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Date:	4/29/2019 2:44:36 PM	
Subject:	FW: Comments on CPIA background information for Single Use Item discussion at	
	Council Today	
Attachments:	2019 CPIA COV meeting material (2).pdf	
	ATT00001.htm	

#### Greetings Mayor and Council

A Councillor forwarded us the following question regarding the attached document from CPIA: I'm wondering if city could propose educating folks to bring permanent plastic or glass take out containers from home. Maybe these places could even sell them to their customers who don't have any with them??? Didn't we use to always pack around clean cups for buying coffee in?? or am I remembering wrong???

We've reviewed the letter from CPIA and provide the following comments:

- A ban on foam cups/containers would help ensure that cups and takeout containers can be recycled in the household recycling program operated by Recycle BC and/or the green bin and streetscape recycling program operated by the City. This contributes to the City's Zero Waste 2040 goal by diverting material from landfill and incinerator.
- Recyclable substitutes for foam cups/containers typically include hard plastic, aluminum and plastic-lined paper. These materials are accepted for recycling in the Recycle BC and streetscape recycling programs.
- Unlined paper is a suitable compostable substitute for foam cups/containers. Food-soiled paper products that aren't lined with plastic are accepted in the City's green bin program for composting.
- Although new recycling technologies are emerging for foam, they are not well established.
- As the CPIA's letter indicates, one of the main difficulties with foam is with collection. This is because foam breaks apart and can contaminate other recyclable materials. As a result, foam must be collected separately, which makes collection prohibitively expensive. For this reason, among others, the City does not accept foam in the streetscape recycling program, and Recycle BC only provides foam recycling at drop off locations. However, our public opinion research found that only 6% of Vancouver residents are willing to recycle foam cups/containers at depots.
- 82% of Vancouver residents would be willing to pay more for non-foam take-out containers that are recyclable in their household and apartment programs.
- The Single-Use Item Reduction Strategy gives priority focus to reducing materials rather than substitutes. The strategy includes a Bring Your Own Container pilot to encourage customers to bring their own containers for take-out orders. Staff have been working closely with Vancouver Coastal Health (VCH) on this initiative, and expect the pilot can begin once VCH develops a guideline to inform businesses how to fill reusable containers brought in by customers while maintaining health and safety.

Best

Sadhu

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The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the Musqueam, Squamish, and Tsleil-Waututh peoples.



### Backgrounder on Polystyrene Foam Foodservice Packaging

Vancouver is deeply committed to forward looking policies and actions designed to help stimulate, support, and allow our city to become a zero-waste community. These include product stewardship, recycling and deployment of leading-edge innovations to help achieve the City's stated ambitions. We are strongly supportive of these policy goals. In order to be impactful, these initiatives need to be coordinated with Vancouver's municipal and provincial partners. We ask Council to carefully consider the wide-ranging unintended consequences of a ban on polystyrene foam foodservice packaging.

A ban on polystyrene foam foodservice packaging will not reduce waste – without practical or sustainable alternatives, it creates more waste and has serious ramifications environmentally and economically for the City.

When making a decision on polystyrene foam, we ask you to consider the following:

### Banning polystyrene foam does not advance the goals of Zero Waste 2040

Restaurants still need to serve their customers. A ban on foam foodservice packaging will force small businesses in the quick service and restaurant sectors to switch to paper cups and take-out containers.

The amount of waste going to landfill will increase significantly because paper foodservice packaging, once contaminated with food waste cannot be recycled or composted in Vancouver. On the other hand, polystyrene foam packaging can be recycled even if contaminated with food waste. With no recycling, paper packaging will end up in landfills as garbage.

## Technological advancement is moving faster than policy. Foam is Recyclable. Collection is the Issue.

Last year, City officials noted in their staff report to Council that they would be open to changes in the policy if new recycling technologies became available:

"Should industry develop a viable recycling alternative during the transition period prior to the by-law coming into effect, staff will report back to Council on any changes to timing or scope of the by-law that could be considered."

#### https://council.vancouver.ca/20180516/documents/pspc2b.pdf

Millions of dollars have been invested in development of a breakthrough technology called de-polymerization which is designed to recycle polystyrene. De-polymerization technology is widely available across Canada and locally. There are a large number of clean technology companies already providing this service and more coming on stream. According to recent media reports, (e.g. April 3 on CBS and April 9 in the Financial Post), there are *"at least 60 companies racing to take part in an estimated \$120 B market opportunity"*. These include Agylix in nearby Portland Oregon, GreenMantra from Ontario and others including, Revital Polymers, and Pyrowave.

This breakthrough technology brings the circular economy closer to practical use in our daily lives. Plastics are just chains of polymers - molecules bonded together. This technology chemically breaks apart these bonds and returns the used foam polystyrene back to its original molecular state for reuse in any medical or food contact application.

The recent City staff recommendation to extend implementation timelines for the Single Use Item Reduction Strategy will allow for a more thorough review of these innovations and how they might be best utilized in support of Vancouver's zero waste policy goals.

# Paper packaging requires more energy to manufacture then polystyrene foam – generates more Green House Gases (GHGs)

As the probable alternative, paper foodservice packaging has a much larger carbon footprint than foam polystyrene foodservice packaging. Paper food packaging is much more energy intensive in its manufacture which means higher GHG emissions. The manufacture of a 16-ounce hot paper cup with a plastic liner requires 32.4% more energy to manufacture than a 16- ounce foam cup; a paper cup with a plastic liner and a protective sleeve requires 70.1% more energy to manufacture. *(2011& 2014 Franklin Associates LCI- see below)* 

## Paper packaging costs small businesses significantly more than foam polystyrene packaging and a ban could lead to local job losses in manufacturing

The burden to switch to paper food packaging is estimated to be an additional \$4.1 million in costs on local small businesses. The sector already works on very slim margins and cannot afford to absorb the increased packaging cost and there is no guarantee that the consumers will tolerate food price increases to cover the increased cost. A common point heard during the City's consultation while developing its foodservice reduction strategy was: *"Vancouver is expensive and interventions should not result in a significant economic burden to businesses and the community."* 

A ban also threatens local manufacturing jobs as foam packaging is made in BC; hundreds of jobs in the lower mainland, many of them unionized, are at risk.

### Polystyrene foam packaging is less than 1% of Vancouver's waste stream

Polystyrene is a tiny part of the city's waste stream. Bin contamination of both paper and plastic is the primary problem in public space recycling bins. Banning foam polystyrene will not contribute to solving this issue. The material in public space recycling bins is highly contaminated with organics and other garbage.

Removing foam polystyrene, which is only about 1% of the contents, will not make the remaining contents of the bin more recyclable. Paper cups and containers soiled with food waste cannot be composted or recycled and will have to be sent to landfill even after a ban on foam polystyrene.

### Plastic Packaging Reduces Mass, Energy Use and GHG Emissions



Source: Impact of Plantics Packaging on Life Cycle Energy Consumption & Greenhour Gas Emissions in the United States and Canada, Frankin Associates, January 2014

### 2011 Franklin Associates LCI

Analysis of Energy Consumption 16 oz Hot Cups

	EPS/Foam	6.88 BTU	
•	LDPE Coated Paperboard	9.11 BTUs	
٠	LDPE Coated Paperboard		
	With Sleeve	11.7 BTUs	

#### Analysis of Solid Waste 16 oz Hot Cups

		With Paper Sleeve
EPS Foam	4.7 grams	Not needed
LDPE Coated Paperboard	13.3 grams	19.1 grams
PLA Coated Paperboard	12.7 grams	18.5 grams
Unbleached Corrugated Slee	<ul> <li>Unbleached Corrugated Sleeve</li> </ul>	