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Date: October 11, 2019

Subject: Proposal for Determining the Feasibility of a Waste Reduction Program at UBC’s International Food Court

**Introduction:**

In the wake of climate change talks, it has become increasingly apparent that action must be taken in order to reduce human’s impact on the planet. Although efforts have been made to create a zero-waste city in Metro Vancouver by 2020, it is becoming unlikely that this goal will be met by that deadline. According to an article in the Vancouver Sun, Metro Vancouver produced an estimated 918 000 tonnes of waste in 2018, nearly 15 000 tonnes more than 2017. While it will be difficult to reduce this amount of waste, there are certainly areas where simple solutions can be implemented in order to reduce waste.

The International Food Court (hereafter referred to as IFC) is located on the lower level of University Village and provides tasty and cost-effective food primarily for UBC students. While UBC’s campus has implemented several strategies to reduce waste, the IFC is part of University Village (technically not part of UBC campus) and are therefore not bound by such regulations. Although a popular location, the IFC lacks a proper program to reduce waste, specifically regarding food and beverage containers. The goal of this proposal is to determine the feasibility of such a program and design a solution that will significantly reduce landfill waste and work for restaurant owners.

**Statement of Problem:**

The generation of waste in the IFC can be broken up into two different problems. Firstly, while some waste generated in the IFC are recyclable, the space lacks suitable disposable bins (eg. recycling for compost, plastic, paper), prompting consumers to throw recyclable containers into the garbage. This includes waste such as plastic beverage containers, plastic straws, and wooden chopsticks. Secondly, single use waste generated at the IFC includes polystyrene (eg. Styrofoam) containers and plastic bags. According to a recent study, containers such as Styrofoam have a degradation rate of less than 1% in the first 90 days in the landfill yet is still used world wide. This material is so harmful that several cities have even banned polystyrene, however Metro Vancouver only requires that polystyrene boxes and shipping containers be recycled. Therefore, take-out Styrofoam containers are still prevalent in Vancouver, and still end up in the garbage bin. With so many students eating at the IFC every day, this generation of waste becomes immense and creates a huge burden on Vancouver landfills.

**Proposed Solution:**

A waste reduction program at the IFC must consider both the consumers as well as the store owners in order to be effective. Thus, this solution involves several different approaches. Firstly, it will be important to implement a strategy that educates the consumer on how to dispose of containers specifically generated at the IFC and provide such recycling bins. Any solution must consider the current recycling facilities at the University Village (of which encompasses the International Food Court) and be mindful of the limited space in the IFC. Most importantly, store owners should be encouraged to move away from single-use waste such as Styrofoam and plastic bags. Suitable alternatives must be found that serve the same purpose and are cost-effective for store owners.

**Scope:**

To determine a proper solution to this problem, I plan to pursue the following questions:

1. What is stopping store owners to move away from single use containers and plastics?
	1. What suitable alternatives are available? And
	2. Are these alternatives cost-effective?
2. Do consumers know which containers are recyclable/non-recyclable?
	1. If yes, then what other limiting factors are there in terms of recycling?
3. What is the cost of implementing a recycling program at the IFC? Is this feasible?
4. Is there currently a recycling program at University Village that encompasses the IFC?

This is a two-pronged approach; One which limits the amount of waste generated, and another that encourages any generated waste to be recycled as much as possible.

**Methods:**

My main primary sources will come from interviewing UBC students and IFC restaurant owners. This will include gathering data on the limitations and concerns of implementing a waste reduction program. It will also provide valuable information on the need’s of both the consumers and the owners. Additionally, I will visit different community centres and buildings and observe how they have reduced waste in their buildings. Secondary sources will include researching cost-effective alternatives to Styrofoam and plastic bags and researching similar programs that encourage store owners to switch away from single-use containers.

**My Qualifications:**

As UBC moves in a direction to reduce its impact on the climate, I believe it is up to the students to notice places in which reforms can be made. As a frequenter of the International Food Court, I understand the limitations of implementing a waste reduction program as well as the need for cost-effective food options at UBC. Although my degree in physics has little to do specifically with recycling, the nature of my degree allows my to look at problems from different perspectives and I believe will be helpful in determining a solution that addresses all parties involved.

**Conclusion:**

During this crucial time in history, it is important to attempt to reduce waste wherever possible. In accordance with Vancouver’s zero-waste goal, it is no longer an option to continue to produce waste at the same rate as before. While UBC has taken steps to reduce landfill waste, the implementation of a waste reduction program at the International Food Court is a strong step to reduce our affect on the climate.

**Citations:**

1. Coulter, Leah. “Styrofoam Recycling Now Required in Vancouver.” *Waste Control Services Inc.*, 5 Feb. 2019, wastecontrolservices.com/articles/styrofoam-recycling-service-vancouver/.
2. Saltman, Jennifer. “ Metro Vancouver, Other Communities, Sending Tonnes of Trash to U.S.” *The Vancouver Sun*, 3 Apr. 2019, vancouversun.com/news/local-news/metro-vancouver-other-communities-sending-tonnes-of-trash-to-u-s.
3. Ho, Ba, et al. “An Overview on Biodegradation of Polystyrene and Modified Polystyrene: the Microbial Approach.” *Critical Reviews in Biology*, vol. 38, no. 2, 1 Aug. 2017, doi:10.1080/07388551.2017.1355293.