

## **CASCADIA INNOVATION** & CIRCULAR ECONOMY CONFERENCE

## **SUMMARY REPORT**

**December 7, 2021** 

Presenting Partners:







#### This event was made possible with the support of the following organizations:



































We thank you for your continued support in our efforts to contribute to a more circular economy in the Pacific Northwest.

We acknowledge the first and continuing custodians of the grounds upon which we all work, create, live and dream.

We recognize the unique and enduring relationship that exists between Indigenous Peoples and their traditional territories worldwide. We welcome their deep knowledge and participation in the regenerative circular economy.

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# On December 7, 2021, the Cascadia Innovation and Circular Economy Conference brought together participants from across the Pacific Northwest to examine the linkage between the circular economy and innovation.

The conference was a collaborative effort which examined circular strategies across three sectors: transportation and logistics; plastics and packaging; and electronics/e-waste. The presentations and discussions demonstrated how circular innovation applications of the Fourth Industrial Revolution (4IR) - such as physical, digital and biological technologies - can enhance economic competitiveness and investments in the region and beyond.

The objectives of this event were to:

- Raise awareness and educate on the circular economy and linkages to regional and global industrial competitiveness.
- Understand the barriers and supportive policy and market enablers for advancing the circular economy and innovation in the Cascadia region.
- Profile sector and supply chain challenges, connecting
   4IR/cleantech solutions with industry needs and challenges.
- Expand the circular economy community across the region as a precursor to establishing a regional circular economy innovation cluster.

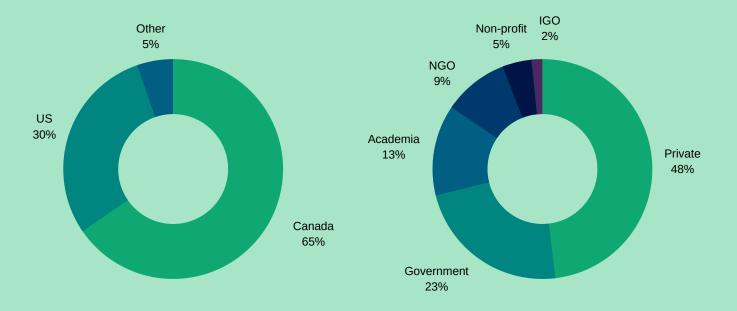




# PARTICIPANT PROFILE

## More than **300 people** registered for this virtual event.

Participants represented a wide range of backgrounds, industries, and sectors, from the private and public sectors, not-for-profits, and academic institutions, largely from Canada and the United States.



Out of the participants surveyed, 57% said that their top reason for attending was to learn about circular solutions, while 43% indicated that their top motivation was for networking.

Networking: 43% Learning about circular solutions: 57%







## **WELCOME:**

## Importance of Innovation & the Circular Economy

We are in a climate crisis.

Our linear economy is driving three global environmental crises: climate change; ecosystem and biodiversity loss; and environmental pollution. In addition, it also leads to huge economic losses.

On the other hand, the circular economy (CE) offers tremendous economic opportunities while offering solutions to these environmental problems. However, our current economy is less than 10% circular.

The CE presents solutions to our economic and environmental challenges through three key principles: Rethinking, Optimizing, and Regenerating.

Ultimately, CE is about prosperity in a world of finite resources.

The four key drivers of circularity in North America are: Investment, Innovation, Policy, and Partnerships. This conference focuses on Innovation, in an effort to stimulate collaboration and growth, and overcome the barriers facing progress.



Mel Clark
President & CEO
CleanTech Alliance



Paul Shorthouse
Managing Director
Circular Economy Leadership Canada





## **Tackling the Climate Crisis Through Circular Innovation**

**Helen Burdett** 

Circular Economy Innovation Lead **World Economy Forum** 



**Ashima Sukhdev** 

Climate Mitigation & Circular **Economy Policy Advisor** City of Seattle





## **OPENING** ARMCHAIR

If we want to fix the climate, we need to fix the economy - and CE provides the solution to this problem.

Helen Burdett and Ashima Sukhdev unpacked what we need in order to successfully and sustainably implement a CE.



#### **Future-proofing**

- · CE is more than a sustainability effort - it is a business decision and opportunity.
- · If we create an unjust CE, we have not succeeded.



#### **CE** is a mindset

- · We need to place "rethinking" and "optimizing" at the forefront of our approaches and processes.
- This shift can (and needs to) happen at all levels.



#### Systems change

- · We are in need of coordinated efforts from all levels of society.
- We need to expand our conceptualization of responsibility to mitigate playing the blame-game and engaging in holistic reduction and regeneration strategies.



#### Safe spaces

- · We need to create enabling environments for CE to thrive by creating safe spaces for innovation.
- This is an urgent need to be addressed, and governments and policymakers need to intervene.





## **Circular Transportation & Reverse Supply Chains**

#### **Evguni Loukipoudos**

CTO **Canada's Digital Technology** Supercluster



#### **Eric Beckwitt**

Co-founder and CEO Freightera



#### Laura Guzman

Director of Government Affairs & Partnerships **Hydra Energy** 



#### **Jury Gualandris**

Associate Director of the Building Sustainable Value (BSV) Centre **Ivey School of Business** 









## **PANEL 1:**

#### **Circular Transportation & Reverse Supply Chains**

How is circular transportation affecting other sectors? What operational barriers are we undertaking when it comes to CE? To what geographic scale should circularity be pushed to avoid unintended consequences?

Four experts answered these important questions (and posed many more) in our discussion on circular transportation and reverse supply chains.

## 01

#### **Stepwise processes**

- Start local, start small then scale up.
- Think both about economies of scale and economies of scope.
- Invest in policies that increase supply, but more importantly, that also increase demand.

## 03

## Rethinking the concept of waste

- "Waste" is a socially constructed concept that assumes there is no value in a resource.
- Waste is not only a prevention problem but also a re-distribution problem.
- We need to fully assess all parts of a product lifecycle for carbon outputs.

## 02

#### **Decentralization**

- Many very small, very efficient entreprises are more stable and resilient than our current system of many large corporations.
- Localized business can better adapt to local environments.

## 04

## **Self-sustaining** communities

- We need to build environments that are replicable.
- We need to think about the concept of the 100-mile diet, but for all products.



## **Circular Plastics & Packaging**

**George Roter Managing Director Canada Plastics Pact** 



Peter Van Stolk CEO **Fresh Local Solutions** 



**Apala Mukherjee** President **BASF Canada** 

**Adrian Tan** 



Policy & Marketing Development Manager, Recycling & Environmental Services **King County** 







## **PANEL 2:**

#### **Circular Plastics & Packaging**

## This can't wait until 2030. We need change, accountability, and trust.

Our panelists had a clear vision for the future of plastics. While no easy calling, they are working within their organizations and communities to bring the circular dream to life. During their discussions, they identified key considerations that can provide feasible pathways to advancing circularity.

## 01

#### **Centralizing circularity**

- Limiting the impact of CE to our perimeters does not work. We need it at the heart of our businesses. systems, and societies.
- · Partnerships are crucial, whether it's public-private or private-private.

## 02

#### **Extended producer** responsibility

- We need extended producer responsibility - ultimately, it comes down to the business case.
- Even if you aren't the producer, you should be accountable for what you offer your customers.
- CE needs to be equitable and just in order for it to be sustainable.
- We need to integrate reverse logistics into business plans.

#### **Digital innovation**

- Digital technology can help us manufacture more efficiently, identify upgrade opportunities, and scale up.
- We need to harness the technology available to us and embrace a radical change in economic and business models rather than holding on to broken systems.

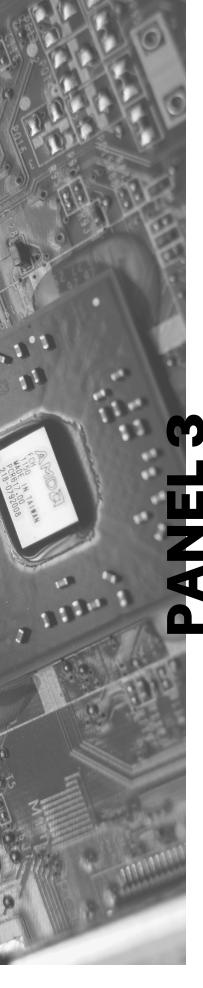
## 04

#### **Right information** equals right decisions

- Consumers have the right to know the impact of the products they buy.
- We believe that if consumers are given the right information, they will make the right decisions.
- Businesses should strive to educate their clients.
- Industry needs to garner trust.







## **Electronics & End-of-Life Recovery**

#### Sonya Sundberg

Executive Director, Environmental Standards Branch, Ministry of **Environment & Climate Change** Strategy

**Province of British Columbia** 



#### **Dan Reid**

Director of Environment & Circularity **Responsible Business Alliance & Circular Electronics Partnership** 



#### Kesava Viswanathan

Director, Circular Center Program Microsoft





# PANEL 3: DISCUSSION

**Electronics & End-of-Life Recovery** 

## The electronics industry has a lot of lowhanging fruit for the CE. At the same time, it also presents a plethora of new challenges.

How do we proceed? Our panelists discussed the unique positionality of the electronics industry within a CE framework, and how the dynamism and innovation inherent to this sector pose unique opportunities and obstacles for a CE.

## 01

#### **New risks & obstacles**

## 02

## Transition to service-industry

- Is innovation incompatible with circularity, due to its constant change and disruption?
- The market value of recycled materials is very affected by the lack of social and environmental assurance on materials in the electronics market.
- Being service-focused reduces the need for hardware and improves circularity capacity.

## 03

#### **Collaboration is key**

04

## Innovation across lifecycles

- Scalability is a challenge that needs to be addressed through collaboration and partnerships.
- Suppliers are the experts of their materials, and make valuable partners when talking about a change as huge as circularity.
- We cannot innovate with just technology; rather, we need to innovate across the supply chain.
- We need to build end-of-life processing into our plans.



## The Path Forward: **Regional to Global Circular Solutions**



**Managing Partner Brain Oxygen LLC** 



#### **Robert Duff**

Sustainable Business Development Director, Office for Economic Development & Competitiveness **Washington State Department of** Commerce



#### **Frances Edmonds**

Head of Sustainable Impact **HP Canada** 



#### Armando Yáñez Sandoval

Head of Green Growth Unit **Commission for Environmental Cooperation (CEC)** 





## **CLOSING ARMCHAIR**

Circularity is decoupling prosperity from consumption - it really is a "free lunch" when it comes to the climate.

Our final discussion takes on the topic of what CE is all about, and what steps we can take to move us closer to that goal.



#### **CE fixes the design** problem

- · CE is not trying to fix a waste problem, but a design one.
- · Procurement is a common blind spot that needs to be addressed.



#### **CE strengthens** communities

- · Consumers and communities can and need to be empowered through CE.
- We need to start reclaiming the concept of value.



#### **CE** is about connectivity

- CE reveals how we are all connected, and how we can harness this for the collective good.
- · Communication is crucial we need to speak a common language.



#### **CE** is a team sport

- CE requires robust networks that share information, support, and resources.
- Commerce can no longer operate independently from environmental agencies.
- The success of CE will be through organization.





#### **Participating Organizations:**

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Aevi Al Shading Allego Global Corp

Appropriate Technology Group

ArcelorMittal

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**BASF Canada** BASI

B.C. Ministry of Jobs, Economic Recovery and

B.C. Ministry of Environment and Climate Change

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**BUILDGREEN Products** Cambium Inc.

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Canadian Manufacturers & Exporters

Canadian Tire Canadian Tire Corporation

Cano Company

Cascadeo (Caelum Northwest)

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City of Seattle City of Toronto

City of Victoria CleanTech Alliance

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National Zero Waste Council Natural Resources Canada

Natures Path Foods Nestle Canada Net Zero Game ApS

Northern Alberta Institute of Technology

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**Odgers Berndtson** Omdm

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Pacific Northwest Center of Excellence for Clean Energy

PhyCo Plastic 'Bank

Plastic Oceans Foundation Canada

PMI Worldwide Port of Seattle PreZero US Prime Strategy & Planning

Progressive Strategies Province of British Columbia

Province of Manitoba Province of Saskatchewan Quantum Lifecycle Partners Reclay StewardEdge

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Regenerated Textiles Industries LLC

Regenerative Waste Labs

Region of Peel

Regional District of Nanaimo Resource Recycling Systems Responsible Business Alliance

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Scrapless

Seagate Technology Seattle Children's Hospital Seattle Creative Studio LLC Seattle Good Business Network

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**ShareWares** 

**Smart Prosperity Institute** 

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