore. In 2007 they developed a Compost Coaching program to reduce the organics in the collected garbage. Using a Community-Based Social Marketing (CBSM) approach, in the first year they worked with 156 local residents at their homes to improve their composting through hands on coaching at their residences. Intended to be fun, informal and based on the residents’ needs, the coach would base the conversation on participants’ questions, level of knowledge and condition of their compost bin. The 30-45 minute session would cover basic composting as well as tips for coexisting with bears. This coaching resulted in an additional 36 kg of organic material composted on site per capita for households that were already composting, and 190 kg per capita for households that had not composted before. The program currently targets 500 homes per year.

Waste Diversion through Policy Approaches

1. **Implement disposal bans.** To encourage source-separation and diversion, many regional districts and municipalities implement disposal bans on recyclable and compostable materials. This is a low-cost policy tool that signals to waste generators and waste collection companies that they are expected to separate and recycle/compost specific materials for which alternatives are readily available (e.g. cardboard, metal, yard waste). Disposal bans are enforced at the point of disposal (i.e. at transfer stations and landfills) through the application of significant surcharges on garbage found to contain

banned materials. Presently, the District of Squamish imposes penalties on roll-off and compactor loads of garbage that are observed to have more than 5% recyclable or compostable materials. At the RMOW transfer station, any load of garbage that contains more than 10% cardboard is subject to a 50% surcharge on the tipping fee.

2. **Apply differential tipping fees to encourage source separation.** Differential tipping fees apply different per tonne charges to the various categories of waste materials delivered to a transfer station or landfill. Differential fees can be used as a pricing signal to waste generators and haulers to source-separate their waste materials for diversion. They are applied at waste management facilities in the SLRD to differing degrees. The current tipping fee structure used by the District of Squamish (partial list of tipping fees shown below) is an example of how tipping fees can be varied to support waste diversion objectives.

Recycling	Mixed paper, plastics, metal, glass	Free
Waste	Residual waste with no Recycle or Reuse options	\$108/T
Demolition and Construction Waste	Non-recyclable only	\$108/T
Mixed Waste	Contains more than 5% recyclables	\$216/T
Dirty Wood	Painted, glued, etc.; suitable for biofuel	\$70/T
Clean Wood & Yard Waste	Suitable for compost	\$40/T

Organics Diversion

SLRD waste composition data presented in the Stage 1 report indicates that, by weight, organic waste (primarily food) is 43% of what we landfill. Consequently, establishing mechanisms to capture organic waste for other purposes (e.g. compost, energy) has the greatest potential for waste diversion. The southern SLRD is particularly fortunate because of the investment in organics processing facilities already in place in Whistler (the RMOW composting facility) and Pemberton (Sea to Sky Soils). The current challenge is to establish an effective collection system to capture the organic waste to support these facilities. The options listed below are intended to address this challenge.

1. Residential curbside collection of organics:

- **Curbside kitchen scraps collection.** Weekly curbside kitchen scraps collection is becoming an increasingly popular service in BC communities. Many programs exist on Vancouver Island and in the Lower Mainland. In October, 2012 the City of Grand Forks (population of 4,000) began the first weekly curbside kitchen scraps collection service in the province's interior. Each home received a plastic "green bin" that cost the regional district approximately \$30 each. They report that the residential collection breakdown (by weight) is currently: 40% green bin materials, 38% waste and 22% recyclables.
- **Curbside yard waste collection and composting (seasonal).** Residents in Squamish receive seasonal yard waste collection. A similar service could be offered in other communities that provide curbside collection, particularly if those communities are observed to generate significant yard waste volumes in the residential waste stream.
- **Collection of commingled food and yard waste.** As an alternative to providing separate collection services for kitchen scraps and yard waste, some communities are opting to collect these two organic waste streams together. For example, both Vancouver and Delta have recently added kitchen scraps to their existing yard waste programs. Vancouver provides cart based collection, while Delta residents designate a regular garbage can as their organics bin by applying a "Green Bin" a sticker provided by the municipality. The commingled organic waste is collected weekly in both municipalities.



2. Food and yard waste depots and drop offs:

- **Maintain existing drop offs.** There are drop off locations for food waste and yard waste in Squamish and Whistler. The Whistler Farmers Markets also offers a location for the drop off of food waste, which provides a great example of "closing the loop."
- **Establish additional food and yard waste drop offs.** Currently, there is no location to drop off food waste or yard waste in Pemberton. Until curbside services are readily available, convenient drop off locations for food waste and yard waste could be established in all communities.

3. Collection of food waste from Multi Family (MF) and Industrial/Commercial/Institutional (ICI) properties:

- **Support private collection by making organics diversion mandatory.** Municipal bylaws can be used to mandate waste collection services at residential, MF and ICI buildings. For example, in Osoyoos, MF buildings are mandated to have a recycling collection service. In San Francisco, all MF and ICI buildings are required to have recycling, garbage and organic waste collection. Bylaws can be

applied broadly or limited to specific types of buildings (e.g. only large grocers and restaurants, only ICI, or only MF).

- o **Support private collection through the application of a disposal ban on organics.** The Regional District of Nanaimo, to support their local privately built and operated composting facilities, banned ICI food waste from their landfill in 2005, which served as a key driver for the waste collection industry to provide organic waste collection service to businesses and institutions in the area. The Capital Regional District and Metro Vancouver have opted to ban all organic waste from disposal to drive both private sector collection activities and the setup of municipal curbside and multi-family collection programs.
- o **Establish a collection service for MF buildings.** Port Coquitlam offers organics collection to apartments and townhouses. The green carts are picked up weekly between mid-May and mid-November and on alternate weeks the rest of the year. This program is voluntary.
- o **Establish a collection service for small ICI locations.** In areas where residential curbside collection of organics is established, the same service can be offered to small ICI locations such as coffee shops, offices and churches. By allowing ICI locations to participate in a municipal collection services, the costs to have organics collection are likely to be more affordable and therefore encourage more small businesses to participate.



4. Encourage and support on-site composting for ICI and MF properties:

- o **Undertake a demonstration project.** In an effort to increase organics diversion and reduce waste-hauling costs in the multi-family sector, Metro Vancouver is currently piloting a fully-automated, on-site composting system called The Rocket. Malaspina Village, a 67 unit Coquitlam townhouse complex is the first Metro Vancouver affordable-housing facility (and the first site in Western Canada) to get the unit. Residents will be using the device to compost their kitchen scraps with the 5 year goal of it paying for itself by greatly reducing waste-hauling costs from the site. All finished



material will be used on-site in community allotment gardens and for site landscaping. Metro Vancouver selected this technology because of its transferability to the ICI sector (e.g. hospitals, universities, sporting facilities, schools, and care facilities).

Another pilot is being conducted as a partnership between the Strathcona Business Improvement Area (SBIA) and the City of Vancouver. Food scraps are collected from commercial businesses (SBIA members) and composted in a "Jora 400K" in-vessel composter. Food scraps are collected from businesses through a local social enterprise

organization and delivered to composting facility located in a newly created Resource Park. SBIA

created the Resource Park on a disused parking lot. The Park houses a material exchange, recycling collection hub, urban garden plots and a sitting area, in addition to the micro-industrial composting facility.

- o **Work to remove regulatory barriers.** Often on-site composting at MF or ICI locations is prevented by local land use bylaws. If it can be demonstrated that on-site composting can be done cost-effectively without impacting on neighbouring properties, then a reconsideration of the language and application of local bylaws that unreasonably restrict on-site composting would be required to allow for the potential for more MF and ICI locations to take advantage of on-site composting technologies.

Residential Recycling

There are recycling collection services available throughout the corridor for residents in the form of curbside collection services in Squamish, Britannia and Furry Creek, and depots for the rest of the area. However, an estimated 13% of Squamish's residential garbage and 23% of Whistler's is considered recyclable. In areas without curbside recycling, the percentage of recyclables in the garbage is typically higher. Options to enhance the residential recycling system include:

1. **Implement curbside recycling in Pemberton.** There is no local government-provided curbside collection services for recycling, organics or garbage in the Village of Pemberton. A key recommendation in the *Zero Waste Strategy for Area C and Pemberton* is the implementation of curbside collection of recyclable and organic wastes. Financial incentives may be available to the Village or SLRD from Multi-Material BC to provide curbside recycling collection services to Village residents. These incentives may cover all or a portion of the costs of recycling collection.
2. **Establish curbside collection bans on recyclables in the garbage.** In the City of Nanaimo, residents are prohibited from placing recyclable items and yard waste in the garbage. This is enforced by the collection truck drivers leaving behind a garbage can that with obvious infractions (e.g. can half full of leaves or cardboard) along with an infraction notice, as well as random spot checks throughout the year by enforcement staff. This hard-nosed approach initially generated significant media attention which resulted in a high level of awareness of the City's solid waste collection policies.

Multi-family and ICI Recycling

Private waste collection services are available to collect recyclables from MF and ICI properties in the southern corridor, however not all MF and ICI locations have these services in place or fully take advantage of the services that they do have in place. Waste composition data presented in the Stage 1 report indicates the 24% of Squamish's commercial garbage is recyclable, 39% of Whistler's ski resort accommodation garbage is recyclable, and 21% of commercial grocery store garbage is recyclable. Since recycling services are readily available this

data indicates that there is a significant opportunity to increase diversion by improving the use of existing recycling services. The following are options to increase the diversion of recyclable materials generated by MF buildings and ICI locations.

1. **Understand the barriers.** Although the composition data indicates that there are improvements to be made on recycling within the MF and ICI sectors, there is no current data on the how many MF and ICI buildings have recycling collection services, nor has there been a detailed assessment of the barriers to hiring a service or to participating fully in services available already on-site.
2. **Implement disposal bans.** Disposal bans at municipal and SLRD transfer stations and landfills reinforce the expectation that ICI and MF buildings have on-site recycling collection. Additionally, bans encourage the waste collection industry to work closely with their customers to ensure that they have a collection service and that they use it.
3. **Implement mandatory recycling.** Mandatory recycling is the requirement that all MF and ICI buildings have a recycling service. In the Regional District of North Okanagan and in many Metro Vancouver municipalities, this means mandatory participation in the recycling collection service provided by the municipality. In other areas, it is mandatory for each building to have a recycling collection service, but the service provider is the choice of the MF/ICI building owner. As of May 19, 2014, financial incentives are available to recycling collection companies from Multi-Material BC to provide recycling collection services to multi-family buildings.
4. **Provision of collection services for MF and small to medium business.** Small businesses and MF properties often report that finding an affordable recycling collection service to pick up their relatively small volumes of recyclables can be challenging. In areas where the local government provides residential curbside recycling collection, the same service can be offered to small ICI and MF locations, assuming they can be serviced by a residential level of collection. By allowing ICI locations to participate in a municipal collection services, there is the potential to improve the economy of scale of the service for all participants. For small businesses, the cost of participating in a municipal service are likely to be much more affordable than hiring a collection service independently.
5. **Encourage recycling and waste minimization at events.**
 - o **Prepare Event Guidelines.** As reported in Stage 1, Whistler has sustainable event guidelines that mainly target larger events. These documents could serve as a template for similar guidelines to be made available for events in Squamish, Pemberton and the other parts of the SLRD. Guidelines on how to create a zero waste event, regardless of the size, would inform users about the resources available to them in each area (renting, recycling, composting).
 - o **Provide Loaner Equipment.** In support of both public and private events, reusable equipment could be lent out to event organizers. Cowichan Valley Regional District lends out collection containers and signage to public and private events. According to their website: *"We provide you with*

everything you need to create up to 12 Zero Waste stations, including totes and signage. Staff have lots of experience in helping events, both large and small, put on a successful Zero Waste program and we're happy to help you design the perfect program for your event."

6. **Improve recycling at tourist accommodations.** Almost 40% of garbage coming from tourist accommodations is recyclable. Although, there are significant challenges in creating recycling behaviour within a transient population and minimal effort is applied in most tourist accommodation properties (hotels and condominiums) to support visitors to recycle effectively. Additionally, there is variance in how property management companies and cleaning staff treat the waste materials generated in guest suites and rooms. Options to improve on the current situation include:
 - o Establish a stakeholder working group to better understand the barriers to recycling in tourist accommodation.
 - o Design and implement a pilot project to address the barriers, measuring the extent and nature of the recyclables in the garbage coming from tourist accommodations.
 - o Share demonstrated successes with the all tourist accommodation stakeholders and identify mechanisms to support on-going improvements.
7. **Mandatory space allocation.** One of the most common barriers to establishing recycling in MF and ICI buildings is the lack of available space for collection containers. To mitigate this barrier, many municipalities in North America are including mandatory space allocations in their building requirements for both new developments and significant re-developments and renovations. For example, in September 2013, Pitt Meadows council adopted Policy No.C060: Specifications for Garbage, Organics, and Recycling Storage Space in New Multi-Family Residential and Mixed Use Developments. Pitt Meadows based their specifications on a model bylaw developed by Metro Vancouver in consultation with the municipalities and the development community. The model is intended to create consistency within the regional district on space allocation, as well as reduce the amount of legwork each municipality would have to undertake to prepare their own policy.
8. **Establish a zero waste technical support program for ICI and MF buildings.** Managers of ICI and MF properties often claim that lack of time and information are significant barriers to the setup of waste reduction and diversion programs within their business or building. In recognition of these barriers, some local governments have implemented technical support programs. Examples of different approaches include:
 - o The City of Penticton in partnership with the Regional District of Okanagan Similkameen offered waste and energy audits to local area businesses.
 - o Metro Portland's 'Recycle at Work' program provides free customized reduction, reuse and recycling assistance to businesses. On-site waste audits, recycling boxes, ready-to-print posters,



Metro Portland poster

factsheets and videos are available to interested businesses.

- o The City of San Francisco provides free stickers and signage, as well as free on-site training sessions for tenants and building managers.

New Recycling

New recycling markets are always emerging, as industry figures out how the material in one type of discarded product or packaging can be a resource for a new product in a manner that is financially viable. In recent years, recycling of mattresses, asphalt shingles and polystyrene foam (commonly known by the brand name “Styrofoam”) has become more established.

The District of Squamish currently accepts asphalt shingles and polystyrene foam at no cost at the landfill. The City of Vancouver accepts mattresses and box springs for recycling at a cost of \$15 per piece. Canadian Mattress Recycling, based in Vancouver, is now accepting other furniture that can be dismantled and recycled, including desk chairs, couches, and sofa beds. Options to establish new recycling opportunities in the SLRD include:

- o **Establish areas at waste management facilities for new diversion opportunities.** Once local diversion markets are determined to be stable, establish areas at waste management facilities for storage of new materials (assuming space is available) and implement the appropriate pricing structures to encourage both diversion and cost recovery are achieved. Investment in new diversion opportunities needs to consider products that are intended to be included under BC’s extended producer responsibility regulation.
- o **Actively seek new opportunities for diversion.** Continue to seek opportunities for waste diversion and be open to piloting new collection programs at waste management facilities to assist in determining realistic diversion potential and costs.



Mattress coils at a scrap metal yard

Promotion and Education

All 3Rs programs and activities require that the intended audience is aware of the opportunities available to them. Promotion and education are critical support mechanisms to successful waste diversion. Currently there is on-line information provided by the SLRD, member municipalities, recycling collection companies and local environmental organizations. The SLRD has a Zero Waste Educator that provides 20 workshop per year to schools throughout the SLRD and conducts an Earth Day event. Additionally, the SLRD has provided funding to AWARE’s Zero Waste Station at the Whistler Farmers Market.

There appears to be limited coordination between organizations involved in these promotion and education efforts and, as a result, there are inconsistencies in the information made available to the public. To enhance local promotion and education efforts, the following options should be considered.

1. **Establish a mechanism for sharing and coordinating** promotion and education efforts amongst organizations involved in promotion and education, including local environmental organizations.
2. **Aim for consistency** between the local governments in 3Rs communications including campaign messaging, colour coding and branding.
3. **Copy successful campaigns** developed elsewhere. Many organizations are happy to share their campaigns and art work. For example, last year the Regional District of Nanaimo was supplied with all of Metro Vancouver's "Make Memories, Not Garbage" campaign art work for free for use in their area. In addition to Metro Vancouver, the North Shore Recycling Program shares their campaigns, and "3Rs.ca" is a website where local governments across Canada are able to post their campaign material for any organization to use.
4. **Promote RCBC's hotline and Recyclopedia.** RCBC acts as a central repository for "where to" and "how to" recycle information for all of BC. They have both a telephone hotline and a web-based information service called Recyclopedia. These services are funded primarily through local governments and stewardship agencies.

Behaviour Change

Engaging in reduction, reuse and recycling in all aspects of life (home, work, school, when shopping, on vacation, when recreating, etc.) requires awareness that moves to action and ultimately habit (a.k.a. behaviour change).

1. **Engage in community based social marketing.** Community-based social marketing (CBSM) is an approach to program promotion and education that encourages high rates of effective participation and long-term behavior change. The community-based social marketing process centres on uncovering barriers that inhibit individuals from engaging in sustainable behaviours, identifying tools that have been effective in fostering and maintaining behaviour change, then piloting takes place on a small portion of the community followed by ongoing evaluation once the program has been implemented community-wide. Therefore, as new behaviours are identified as desirable to achieve zero waste objectives, CBSM should be employed and should include:
 - o **Identification of existing barriers** to desired behaviours
 - o **Research on successful approaches** in other jurisdictions
 - o **Undertake pilot projects** to confirm that a selected approach will be effective in the SLRD
 - o **Monitor and measure** to confirm that objectives are being met

Extended Producer Responsibility

As described in the Stage 1 report, Extended Producer Responsibility (EPR) is a policy tool that aims to shift the responsibility for end-of-life management of products (physically and economically) to the producer and away from local government, and to create an incentive for producers to include environmental considerations in the design of products. EPR programs in BC are mandated by the BC Recycling Regulation. The regulation requires producers of the designated products to develop a program for their collection and recycling or disposal. Future categories for consideration in Recycling Regulation include packaging and printed materials (from ICI sources), construction and demolition materials, furniture, textiles and carpet. Options for consideration in relation to EPR include:

- 1. Continue to participate on BC Product Stewardship Council.** The SLRD should continue to participate on the council with other BC regional districts. Associated with that, the SLRD could liaise with member municipalities to share information on the outcomes of the BCPSC meetings and provide information on other EPR-related initiatives.
- 2. Establish a policy framework for making decisions regarding participation in current and future EPR programs.** As EPR becomes an increasingly significant component of BC's waste management system, the SLRD and member municipalities may benefit from determining the extent that they wish to engage in EPR-related services. In BC, three models of local participation appear to be emerging:
 - i. Provide as broad a range of EPR drop off services at local solid waste facilities as possible (i.e. try to provide "one stop drops")
 - ii. Minimize local government participation or do not participate in EPR programs directly
 - iii. Hybrid: Participate in the collection of specific products and packaging based on some or all of the following:
 - Available space and resources to manage the EPR program at local government facilities
 - The current role of the local government in collecting the designated product/package
 - The level of remuneration offered by stewardship organizations for the collection service
- 3. Advocate for reasonable service levels for the SLRD from all EPR programs.**
- 4. Advocate for full cost compensation** for all organizations involved in collections on behalf of producers.
- 5. Increase public awareness.** With the substantial growth of the number of products covered by EPR programs in BC, many citizens are unaware of the take back programs and opportunities. To ensure that

EPR materials are diverted from landfills, more information needs to get into the hands of consumers on the range of goods covered by EPR programs and how they can participate in the SLRD.

6. **Establish landfill bans on EPR materials/products.** To reinforce that EPR materials should not be in the waste stream, disposal bans can include all designated EPR products and packaging. Cowichan Valley Regional District's solid waste bylaw bans all EPR materials, as well as all recyclables and organic waste (yard waste and food waste) from disposal in the garbage stream.
7. **Ensure that there is a land base that can accommodate the shift to EPR.** EPR is frequently associated with "take back" programs, which requires the siting of depots. For EPR to be successful, take back depots will need to be sited with users' interests in mind. Pre-establishing where these facilities will go can help to prevent the emergence of conflicting uses. Local land use planning (zoning and OCPs) will need to recognize the evolution of "reverse retail" so that there is appropriate land available to accommodate EPR take back depots.

Leadership

Local governments espousing zero waste can lead by example by establishing progressive internal waste reduction policies and programs. Providing waste minimization leadership shows commitment and acts as a model for local businesses and institutions. A leadership role would include procurement policies that support waste minimization and aggressive waste minimization programs in all operations.

1. **Establish internal 3Rs initiatives.** The City of Markham in Ontario is a good example of a leading by example; they have implemented the following initiatives within their municipal operations:
 - Removed all garbage containers from staff work stations and offices (went from 500 containers to 45)
 - Provided a small blue box at each desk (staff was instructed to empty as needed into larger centralized recycling container)
 - Introduced centralized organics containers
 - Established internal material bans from garbage
 - Developed a Zero Waste Food and Catering Services and Events Policy
 - Developed a Local Food Plus Procurement Practice
2. **Establish procurement policies that support the 3Rs.** The City of Richmond, BC has an environmental purchasing policy and guide, which includes an environmental purchasing checklist for suppliers to complete. Other opportunities to lead by example are:
 - o **Require the use of locally generated compost** in internal operations and contractors, wherever applicable (parks, road works, etc.).
 - o **Require a minimum amount of recycled content** in material purchases where the quality required will not be compromised. Examples of common recycled-content products include office paper products (copy paper, file folders, envelopes), toilet paper, paper towels, concrete and plastic benches, litter cans and recycling boxes.

- O **Require waste management plans** to be submitted at part of all construction, demolition and renovation bids (recognizing high diversion and use of recycled content in the allocation of points for contract award).