



**MAY 6-8, 2015**

# **RCBC CONFERENCE**

creating the circular economy

*join the conversation*

## **Conference Findings**

(Product Stream)

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## ***SUMMARY***

During the RCBC 41<sup>st</sup> annual conference in Whistler May 6-8, 2015 there were a number of participatory sessions focused on the transition to a circular economy.

There was a high participation rate for those sessions among the 276 total conference attendees. Delegates included people from local and the provincial government, small business and industry, the nonprofit sector and individuals. Their positions in those organizations ranged from coordinator level to chief executive officer.

Participants were asked to identify policies and systems changes they felt were needed to make the transition to a circular economy in Canada. Attendees were asked as part of that process what they thought was the one simplest action that could have the most impact in that change.

Participants recorded their input on provided forms. These were collected at the end of each session and analyzed by the conference facilitation team. There was high percentage of contribution and a wide variety of input. In many cases, delegates offered similar insights. The following report summarizes those results.

## ***BARRIERS & CHALLENGES***

Participants were asked to identify the barriers and challenges they perceived in the transition to a circular economy. Fifty eight points were raised that covered five broader categories. These broader categories included:

1. Behavior
2. Cost
3. Products and business models
4. Education and awareness of circular economy
5. Systems thinking

### **Behavior**

Most of the 13 comments related to habits formed from ingrained cultural and societal mindsets. From a change-management perspective, this is referred to as mental models. This implies that the behavior is learned and can be overcome through a process of exposure to new concepts that challenge the mental models held by those individuals. Most felt that programs of public awareness and education campaigns were the most effective means to facilitate a greater acceptance of the circular economy concept and its principles.

### **Cost**

Nine of the remarks related to economics. Most of those were in regards to costs. In terms of production costs within the current linear economic model, several participants pointed to a disconnect between the full-cost accounting of products and the actual point-of-sale price.

Within this complex issue there were a number of points raised. These included:

- virgin inputs cheaper than recycled materials,
- incentives to use virgin materials in the form of subsidized resource extraction,
- the low cost of waste disposal,
- the lack of economic incentive to reduce waste (either by carrot or stick method).

One delegate identified the high cost of storage or warehousing surplus materials as a barrier for more instances of reuse.

### **Product Design & Business Models**

Under this category there were four main points raised, two of which related directly to the design of products. Those comments included a lack of incentive to design products that were more suited to a circular economy, as well as the need to design products for easier disassembly to facilitate the recycling process. However, the latter would also lend itself in theory to products that could more easily be repaired, upgraded or rebuilt, core circular economy principles.

One comment related to technology, referring to the challenge of designing a product, the core of which is not rendered obsolete by advances in technology over short periods of time.

Access over ownership is a primary principle of the circular economy, which can be adapted to a lease-based business model. However, one respondent opined that models available for lease didn't necessarily provide the choice or quality of the variety of products currently offered for sale.

### **Education and Awareness of Circular Economy**

Ten comments were offered in the area of education and awareness. The majority of comments can be summed up as stating that education was an important component to overcome the lack of awareness and knowledge required for business and consumers to adapt to a more circular economic model. Suggestions included a program of world-wide corporate engagement with specific initiatives to educate business on the importance and financial viability of adopting circular economic principles and practices.

### **Systems Thinking**

There were 22 remarks provided that fit into the systems-thinking category. While there was some overlap with other categories, it was this area where the majority of input was provided. Comments included a focus on a regulatory approach to create change through incentives. It was also noted systems thinking could break down barriers created by institutional and sector silos to facilitate a more integrated holistic approach. Also suggested was the need to change the marketplace through a shift in corporate and consumer culture. Other elements raised as issues within systems thinking included changing demographics, legal liabilities, indemnification, and geography. The implication on the latter point being that an area of B.C.'s size, diversity and population distribution could provide its own set of challenge.

## ***POLICY & SYSTEMS CHANGES***

Participants were next asked to identify policy and/or systems changes that could make a move to a circular economy easier. Consolidated in point form, the input covered the following areas:

### **Policy**

- Legislative and regulatory tools (regulations, EPR, mandatory warranties, recycled content, municipal bylaws, strata act.)
- Health & safety and taxation rules are archaic and need revision.

- Require EPR programs to invest in innovation regarding circular economy for recycled commodities.
- Financial incentives and penalties that facilitate transition to circular economy practices and design for environment.
- Outcomes-based approaches rather than prescriptive.
- Definitions of waste, permitting process.
- Tax reform, with instruments such as credits for adopting circular economy practices.
- Basel Convention restricts waste to be moved across borders, but this works against reuse in some cases e.g. Need to ship waste plastic to China for production, but it is prevented.

### **Systems Thinking**

- Expand existing programs to be agents of innovation.
- Change liability laws.
- Manufacturers providing replacement parts.
- Leasing vs. ownership.
- Creating local economies.
- EPR.
- It all comes down to design.
- “Market clout” – Wal-Mart and toxins.
- Applied design for the environment if used by regulators meaningfully.
- From manufacturing to services.
- Product to service transition.
- Framework statement of issue & solutions within a global political agreement (carbon/recycling).
- Privatize landfill sites so the owners will pursue economically viable materials; processing opportunities (Hartland Landfill in Victoria).
- Create system to collect reusable items at all transfer and recycling facilities.
- Insurance industry getting more involved.
- Adding value to improvements by owner or lender – how is this perceived?
- Knowledge sharing.
- Incentives for durability.
- Financials – subsidies.
- Affordable sustainable goods for consumers.
- Bold vision.

Delegates were asked, “what is the one easiest thing to change that would have the most impact?” Those responses were categorized into three sections. Below, consolidated in point form, are the input in those areas.

### **Education & Awareness Of Circular Economy**

- Integrate circular economy education into the K-12 curriculum as well as post-secondary programs.
- Leverage social media to raise awareness.
- Engage consumers in their responsibility regarding purchasing decisions.
- Focus on changing mental models towards greater acceptance of circular economy.
- Engage industry directly in circular economy education and best practices.

### **Policy & Regulation**

- Design guidelines for reuse and disassembly.
- Ban all household waste from landfill disposal.
- Landfill bans for stewardship products, recyclables, and items still fit for use.
- Label products for recycled content or other identifiable components as the food industry is regulated to do for nutrition.
- Integrated national/international laws, regulations, and policies.
- Government mandates on standards (eg. Co2 emissions or recycled content).
- Tax incentives from levels of compliance to standards.

### **Systems Thinking**

- Technology to facilitate behaviour change and make sharing systems more visible/reliable.
- Diverse collaboration.
- Design – going in – good outcome.
- Aligning economic and environmental factors/interests.
- Make existing programs more effective.
- Marketing values.
- Convenience.

## ***CONCLUSIONS***

While more comprehensive research is required, the data collected provides a snapshot of delegate perspective. What participants were asked focused on the ways and means to facilitate a transition to a circular economy. Their input suggests that a combination of legislative support, plus the application of education and awareness measures, applied in a systems thinking approach by a variety of governments, industries, and NGO organizations could achieve those results.

These findings will now be shared with the National Zero Waste Council to assist its work in developing a network of support for a circular economy across Canada.