
CAPSTONE REPORT EXECUTIVE SUMMARY

**EXPLORING THE
FEASIBILITY OF
SUSTAINABLE
FOOD SERVICE
WARE AT BCIT**

WRITTEN BY: ISABELLA BRAUN, PATRICK ENRIGHT, ADDY MENICAN, MADELYN READ

CAPSTONE REPORT EXECUTIVE SUMMARY: EXPLORING THE FEASIBILITY OF SUSTAINABLE FOOD SERVICE WARE AT BCIT

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BCIT's Institute of Sustainability and Corporate Services Department asked the Capstone student team to investigate different possible food service ware (FSW) options for their facilities, including more sustainable single-use and reusable items. The goal of the report is to aid BCIT Food Services, Operations, and the Sustainability Department in making an informed decision regarding their procurement practices based on an analysis of financial, environmental, and operational considerations. In order to gather this information, the team conducted secondary research, key informant interviews, surveys and observational research. The key findings from this research are outlined below.

KEY POINTS

1. Staying ahead of forthcoming Single-Use Item policies is smart business
2. Reusables are the most environmentally sustainable choice
3. Challenges in introducing reusables can be addressed through careful implementation
4. A membership based container share program would be the most successful at BCIT
5. There is a receptive market for both reusable dine-in and take-out dishware at BCIT
6. Increased costs of introducing reusables could be recaptured through fees and reduced waste management costs

1. POLICY

The provincial and federal governments are likely to introduce policies that regulate or ban single-use items (SUIs) in the coming years. Keeping ahead of these upcoming policies will position BCIT among leaders in sustainability and ensure they are prepared for when these policies are implemented.

3. ADDRESSING CHALLENGES

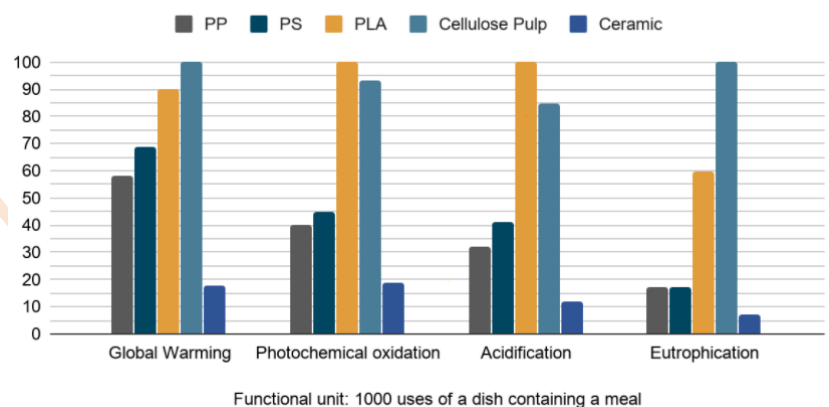
CHALLENGES	PROVEN SOLUTIONS
Upfront costs	Pilot program
Program uptake	Access to industrial dishwashing facilities
Shrinkage	Create pleasant atmosphere
Support from franchisees	Dine-In as default option and fee on SUIs
COVID-19	Active communication and education

Other institutions and businesses with reusable programs have been able to confront the challenges they have experienced by incorporating the solutions listed above

2. ENVIRONMENTAL IMPACT

The research shows that SUIs of all materials have a significant environmental impact, indicating BCIT should prioritize reusable options as much as possible. If they continue to provide SUIs, BCIT must find fibre-based compostable options that are free of chemicals and fully compostable in Metro Vancouver facilities.

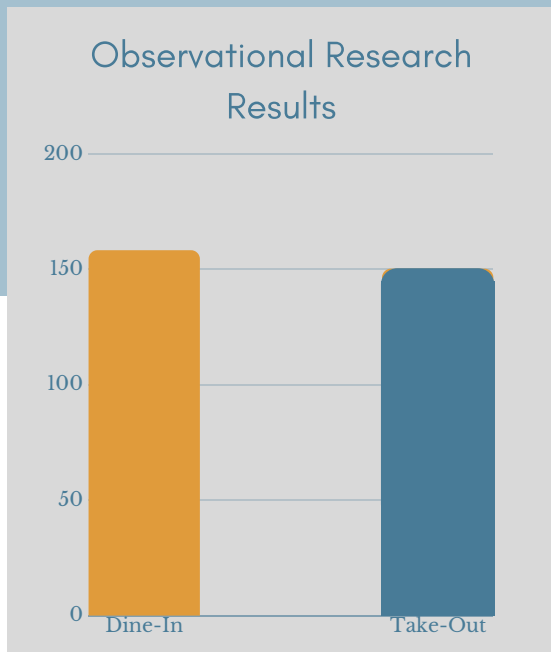
DISHES: Results of the Life Cycle Impact Analysis study according to the "target" end-of-life scenario



4. THE MOST SUCCESSFUL CONTAINER SHARE MODEL

	MEMBERSHIP	HONESTY BASED	OZZI BOX
HOW IT WORKS	<ul style="list-style-type: none"> \$5 fee for membership (refundable or non-refundable) Receive 'token' of membership, exchange token for container, exchange dirty container for token or refunded fee at cashier 	<ul style="list-style-type: none"> No user fee Drop off bins located throughout campus Containers not tracked 	<ul style="list-style-type: none"> Same system as Membership model Drop off dirty containers at OZZI Box machines instead of at cashier
DECIDING FACTORS	<ul style="list-style-type: none"> 30% shrinkage with refundable fee Can recapture cost of lost containers through deposit fee 	<ul style="list-style-type: none"> 75-100% shrinkage rate 	<ul style="list-style-type: none"> \$12,000 per machine

5. RECEPTIVE MARKET: PATRON PREFERENCES AND BEHAVIOUR



Our research found that there was a fairly equal split between patrons choosing to dine-in and take their food to go, which indicates that there is a market for both dine-in and take-out reusables at SE2.

6. COSTS & BENEFITS OF TRANSITIONING TO REUSABLES

ESTIMATED INITIAL COSTS:

\$34,500

ESTIMATED ANNUAL OPERATING COSTS:

\$0.25 - \$1 per dish

Costs can be minimized through savings on SUI's, new fees on SUIs, and decreased waste management costs

BENEFITS

Reduce costs

Increase sustainability

Enhance student experience

Become a leader

85%

OF PATRONS 'STRONGLY AGREE' OR 'AGREE' WITH BCIT SWITCHING TO REUSABLES

This suggests that incorporating reusable dishware would be successful at SE2

RECOMMENDATIONS

DINE-IN REUSABLES

- Pilot Program
- Dine-in as Default
- Create Atmosphere

CONTAINER SHARE

- Membership Model
- Refundable Deposit
- Discount on Reusables

SINGLE-USE ITEMS

- Keep fibre-based SUIs as backup
- Fee on all SUIs
- Verify compostability