



Zero Waste Committee Meeting Date: July 12, 2012

Intergovernmental and Administration Committee Meeting Date: July 18, 2012

To: Zero Waste Committee
Intergovernmental and Administration Committee

From: Simon Cumming, Division Manager, External Outreach and Intergovernmental Relations, Corporate Relations Department
Denise Philippe/Joanne Gauci, Policy Advisors, External Outreach and Intergovernmental Relations, Corporate Relations Department

Date: July 4, 2012

Subject: **Future of the Region Sustainability Dialogues and Post-Dialogue Forum: Dematerialization: Transitioning to an Economy Without Waste**

That the Board forward the report dated July 4, 2012 and titled “*Future of the Region Sustainability Dialogues and Post-Dialogue Forum: Dematerialization: Transitioning to an Economy Without Waste*” to member municipalities, and other related agencies for their information and comment.

1. PURPOSE

To provide an update on the Future of the Region Sustainability Dialogues and Post-Dialogue Forum held throughout the region in March and June 2012 respectively, on the topic of *Dematerialization: Transitioning to an Economy Without Waste*.

2. CONTEXT

Metro Vancouver’s Future of the Region Sustainability Dialogues, hosted in collaboration with local Chambers of Commerce and Boards of Trade, are high-profile discussions intended to help decision-makers shape the future of the region by presenting a range of views to stimulate fresh thought on regional issues.

The post-dialogue forums aim to move from dialogue to action by convening a small group of dialogue participants, subject matter experts and appropriate Metro Vancouver staff and directors to reflect on the outcomes of the dialogues and identify action areas for the consideration of the Metro Vancouver Board and other community organizations.

In March, Metro Vancouver hosted a dialogue series on the topic of dematerialization, in which dialogue participants were presented with the following scenario:

Economic growth brings challenges as we attempt to reconcile the consumption of materials with the finite limits of resources extracted from the earth. There is a growing need to increase resource productivity, improve quality of life, and ensure continued economic prosperity that is not based on increased consumption of materials and energy throughput. This need signals significant changes to our current economic system –

changes that mark the transition to an economy without waste. What would such a transition look like? What societal impacts might such a transition entail? What is the role for businesses and organizations, for producers and consumers, in transitioning to a new economic system?

Dialogues were hosted in Surrey (March 6), Vancouver (March 7), the Central Northeast (March 27) and the North Shore (March 28), followed by a post-dialogue forum (June 8).

Dematerialization was one of the key themes of Metro Vancouver's 2011 Sustainability Congress, and is an area that congress participants expressed an interest in discussing further. It is also a topic that will figure prominently in the upcoming Metro Vancouver 2012 Zero Waste Conference and the efforts to establish a National Zero Waste Marketing Council.

This dialogue series took advantage of an international conference “Sustainable Consumption Research and Action Initiative (SCORAI)” on dematerialization held in Vancouver, securing two international speakers for the March 6 and March 7 panels: Maurie Cohen with the New Jersey Institute of Technology and Peter Victor with York University. The dialogue series also aligned with a special breakfast presentation that featured a panel of international experts, again all visiting Vancouver for the SCORAI conference. In total, 10 subject matter experts were engaged as panelists, and were selected to provide a range of perspectives ranging from macroeconomic analyses to detailed, on-the-ground best practices.

Approximately 256 people participated in the dialogues, reflecting a cross-section of key stakeholders and community interests. This included the participation of five Directors and eight elected officials. The March 7 dialogue was webcast – our first live streamed dialogue – and secured 56 additional viewers/participants, with another 157 people viewing the session from the dialogue homepage in the weeks following. A cross-section of 20 key stakeholders and thought leaders joined with key Metro Vancouver staff directors at the post-dialogue forum to reflect on dialogue outcomes and consider ways forward.

A summary of the dialogues, which formed the basis for discussions at the post-dialogue forum, can be found attached. A comprehensive transcript of each dialogue (i.e., the Issues Summary Notes) is available on the Metro Vancouver website.

3. KEY THEMES

This set of dialogues raised public awareness around what dematerialization is and why it is an important concept for individual citizens, businesses and local governments to consider in their path towards sustainability. Dematerialization and its linkages with concepts such as sustainable materials management and zero waste were also considered, particularly by participants at the post-dialogue forum.

A large part of the discussions focused on identifying ways to better align practices, policies and procedures with “closed-loop” principles, where materials are better managed throughout their life cycle. Participants expressed the need to shift perceptions and focus away from “waste management” to “materials management”, to raise awareness around the inefficient use of materials and begin to target reductions in waste generation.

Barriers

The dialogues and post-dialogue forum engaged participants in a robust discussion of the complex challenges facing a region striving to transition to an economy without waste. Time was spent discussing the high-level challenges related to creating a societal shift in how we view and manage waste and materials, as well as the real challenges being faced by "on-the-ground" practitioners trying to grow best practices and implement innovative solutions.

With respect to facilitating a broader societal shift, the following challenges were identified.

- Focusing largely on "end of pipe" waste management solutions without regard for broader sustainable materials management that consider the full life cycle of materials, or waste prevention strategies that address the generation of waste.
- Lack of support for alternate models of economic development and well-being (i.e., "the public demands green solutions, but generally don't want to pay more for those solutions").
- Pricing systems that do not account for externalities or true market price, specifically the cost of pollution and waste management.
- A focus on efficiency as a goal without regard for reinvesting efficiency gains in the transition to a more sustainable economy.
- Not placing enough value on resources - materials are not valued high enough to keep them in our system longer and products are not designed to last, or for re-use or repair.
- Lack of adequate markets for materials currently recovered and available for re-use.
- A disconnect between what is happening on the ground within the business community and what policies are in place (or not in place) to support businesses in looking more closely at the sustainability of their operations.

Areas for Action and Collaboration

The dialogues generated ideas for action and collaboration in four key areas: advocating for design change; maximizing local material recovery and re-use; influencing production and distribution systems; and encouraging a broad societal shift in consumer and corporate behavior and lifestyle choices.

1. *Advocating for design change*

- 1.1. Advocate for product redesign that minimizes waste generation throughout a product's life cycle and maximizes its durability, adaptability, recyclability, and deconstruction.
- 1.2. Lobby for extended producer responsibility approaches that hold individual producers responsible for the end-of-life costs associated with their own products.
- 1.3. Implement an "ideas competition" to encourage product re-design.
- 1.4. Apply stricter controls to regulate toxicity and, in turn, drive broader design change.

2. Maximizing local material recovery and re-use

- 2.1. Target overall reductions in material use and material recovery in specific sectors, e.g., the construction industry; electronics; food packaging and distribution; retail; other?
- 2.2. Work with the business community to create local space and networks for repurposing, re-use and entrepreneurship, e.g., Maplewood Industrial Park and Strathcona BIA's Resource Exchange and Resource Park.
- 2.3. Identify and promote the business and entrepreneurship opportunities related to dematerialization and "closing the loop" (e.g., deconstruction; re-use; recovery).
- 2.4. Work with the business community to build knowledge around sustainable purchasing and to expand sustainable purchasing practices and waste reduction.

3. Influencing production and distribution systems

- 3.1. Implement sustainable procurement policies with criteria consistent with sustainable materials management.
- 3.2. Explore the opportunities for sharing equipment and joint purchasing between local governments.
- 3.3. Conduct a product life cycle or material flow assessment for a specific material/product and work with businesses along the supply chain to address inefficiencies.
- 3.4. Use stricter regulatory and pricing controls to shift the cost of waste management to the manufacturer, possibly targeting industry packaging.
- 3.5. Consider mechanisms for taxing those that produce and transfer large amounts of waste (transferring burden of waste back to producer).
- 3.6. Identify and address bylaws and regulatory frameworks that act as barriers to businesses, non-profits and individuals pursuing dematerialization strategies and business opportunities.
- 3.7. Establish materials reduction, reuse, recycling and recovery targets in capital projects.
- 3.8. Explore the opportunities to align EPR and other waste minimization programs from other jurisdictions to drive design change.

4. Encouraging a broad societal shift in consumer behaviour and lifestyle choices

- 4.1. Consider campaigns aimed at changing perceptions around waste, emphasizing its value as a resource.
- 4.2. Create an enabling environment for collaborative consumption (e.g., car sharing, resource sharing, eco-industrial hubs and networks) through bylaws and other mechanisms.
- 4.3. Host public dialogues and other engagement activities to communicate the non-material aspects of well-being.
- 4.4. Pursue smart growth land use and transportation planning and mobility opportunities that reduce fossil-fuel consumption and lower the carbon footprint of consumers (e.g., Portland "Small House" Initiative).

4.5. Implement a broader system of eco-labeling that communicates the externalities related to products.

4.6. Include social capital as a key component of corporate reporting.

Encourage broader adoption of zero waste campaigns and waste prevention strategies by sharing information and best practices across municipalities, the business community and other key stakeholders.

4. POST-DIALOGUE FORUM – KEY CONCLUSIONS/NEXT STEPS

A summary of the dialogues was presented to participants at the post-dialogue forum, with the goal of prioritizing actions and exploring roles and projects for Metro Vancouver to pursue in collaboration with others.

Participants generally agreed on the four areas for further action noted in the section above (and described in Attachment 1). Participants expressed a need to focus on encouraging a broad societal shift in the way we perceive waste, including a parallel shift from a focus primarily on waste management to integrated approaches that include waste prevention and sustainable materials management, better address the upstream generation of waste.

Advocating for design change was viewed as a critical waste prevention strategy to achieve significantly larger waste diversion rates – and an area where collaboration across sectors and stakeholders locally, nationally and internationally is needed. The economic and business opportunities associated with a shift in approaches was also an area of emphasis, particularly opportunities related to local recovery and re-use of materials, re-manufacturing, deconstruction, and influencing production and distribution systems. There was a suggestion to give greater consideration to the use of incentives to alter the consumption of materials. Similarly, some participants from the business community noted the need for policies and regulations that encourage businesses to look at their operations from a sustainability perspective, noting there is currently a disconnect between what is happening on the ground and what policies are in place (or not in place) to support change.

Participants also identified specific opportunities for Metro Vancouver to lead. Participants supported an expanded convening and leadership role for Metro Vancouver in facilitating a societal shift, with initiatives such as the annual Zero Waste Conference and the National Zero Waste Marketing Council. There was significant interest in Metro Vancouver leading a design challenge to raise awareness around the need for product re-design – an initiative that is now being considered for the 2012 Zero Waste Conference in September. Other ideas for Metro Vancouver included:

- developing and implementing a joint purchasing policy amongst municipalities for large scale materials procurement;
- hosting a collaborative consumption website to promote a culture of sharing and re-use (i.e., that identifies what, and where, people could share in the ownership of assets/materials); and
- providing kiosks at Waste Transfer Stations where people can leave materials and recover viable materials for re-use/re-sale.

As staff move forward with the implementation of Metro Vancouver's solid waste management plan, a number of the areas identified for action and collaboration will inform

important milestones for the 2013 program planning and budget process, including 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.3, 3.4, 3.8, 4.1, 4.3, and 4.4.

5. ALTERNATIVES

The Board may:

- a) Forward the report dated July 4, 2012 and titled “Future of the Region Sustainability Dialogues and Post-Dialogue Forum: Dematerialization: Transitioning to an Economy Without Waste” to member municipalities, and other related agencies for their information and comment.

OR

- c) Receive this report for information and take no further action.

6. CONCLUSION

A key objective of the dematerialization dialogues was to inform and engage on a complex topic – a topic that speaks to the key objectives of Metro Vancouver’s solid waste management plan and our commitment to building a sustainable region. The dialogues and post-dialogue forum identified significant challenges; however, they also successfully illustrated local opportunities and best practices for transitioning to an economy without waste. The series also laid out the evolving international, economic context within which dematerialization is taking place. The best practices that were explored created a shared understanding amongst participants that suggests dematerialization is both possible and potentially profitable. The dialogues and forum also identified a need for greater public adoption of dematerialization practices and behavior, and the need for greater policy support.

Important areas for action and collaboration were identified and a number of these will inform key milestones in the implementation of Metro Vancouver’s solid waste management plan. The dialogues and forum discussions will also play a key role in the planning for the Metro Vancouver 2012 Zero Waste Conference and the efforts to establish a National Zero Waste Marketing Council.

ATTACHMENT: Future of the Region Sustainability Dialogues – Summary of Dialogues and Post-Dialogue Forum. (*Orbit # 6334217*)

Metro Vancouver Future of the Region Sustainability Dialogues

DEMATERIALIZATION: TRANSITIONING TO AN ECONOMY WITHOUT WASTE SUMMARY OF DIALOGUES

Metro Vancouver hosted four dialogues on the topic of dematerialization: South of the Fraser on March 6, Vancouver on March 7, Central Northeast on March 27 and the North Shore on March 28. This is a summary of the dialogues, including a snapshot of challenges and possible areas for action and collaboration as suggested by dialogue panellists and participants. This summary formed the basis for discussions at the post-dialogue forum held on June 8.

Dialogue Panelists:

- *Maurie Cohen*, Associate Professor & Director, Program in Environmental Policy Studies and \ Program in Science, Technology & Society, New Jersey Institute of Technology, and Associate Fellow, Tellus Institute (Mar 6, 7)
- *Richard Lipsey*, Professor Emeritus, Department of Economics, Simon Fraser University (Mar 6, 7)
- *Joji Kumagai*, Executive Director, Strathcona Business Improvement Association (Mar 6 and 7)
- *Juergen Baumann*, Director, Environmental Programs, Port Metro Vancouver (Mar 6 and 28)
- *Peter Victor*, Professor, Faculty of Environmental Studies, York University (Mar 7)
- *Tracy Casavant*, Executive Director, Light House Sustainable Building Centre (Mar 7)
- *Vanessa Timmer*, Consultant and Executive Director, One Earth Initiative (Mar 27 and 28)
- *Marc Lee*, Senior Economist, Canadian Centre for Policy Alternatives (Mar 27 and 28)
- *Werner Antweiler*, Associate Professor, Strategy and Business Economics Division, Sauder School of Business, University of British Columbia (Mar 27)
- *Sumeet Gulati*, Associate Professor, Faculty of Land and Food Systems, University of British Columbia (Mar 28)

Attendance:

	Date and Location	Participants	Opening and Closing Remarks
South of the Fraser	March 6, 2012 Eaglequest Coyote Creek Golf Club, Surrey	40	<i>Director Gayle Martin, Councillor, City of Langley</i> <i>Ray Hudson, Communications Manager, Surrey Board of Trade</i>
Vancouver	March 7, 2012 Wosk Centre for Dialogue, Vancouver	105	<i>Director Geoff Meggs, Councillor, City of Vancouver</i>
Central Northeast	March 27, 2012 Inn at the Quay, New Westminster	58	<i>Director Mike Clay, Mayor, City of Port Moody</i> <i>Cori Lynn Germiquet, Executive Director, New Westminster Chamber of Commerce</i>
North Shore	March 28, 2012 Hollyburn Country Club, West Vancouver	53	<i>Director Michael Smith, Mayor, District of West Vancouver</i> <i>Leagh Gabriel, Executive Director, West Vancouver Chamber of Commerce</i>
Post-Dialogue Forum	June 8, 2012 Metro Vancouver Head Office	28	

Challenges

- Focusing on “end of pipe” waste management solutions without regard for broader sustainable materials management approaches that consider the full life cycle of materials.
- Pricing systems that do not account for externalities or true market price, specifically the cost of pollution and waste management.
- A focus on efficiency as a goal without regard for reinvesting efficiency gains in the transition to a more sustainable economy.
- Lack of support for alternate models of economic development and well-being (i.e., “the public demands green solutions, but generally don’t want to pay more for those solutions”).
- Not placing enough value on resources - materials are not valued high enough to keep them in our system longer and products are not designed to last, or for re-use or repair.
- Rising populations, and greater proportion of populations achieving middle-class standards, resulting in increased consumer consumption and greater material and energy output.
- Lack of adequate markets for materials currently recovered and available for re-use.

Areas for Action and Collaboration

1. Advocating for design change

- 1.1. Advocate for the redesign of products that minimizes waste generation throughout a product’s life cycle and maximizes its durability, adaptability, recyclability, and deconstruction.
- 1.2. Lobby for extended producer responsibility approaches that hold individual producers responsible for the end-of-life costs associated with their own products.
- 1.3. Implement a design competition to encourage product re-design.
- 1.4. Apply stricter controls to regulate toxicity and, in turn, drive broader design change.

2. Maximizing local material recovery and re-use

- 2.1. Target overall reductions in material use and material recovery in specific sectors, e.g., the construction industry; electronics; food packaging and distribution; retail; etc.
- 2.2. Work with the business community to create local space and networks for repurposing, re-use and entrepreneurship, e.g., Maplewood Industrial Park and Strathcona BIA’s Resource Exchange and Resource Park.
- 2.3. Identify and communicate the business and entrepreneurship opportunities related to dematerialization and closing the loop (e.g., deconstruction; re-use; recovery).
- 2.4. Work with the business community to build knowledge around sustainable purchasing and to expand sustainable purchasing power and waste reduction efforts.

3. Influencing production and distribution systems

- 3.1. Implement sustainable procurement policies with criteria consistent with sustainable materials management.

- 3.2. Explore the opportunities with other local governments for sharing equipment and joint purchasing.
- 3.3. Conduct product life cycle assessments for targeted products and work with businesses along the supply chain to address inefficiencies.
- 3.4. Use stricter regulatory and pricing controls to shift the cost of waste management to the manufacturer, possibly targeting industry packaging.
- 3.5. Consider mechanisms for taxing those that produce and transfer large amounts of waste (transferring burden of waste back to producer).
- 3.6. Identify and address bylaws and regulatory frameworks that are acting as barriers to businesses, non-profits and individuals pursuing dematerialization strategies and business opportunities.
- 3.7. Establish materials reduction, reuse, recycling and recovery targets in capital projects.
- 3.8. Explore the opportunities to align EPR and other waste minimization programs from other jurisdictions to drive design change.

4. Encouraging a broad societal shift in consumer and corporate behaviour

- 4.1. Develop campaigns to change perceptions of waste, emphasizing its value as a resource.
- 4.2. Encourage broader adoption of zero waste campaigns by sharing information and best practices across municipalities, the business community and other key stakeholders.
- 4.3. Give greater consideration to incentives that would reduce the consumption of materials.
- 4.4. Nurture collaborative consumption (e.g., car sharing, resource sharing, eco-industrial hubs and networks) through bylaws, information sharing and other mechanisms – consider the establishment of a website to encourage sharing/rental of materials.
- 4.5. Host public dialogues and other engagement activities to communicate the non-material aspects of well-being.
- 4.6. Pursue smart growth land use and transportation planning and mobility opportunities that reduce fossil-fuel consumption and lower the carbon footprint of consumers.
- 4.7. Implement a broader system of eco-labelling that communicates the externalities related to products.