



Local Waste  
into **LOCAL  
JOBS**

Labour Market Strategies for the Capital Region Resource Recovery Sector

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## Local Waste into Local Jobs: Labour Market Strategies for the Capital Region Resource Recovery Sector

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## Introduction

In 2015-2016, the Community Social Planning Council of Greater Victoria studied Labour Market Partnerships in the Waste Management and Resource Recovery Sector in British Columbia's (BC) Capital Region. The study focused on low-barrier job opportunities suitable for increasing the employment of historically marginalized and disadvantaged populations. The report was the result of in-depth research and input from a broad range of key informants and stakeholders.

Waste management is a highly competitive and dynamic business where small profit margins are obtained from certain waste streams. It is dependent on the volatile commodities market which, over the last few years, has seen prices declining. Economy of scale is also a topic of concern.

Despite the myriad of challenges, there is an opportunity for small businesses and employment social enterprises to provide services that do not require high technology and infrastructure to treat particular waste streams, such as mattresses and construction, renovation, and demolition (CR&D) materials.



# PROJECT COMPONENTS

## Phase 1 - Research (May-Dec 2015)

- **In-depth review of the BC Capital Region waste management & resource recovery sector from a labour market perspective**
- **Identification of best practice examples of low-barrier job creation in the sector from other Canadian jurisdictions**
- **Analysis & identification of priority waste streams with greatest low-barrier job creation potential**

### Phase 1 Key Findings:

#### Labour Market Perspective:

- Waste sector jobs are "good jobs" that offer a living wage and opportunities for **advancement**.
- With an average weekly wage of \$1,000 in 2007, jobs vary between unionized employers and contractors
- While some jobs exist in collection, greater job growth potential exists in increased local resource recovery and recycling

#### Prioritize waste streams that:

- Make up a portion of material currently landfilled
- Can be diverted or recycled
- Through diversion or recycling will create low barrier jobs

#### Priority Waste Streams:

1. Textiles & carpets
2. Mattresses and furniture – mattress components not yet recycled locally
3. CR&D
4. Legislated obsolescence, returned materials & hard to collect materials
5. Waste oil – animal & vegetable

**For the complete research report, please see**  
<http://communitycouncil.ca/RRLMP#PhaseOne>.

# A Blueprint for Resource Recovery Sector Labour Market Partnerships

## Phase 2 - Strategy

### Labour Market Strategy

#### Stakeholder Engagement (Dec 2015-Mar 2016)

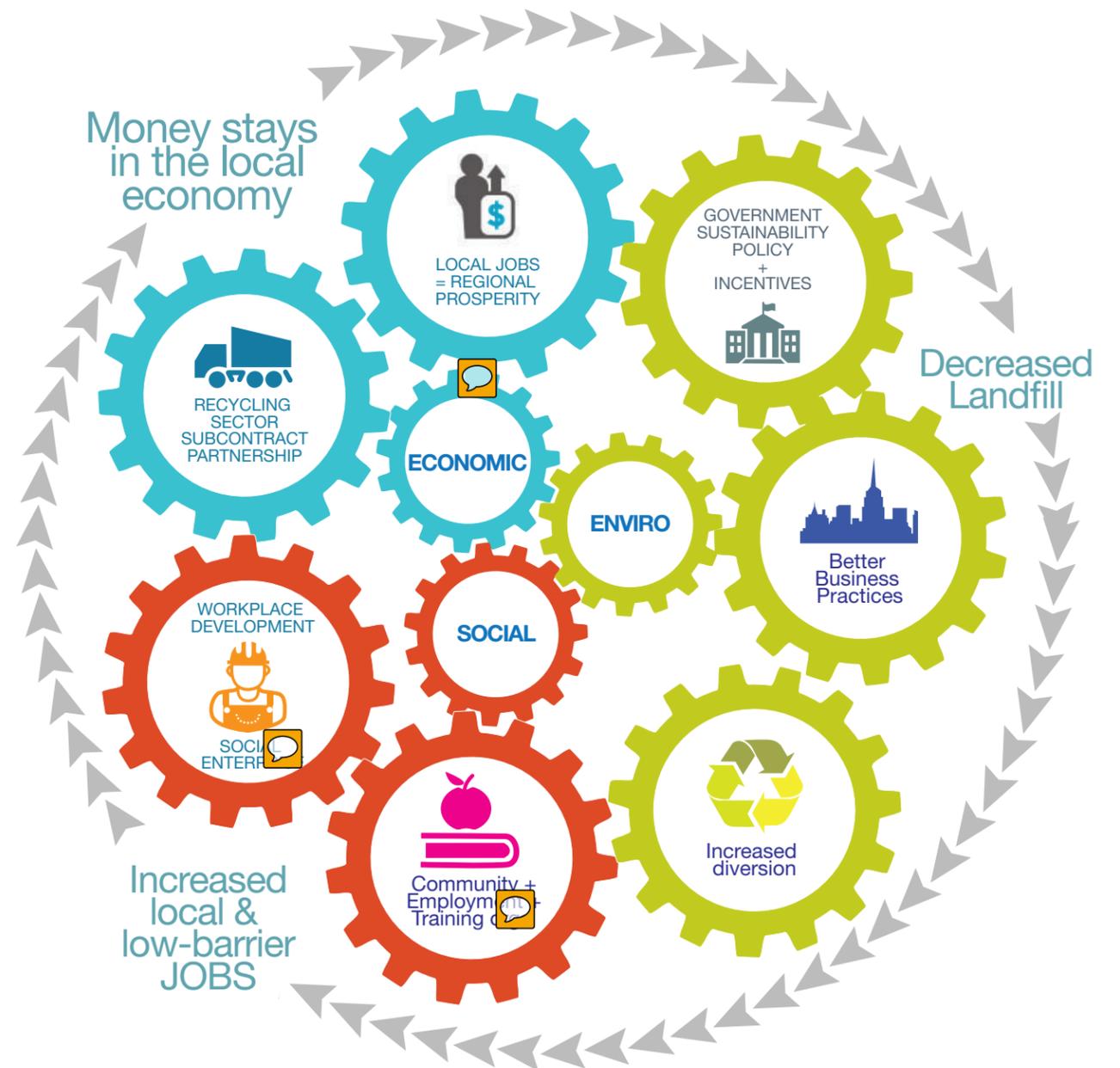
- Convened over 35 stakeholders who identified actions, immediate priorities and partnership opportunities
- Seven subsector meetings were also held
- Results informed Phase 2 Labour Market Strategy Report

#### Phase 2 Report (Mar 2016)

- Share identified areas of action and stakeholder recommendations
- Provide a blueprint for acting on opportunities

#### Key Findings:

- Focus on 'low hanging fruit' and most immediate opportunities
- Use these to demonstrate greater job creation potential
- Two streams of hard to recycle items were identified
  - CR&D
  - Bulky items – particularly mattresses
- The job creation focus involves employment training and partnerships with multiple stakeholders.



# Working Towards Resource Recovery Sector Labour Market Partnerships

## Regional Coordinator:

The need for coordination and the capacity to make one call to find out where and how to access services was identified as a priority. Only 50% of hoteliers, for example, are aware of recycling mattresses and furniture. There is no coordinated network in the Capital Region.

## Recommendation:

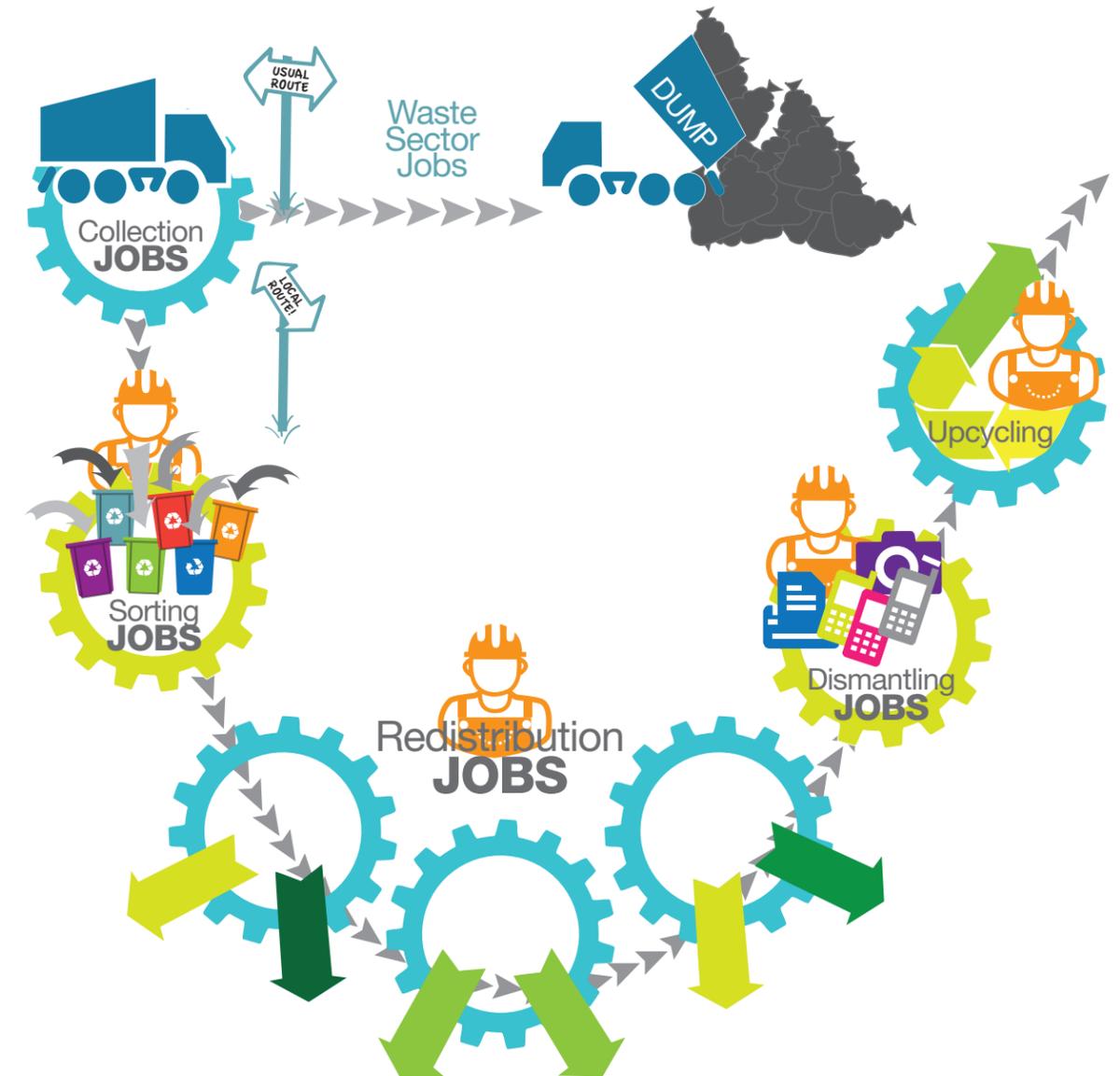
Set up a Capital Regional District (CRD) Hotline for businesses and residents to call about how to recycle bulky items singly or in large volumes. Add support option to the CRD website.

Resource Recovery is a complex industry with many stakeholders, each playing a particular role. A solution that meets the needs of all stakeholders requires engagement from all parties. The two engagement sessions brought together 42 representatives from business, government, nonprofits, and associations and generated energy and enthusiasm to create a social enterprise solution.

## Stakeholder Role

<b>Industry Associations:</b> Coast Waste Management Association (CWMA), Greater Victoria Harbour Association (GVHA), Vancouver Island Construction Association (VICA)	Educate and facilitate member discussions; advocate on behalf of members
<b>Waste Management Industry</b>	Provide waste collection and disposal services according to contracts
<b>Governments:</b> municipal, regional, provincial, federal – Canadian Council of Ministers of the Environment (CCME)	Plans, sets policy and regulations, engages contractors to meet the needs of the community
<b>Industrial, Commercial and Institutional (ICI) sector:</b> Hoteliers, Retailers, Health Care, etc.	Generate volumes of waste that must be collected, disposed and/or recycled; contract services to private contractors
<b>Landfill and recycling facilities</b>	Receive and process non-recyclable waste that is separated at the source
<b>Universities</b>	Train professionals in resource and environmental management; research new uses for non-recyclable items, e.g., furniture
<b>Non-profits:</b> BC Housing, Association of Apartment Managers, charities, employment training agencies, social enterprises, social service agencies	Provide services (e.g., training and supports) to persons belonging to specific populations in need and advocate on their behalf

## LOCAL PROCESSING JOB POTENTIAL





“Consumers need a simple way to find out where and how to dispose of recyclables.”

“The research study and engagement sessions revealed significant opportunities, challenges, solutions, and recommendations for consideration”

## Working Towards Resource Recovery Sector Labour Market Partnerships cont'd

Although Resource Recovery is a growth sector brimming with opportunity, key challenges exist. As waste management becomes more mechanized and consolidated, gaps in services arise. In a region where a significant portion of recyclables is barged to Vancouver, the potential for alternatives exists. The research study and engagement sessions revealed significant opportunities, challenges, solutions, and recommendations for consideration:

### OPPORTUNITIES

- Collection, sorting, re-distribution, are reducing contamination in waste streams, and re-distributing re-use able items directly
- The Residential sector has no pickup service for hard to recycle materials (e.g., mattresses and CR&D).
- Mattresses & furniture are highly problematic to landfill.
- Dismantling materials into components for recycling reduces landfilled waste and requires labour
- Consumers need a simple way to find out where and how to dispose of recyclables.
- Materials salvaged in the region are essentially wood and steel components.
- There is potential for recovering additional components such as fibers, foams, felt, and coconut husks that would otherwise be landfilled.
- Some jurisdictions such as Vancouver have banned mattresses from the landfill creating increased demand for recycling.
- Local recycling and job creation levers Corporate Social Responsibility (CSR)

### Recommendation

Implementing mechanisms such as material landfill bans that allow recycling enterprises to establish larger profit margins may be better than extended producer responsibility (EPR) or stewardship programs that can lead to reduced benefits (i.e., standard fees).

### CHALLENGES

- Lack and cost of required storage and processing space
- Lack of coordinator to create ongoing value chain
- Treading on the territory/business of existing recyclers
- Health & workplace safety concerns
- No policy driver to recycle/re-use
- The collection of mattresses & furniture is difficult due to a lack of coordinated logistics in the region.

### SOLUTIONS

- Build industry-community partnerships that improve cost efficiency, create jobs, and increase volumes to collection points.
- Build a resource recovery value chain with the ICI sector, particularly, with hoteliers, the regional health care authority, and retailers
- Regional coordination can raise awareness and be a central source for information.
- Explore online matching of goods supplied and desired

## Emerging Opportunities

Local resource recovery and recycling is the key to creating local jobs. To realize this potential, government, industry, and community organizations can collaborate to achieve social, environmental, and economic goals. During the engagement sessions, the following opportunities were identified and prioritized for development.

**Emerging Opportunities: Mattress and Upholstered Furniture Recycling** As mattresses and bulky items are problematic for all stakeholders, the potential of this waste stream was clearly evident. A co-created solution will benefit all stakeholders, the broader community and, ultimately, the environment.

### Characteristics of Bulky Items – Mattresses & Furniture:

- A large component of illegal dumping
- Difficult to transport
- A challenge for thrift shops to receive, store, and re-sell
- Absorb volume from hotels and cruise ships
- Backhauled to the mainland taking the potential jobs and income out of the local economy
- A challenge to the landfill (takes up significant space)

### OPPORTUNITIES

- Saves landfill space
- Conserves resources
- Provides low-cost alternative for purchasers
- Solution to pervasive problem
- Mitigates illegal dumping
- Reduces costs to government and the private sector
- Suitable for low-barrier employment
- Creates local employment/economic development

### CHALLENGES

- Both mattresses and furniture need to be dry and in their original shape in order to be fully recycled.
- The exposure to different weather conditions and soiled grounds reduces possibilities for further use and recycling.
- Tipping fees impose a barrier for residents to bring mattresses to drop-off/recycling sites contributing to illegal dumping
- The Waste Management and Resource Recovery sector is constantly changing.
- Data collection is not centralized.
- Market prices and demand for commodities are volatile.

## 9 Reasons to Recycle Mattresses

- 1 Reduce products in the landfill
- 2 Lessen illegal dumping
- 3 Increase the waste diversion rate
- 4 Create low-barrier jobs
- 5 Develop industry-community partnerships
- 6 Support social procurement
- 7 Enhance the local economy
- 8 Provide low or no-cost clean mattresses for re-use for persons in need
- 9 Recycle additional components such as cloth and husks that are currently landfilled.



## Example 1: Canadian Mattress Recycling

canadianmattressrecycling.com

Canadian Mattress Recycling in Delta, BC dismantles mattresses at a central depot and recycles at least 95% of their components. Salvaged steel, foam, plastic, cotton, polyester, coir, wood, leather, and cardboard become new products instead of landfilled waste.

What is reclaimed is sent to local processors, supporting jobs for people in the area and helping the economy and the environment, too. Canadian Mattress Recycling is a 100% locally-owned BC company located in the middle of Metro Vancouver on Annacis Island in Delta, BC and serves the entire Lower Mainland region and beyond. Fees for pick-up services and drop-off are posted on the website.

The company also supports community work and environmental projects.

## Working Towards Resource Recovery Sector Labour Market Partnerships cont'd

### Recommendation:

Develop a multi-stakeholder social enterprise for the re-use/recycling of mattresses and bulky items in a sustainable way that creates low-barrier training and job opportunities with a planned evolution into a recycling hub to dismantle, refurbish, or upcycle various materials.

### Opportunities

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### Emerging Opportunities:

#### Employment Development

Employment development systems require that job seekers know how to access training and employment supports, employers provide work placements, and job developers match individuals with job openings that meet employers' needs. The analysis below outlines the current state of employment development systems in the Capital Region. For more in-depth information, please see the Phase 1 Labour Market Partnership report by the Community Social Planning Council [http://communitycouncil.ca/sites/default/files/2015\\_LMP\\_Building\\_an\\_effective\\_system-web\\_0.pdf](http://communitycouncil.ca/sites/default/files/2015_LMP_Building_an_effective_system-web_0.pdf)

### Emerging Opportunities:

#### Employment Development

##### Opportunities

- Employment training and job coaching exists in the Capital Region (e.g., The Cridge Centre, WorkBC)
- Work-related certificate courses are provided at no cost
- Inclusive hiring levers CSR
- Individual job seeker assessments
- Ladder people into jobs
- Job sharing
- WorkBC funding

##### Challenges

- Internal nonprofit organizational capacity
- Health & safety concerns
- No Resource Recovery Coordinator in the region
- Finding Employer champions of inclusive employment
- Realistic job task analysis
- Need to ensure work quotas are met
- Process to access funding is bureaucratic

### Emerging Opportunities:

#### Partnerships

The engagement sessions shared the experiences of industry-government-nonprofit partnerships. Partnerships among business, government, and non-profits generate:

- Mutual benefit
- A sense of long-term development and commitment
- Synergy for a better, innovative solution that meets stakeholders' needs on all sides
- Collaboration for growth and a sense of cooperation.

##### Opportunities

- Work-ready employees
- Share knowledge, influence policy
- Leverage existing networks
- Add agency capacity to the enterprise
- Leverage CSR – accredited Green Key eco-label for hotels
- Innovation in business processes and end products
- Use of volunteers

##### Challenges

- Funding for coordination, start-up, training, and supports for employment development
- Industry champions
- Harder to define benefit to profit & shareholders
- Equipment/capital costs
- Labour costs
- Structure may not benefit the target population
- Financial viability
- Policy barriers

## Example 2: Tradeworks

Tradeworks Training Society works with women and community members from Vancouver's Downtown Eastside who experience multiple barriers to employment.

Tradeworks provides life- and employment skills training plus hands-on work experience in carpentry.

Graduates use reclaimed wood to create Tradeworks' product line. Upcycling clean wood, the program demonstrates the power of collaboration between industry and community to achieve triple bottom-line goals.



## Example 1: Penticton Area Cooperative Enterprises

In the Okanagan-Similkameen Regional District, a type of hub is supported by regional government and works with a number of agencies such as Penticton Area Cooperative Enterprises (PACE) to dismantle mattresses and sort construction materials on site. The Okanagan Upcycling Resource Society <http://www.ours-penticton.ca/> accepts dimensional lumber for reuse. Other services include collecting illegally dumped materials and palletizing electronics. Five-year contracts provide agency employees with jobs on landfill sites. WorkSafe BC supports, training, and insurance is covered by the community organization. The Regional District works cooperatively on Occupational Health & Safety training. There are occasional site meetings and contracts are reviewed for performance.

<http://www.rdos.bc.ca/departments/public-works/solid-waste/what-we-do/>

## Emerging Opportunities cont'd

### Diverting Construction, Renovation, & Demolition (CR&D) Waste

#### CR&D waste:

- Is largely landfilled due to costs of diversion, possible or known presence of hazardous materials, limited legislated requirement to divert
- Has a limited local infrastructure for disposal, recycling, re-use, and upcycling
- Demolition is often selected due to lower labour costs and time requirements compared with deconstruction which is more time-consuming and may delay development.

#### OPPORTUNITIES

- Saves landfill space
- Conserves resources
- Re-use provides a local low-cost alternative to buying new materials
- May mitigate illegal dumping and reduce costs to local governments and the private sector
- Generates local employment/ community economic development opportunities
- Target new construction rather than demolition to mitigate safety issues (i.e., clean wood vs. asbestos exposure)
- Create new markets for end use
- Collect other items at sites (e.g., plastic, cardboard)
- Leverage public desire to 'do the right thing'
- Use empty provincial space

#### CHALLENGES

- New materials are composite which are not readily recyclable
- Space to source separate on site
- Resistance by contractors
- Small contractors' low level of awareness
- Health & safety concerns
- Competing with Habitat for Humanity for re-usable items
- No policy driver to ensure CR&D is subject to waste diversion options
- Further development of mechanized options for processing
- Recycling/re-use companies cannot compete with the low cost of disposal at landfills (i.e., low tipping fees)



## Other Opportunities

### Redistribution

Charities, thrift stores, and retailers are interested in mattresses that can be re-used, gifted to those in need, or sold. For example, Sleep Country donates mattresses that are suitable for re-use but cannot be sold to a number of charities across Canada. On Vancouver Island, however, Sleep Country mattresses are shipped to the Lower Mainland. When taking used mattresses from customers, there is a 2-piece limit and customers are charged a \$15.75 environmental fee per item.

### Recycle Hub

The Phase 1 Report proposed a Recycle Hub as an innovative solution for stimulating the most local growth and development in the region's Waste Management and Resource Recovery sector. One of the main issues facing the sector is volume. A key strategy to reach sufficient volume is to expand mattress recycling operations to include additional waste streams, such as furniture and CR&D clean wood. With sufficient capacity, a regional Recycle Hub featuring a storage and re-processing facility could also upcycle components into new products, or repair/refurbish items for resale.

With coordination among stakeholders, a Recycle Hub could provide:

- Job training in each waste stream
- A combination of goods not suitable for that could result in volumes sufficient for remanufacturing, repair, refurbishing and resale.
- Paid employees/volunteers who mentor and train persons with barriers
- Community education on how to recycle particular goods
- A marketplace for repaired, refurbished, and upcycled goods
- Entrepreneurial workshops on how to market and resell these goods



## Example 3: Soap For Hope

Disaster Aid Canada's Soap for Hope program in Victoria is a great example of re-distribution. Individual hotels donate used and unused soaps, shampoo and other toiletries. Disaster Aid Canada has regular volunteers to sort, process and repackage these materials; local schools also get involved to learn about hygiene and how they can help in their own communities. These products are then shipped internationally to disaster areas. Additionally, individual bottles and bars of soap are provided to our local shelters and drop-in shower programs. This diverts personal toiletry materials and recyclable containers from landfill while redistributing materials to those who need it most.

[disasteraid.ca/index.php?p=1\\_9\\_Soap-for-Hope](http://disasteraid.ca/index.php?p=1_9_Soap-for-Hope)



## What is a feasibility study?

At the early stages of any business venture, more information is often needed to answer key business planning and operation questions. A feasibility study is designed to provide enough information to answer the “go/no-go” question – whether or not to develop the new enterprise in question. Feasibility studies help identify if a business concept has a reasonable chance of working effectively to achieve its social, environmental, and economic goals.

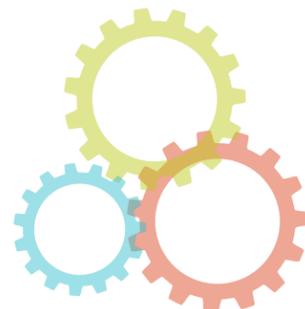
# Next Steps

## Feasibility Studies

Stakeholders who participated in engagement sessions recommended that a feasibility study is needed to better understand the market for and viability of an enterprise for dismantling and recycling of bulky items in the Capital Region. The feasibility study can include examining the Metro Vancouver experience with mattress recycling, successful examples in other jurisdictions, and different business models.

### Assessing the Viability of a New Enterprise in the Capital Region: Key Questions for the Proposed Feasibility Study

- Who are the customers?
- How many customers are there?
- How much will they pay?
- Who are the partners?
- What is the structure?
- What are the services to be provided now and in the future?
- What is the volume needed to breakeven?
- How much can ICI customers divert to the new enterprise?
- How will re-distribution and sorting be handled?
- How many times does the mattress get handled?
- Is a recycling hub the desired direction and/or model?
- Is a mobile dismantling model feasible?
- What other waste streams can be added and what is the volume of each?
- How will significant volume in creases be managed periodically?
- How much revenue can be generated?
- What are the operating costs?
- What are the equipment and training costs?
- How will it be financed?
- What funding is available?
- What capacity for storage and reprocessing is needed and what will that cost?
- How will health and safety concerns be addressed?
- What policy changes are needed to support this enterprise?
- Is the CRD willing to implement a landfill mattress ban?
- What is Vancouver’s experience with the mattress ban?
- What is the possibility that the Province of BC will initiate an Extended Producer Responsibility program for mattresses and furniture in the near future?
- In the current state, the sale of recovered materials will not cover all operating costs. What is the right combination of revenue sources necessary to achieve enterprise viability



# Recommendations

Stakeholder recommendations fell into one of three categories: (a) pilot projects, (b) awareness and education, and (c) policy changes. The actions proposed below are intended to continue the discussion.

## Pilot Project Suggestions

- Foster partnership between one agency and one business
- Establish a 2-bin system at CRD project sites – one for salvageable materials and one for garbage. Provide small bins to collect refundable items
- Engage a waste management/resource recovery coordinator
- Develop a checklist of guidelines to identify mattresses suitable for reuse
- Establish a CRD 1-800-RECYCLE hotline for businesses and residents



## Awareness and Education

- Offer training and education on how to salvage CR&D materials safely and how to assess a site for diversion potential/cost savings
- Promote success stories and include these in a business case
- Raise awareness of partnership benefits
- Support employers to access WorkBC funding for training
- Ongoing partnership development with key stakeholders (e.g., the construction industry)
- Support the CRD to convene thrift stores and other nonprofits to ascertain their capacity and interest in the concept



## Policy Considerations

- Disposal bans on recyclable components of the CR&D waste stream
- Refundable deposits on building and demolition permits to incentivize deconstruction, recycling, and reuse of CR&D materials
- Procurement policies that recognize social and environmental value
- Educate policy makers by demonstrating triple bottom line value
- A landfill ban on mattresses/upholstered furniture





## Conclusion

The recycling of mattresses and bulky items presents a promising opportunity for developing a social enterprise that resolves a common problem for stakeholders, while creating training and jobs for disadvantaged job seekers in BC's Capital Region. As participants have illustrated, the level of engagement, interest, and desire to continue the development process is encouraging. Securing funding for the feasibility study and ongoing project coordination is the required next step to facilitate subsequent information gathering and partnership development.

While getting started on such a venture may be challenging, finding the right mix of waste streams that will provide viable returns, we hope to continue this project into another phase. With potential for low-barrier employment, increased waste diversion, and cost efficiency, we hope stakeholders will think "long term" and develop a sustainable solution for turning local waste into local jobs.



## Thank you

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### STAFF, CONTRACTORS

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