

Waste Wars: The Complete Guide

Vancouver Airport Authority Environment Department

WASTE  WARS
May the best bin win!

May 2019

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1. Introduction

1.1 What is Waste Wars?

Waste Wars is a YVR Environment Department program which has been held since 2015, focusing on waste and recycling. This friendly competition is run annually between Food and Beverage (F&B) Tenants in the terminal to help meet YVR's waste goals. In 2018, the scope was expanded to include a separate competition between Airport Authority employees. This internal Waste Wars pits different teams against each other to see who can sort office and kitchen waste the best. Both programs promote waste education, outreach, and engagement.

Conducting Waste Wars annually has had many benefits for F&B tenants, Airport Authority employees, and other members of the YVR community. The Airport Authority has seen great improvement in sorting practices, which means more waste is being diverted from landfill. YVR's Environmental Management Plan (EMP) includes a Strategic Priority on waste reduction. In the Terminal, the goal is to reduce waste generation and increase recycling. Measurably, YVR aims to divert 50% of its waste from the landfill by 2020.¹ This goal was surpassed in 2016 with a 51% diversion rate, which has been maintained since then.² YVR works hard to lead the aviation industry with innovative environmental programs. Waste Wars is a key part of this strategy, creating widespread awareness and education around waste. It gives employees and tenants the opportunity to implement efficient practices, motivated by company-wide recognition and prizes each year. The Airport Authority's job is to promote a waste-aware culture and shift ideas around waste management.



Figure 1. Marion Town (Director, Environment) hosting the internal Waste Wars awards ceremony. February 8th, 2019. Photo Credit: Kim Bellavance.

¹ Vancouver Airport Authority (2014). Vancouver Airport Authority 2015-2019 Environmental Management Plan, pg. 17.

² Vancouver Airport Authority (2018). 2018 Annual Sustainability Report. <http://www.yvr.ca/en/about-yvr/leadership-and-accountability/annual-and-sustainability-report>

1.2 Purpose of Report

This document is meant to be a guide on all things YVR Waste Wars:

What it is

How it's run

Why it's important

Below are details on planning and conducting both the internal and external Waste Wars programs. This document can serve as a useful tool for other organizations who wish to implement similar initiatives at varying scales.

2. External Waste Wars – Food and Beverage Tenants

2.1 What is External Waste Wars?

Since 2015 the Airport Authority has promoted waste reduction through the external Waste Wars program. Working with food and beverage tenants in the terminal, a friendly competition takes place to see who can sort their trash with the least amount of contamination. Every week for seven weeks, typically in the Spring, waste experts from the Environment department visit each of the approximately 50 F&B tenants. Points are awarded for the best bin sorting among YVR's four designated streams: Garbage, Paper, Compost, and Containers. Participation is not mandatory, but in 2019 we saw 100% participation from tenants.



Figures 2 and 3. Tenants are awarded for first, second, and third place prizes in each external Waste Wars competition. There are six total winners, as Restaurants and Quick Service are separated. 2018.

2.2 Running External Waste Wars

The Waste Wars program consists of weekly site visits to each participating tenant. Waste bins are examined to see how well they are sorting, and points are awarded based on the level of contamination, as well as bonus points for trivia questions and general enthusiasm. Educational materials are handed out along with report cards and leaderboards. This allows tenants to continually learn better waste management behaviour while tracking their progress in the competition. Winners are determined after seven weeks and are recognized with awards later in the year.

Below is a list of tasks completed before and during the program. See 2.3.1 for a sample timeline.

1. Prepare Tenants: Each tenant is emailed to educate them on the program and when it will occur.
2. Prepare Report Cards: Adobe Illustrator files which are customized for each tenant are grouped by location in the Terminal.
3. Prepare Leaderboards:
 - a. OPTION 1: Periodically throughout Waste Wars, large banners are placed in several Waste Transfer Rooms throughout the terminal (Fig. 5)
 - b. OPTION 2: A list of tenant scores are handed out in person. These are updated during the program to reflect current scores (Fig. 4)
4. Prepare Points Sheets: When visiting tenants during the program, points for sorting are recorded on printed score sheets. A Master Points Excel sheet is later updated with scores, with the tenant names already up-to-date. F&B tenants are constantly changing, and it is more convenient to have the sheets updated beforehand.
5. Develop, Print, and Hand out Brochure: Prior to Waste Wars, waste experts visit tenants and check on their waste sorting. This is a good time for tenants to voice questions and concerns, and for YVR to assist them. They are also informed when Waste Wars begins and receive an informational poster (Fig. 6). This helps all employees be informed of the upcoming program. An Adobe Illustrator file of the poster is updated and printed. In some years, lanyard cards have been prepared for the key supervisors of each tenant.
6. Advertise: Internal Airport Authority employees are informed that Waste Wars is commencing. A short article is written outlining the purpose and dates of the program. This is a reminder of what is being done to reduce waste.



Figure 5. Sample Leaderboard for Waste Transfer Rooms.

The brochure features a light blue header with the 'WASTE WARS' logo and tagline. Below this is a dark blue horizontal band containing a circular icon of a trash bin with a recycling symbol. The main text is centered and includes the event dates, a list of details (WHO, WHAT, HOW, WHY), and a scoring table. At the bottom, there are icons for recycling bins, a person holding a clipboard, and logos for YVR and the 50% diversion rate goal.

WASTE WARS
May the best bin win!

Get out your bins, the war on waste begins!

April 9 - May 23, 2019

WHO: Participating Food & Beverage tenants

WHAT: A friendly competition encouraging tenants to sort their waste correctly and improve YVR's waste diversion rate.

HOW: Weekly waste bin inspections, with points assigned for correct waste sorting. The tenant with the highest number of points will be declared the champion of Waste Wars 2019.

WHY: Prizes for the best bin!

Let's work together to reduce YVR's environmental footprint and send less waste to landfill.

Questions? Please contact environment@yvr.ca

REMEMBER: BETTER SORTING MEANS MORE POINTS:				
0% - 4 points	25% - 3 points	50% - 2 points	75% - 1 point	100% - 0

**WORKING TOGETHER TO ACHIEVE
A 50% DIVERSION RATE**

YVR VANCOUVER INTERNATIONAL AIRPORT
Beyond, Every Day.

Figure 6. Sample Brochure handed out before the program starts.

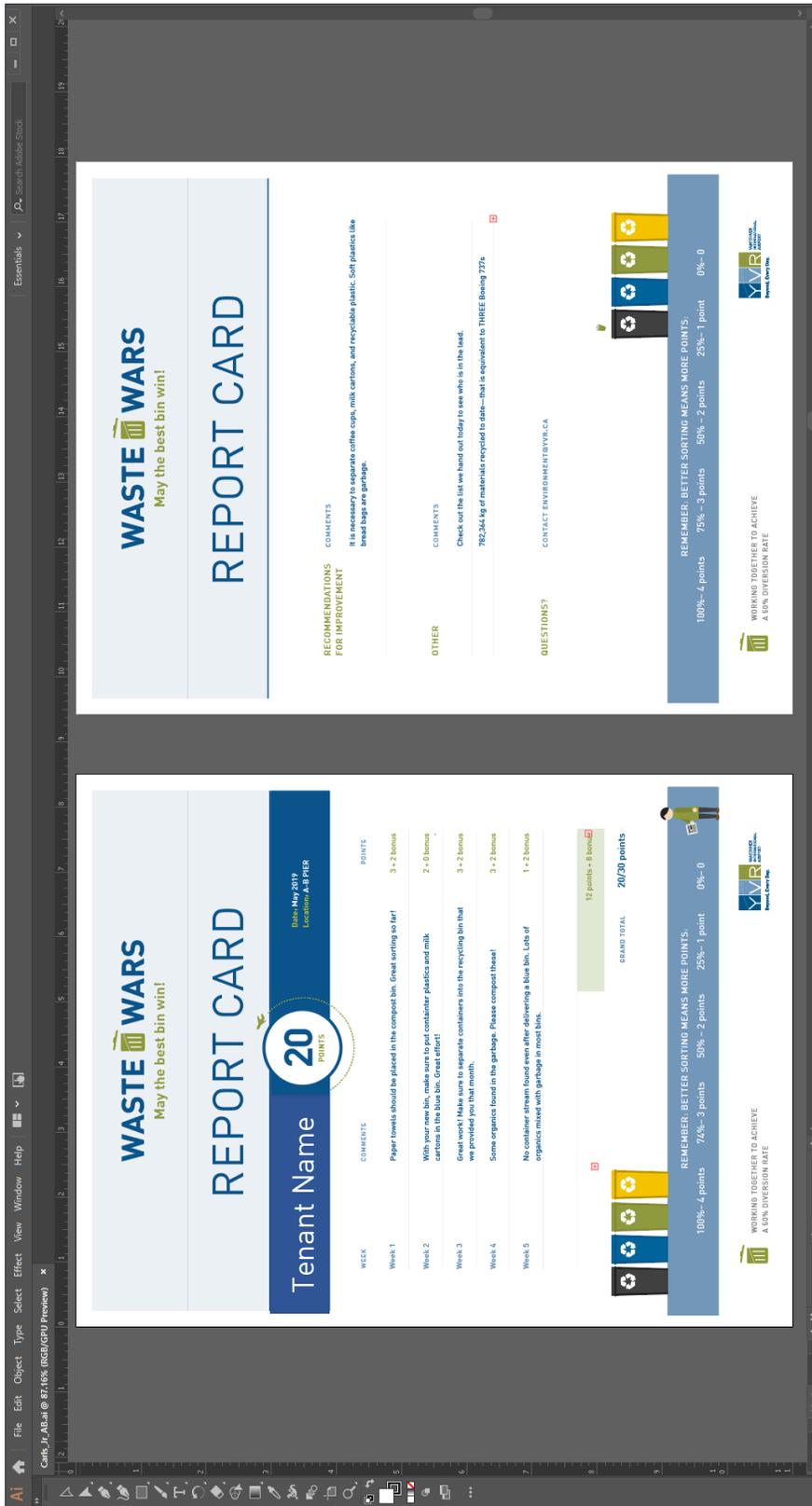


Figure 7. Sample report card.

WEEK #1

Trivia: Tell me about Waste Wars? Ask a random employee.
Bonus points: Do they have the poster up advertising waste wars

Domestic Terminal Building				
F&B Tenant	Pre/Post-Security	Location	Bins/Trivia/Bonus	Comments
Tenant Names	Pre-Security	Level 3, Food Court		
	Pre-Security	Level 3, Food Court		
	Pre-Security	Level 3, Food Court		
	Pre-Security	Level 3, Food Court		
	Pre-Security	Level 3, Food Court		
	Pre-Security	Level 3		
	Pre-Security	Level 3, Food Court		
	Pre-Security	Level 2		
	Pre-Security	Level 3, Food Court		
	Pre-Security	Level 3, Food Court		

Figure 8. Sample point sheet which is printed out to record on site. Their values and comments are entered into the master sheet and report cards later.

7. Conduct Site Visits: For seven weeks, waste experts visit each participating tenant. This involves going into the kitchens and the front of restaurants (Fig. 9). For YVR, it is split up into two-hour sessions twice a week with varying times of day. Traversing the largest building in British Columbia is no small feat! One of the most important aspects besides recording scores is talking to the tenants. What are they wondering about waste? How can YVR help them achieve efficient waste management strategies? The icebreaker for these conversations is trivia questions. Each week, one or two trivia questions are posed to random employees for bonus points. This really helps open the discussion on waste management.



Figure 9. During Waste Wars, Environment team members go into kitchens to check each bin. Photo credit: Kim Bellavance.

2.2.1 Scoring

All participating tenants are evaluated based on the same point scale (Table 1). This means that, for example, if a tenant's bins seem to be sorted about half-right, then they are awarded two points for that week. This is a subjective process; the purpose is to motivate waste action and foster awareness for tenants. Up to two bonus points can be awarded each week.

Table 1: External Waste Wars scoring scale for bin sorting.

Points Awarded	Level of Sorting Achieved
4	100%
3	75%
2	50%
1	25%
0	0%

8. Update the Master Point Sheet: Scores are entered on a master Excel sheet. This allows for easy tallying.
9. Update, Print, and Hand out the Report Cards: Points and comments are entered for each tenant visited. They are printed and handed out three times.
10. Update, Print, and Post the Leaderboards or Hand out Lists: Updates are made to the leaderboards, so tenants can track their progress.

2.3 The Aftermath

1. Determine Winners: Scores are tabulated to determine the top three winners. YVR has six total winners – three for Restaurants and three for Quick Service.
2. Order Trophies: The first-place tenants receive an amazing trophy made from recycled chopsticks (Fig. 9) collected from YVR food courts.³ It has the correct name engraved on the front before the awards ceremony. There are several options for creating awards made from recycled material.
3. Contact Winners: The top three tenants from each category are contacted
4. Update, Print, and Hand out Final Report Cards
5. Update, Print, and Post Final Leaderboards or Hand out Lists
6. Create a Closing Advertisement: A short article can be used to announce the winners and congratulate them for their sorting efforts!
7. Research and Acquire Prizes: Prizes have usually been YVR Bucks – the terminal ‘currency’! They are valid at almost any commercial tenant in the airport.
8. Award the Winners: To reward tenants and give them airport-wide recognition, two ceremonies are held. First, we gather in the terminal in June, to take photos and hand out certificates. Second, the trophies are awarded at a Customer Appreciation Party in December, honouring the winners in front of their peers.
 - a. Select a date, time, and location
 - b. Create an agenda for the event

³ ChopValue. <https://chopvalue.ca/>

- c. Acquire a company banner for photographs
- d. Contact and book a photographer
- e. Create and frame certificates to give to tenants

Figure 10. ChopValue trophy. Photo credit: Kim Bellavance.



2.3.1 Timeline

Below is an example of how these tasks may be distributed over time. The external competition is generally held from May-June, as the Summer travel period at YVR is very busy.

To Do List (2019)

Week 1

- Ready report cards
- Ready leaderboard design
- Ready master point sheet

Week 2

- Develop and print brochure
- Hand out brochure to tenants

- Draft an article advertisement

Week 3

- Hand out brochure and lanyard cards to tenants
- Post article to kick off Waste Wars

Week 4

- Week #1 Site Visits THEN:
- Update Master Points Sheet
- Update Report Cards

Week 5

- Week #2 Site Visits THEN:
- Update Master Points Sheet
- Update Report Cards
- Update leaderboard or list design
- Print Report Cards
- Print leaderboard posters

Week 6

- Week #3 Site Visits
- Hand out Report Cards to tenants
- Put up Leaderboard or Hand out Lists
- Update Master Points Sheet
- Update Report Cards

Week 7

- Week #4 Site THEN:
- Update Master Points Sheet
- Update Report Cards

Week 8

- Week #5 Site Visits
- Update Master Points Sheet
- Update Report Cards
- Update Leaderboards

Week 9

- Week #6 Site Visits
- Update Master Points Sheet
- Update Report Cards
- Print Report Cards
- Update Report Cards
- Print leaderboard posters (QSR and Restaurant categories)

Week 10

- Week #7 Site Visits
- Hand out Report Cards to tenants
- Put up Leaderboard posters in Waste Transfer rooms
- Update Master Points Sheet
- Update Report Cards
- Update Master Points Sheet
- Update Report Cards

Week 11

- Determine Winners (Quick Service and Restaurants – 1st 2nd and 3rd) = 6 winners
- Contact trophy company
- Contact winners
- Print Report Cards
- Handout final report cards to all tenants
- Put up Leaderboard or Hand out List with Winners
- Create and post a closing article advertisement
- Research prizes
- Organize prizes
- Plan dates for awards ceremony

Week 12

- Finalize awards ceremony details (Agenda, invites, photographer, materials)
- Conduct awards ceremony

3. Internal Waste Wars – YVRAA Employees

3.1 What is Internal Waste Wars?

Starting in 2018, the Airport Authority decided to start holding a Waste Wars competition between its internal office employees. This came from a realization that if tenants were being held to high standards for sorting waste, why shouldn't employees hold themselves to the same standards? In the office, some noticed improper sorting in the kitchen bins, leading to contamination. The initiative for this competition was taken by the Sustainability Innovation Team⁴ and the Navigators.⁵

Teams were assigned based on proximity to designated common-use waste stations in the office. They were each graded based on sorting into the four streams: Garbage, Containers, Paper, and Compost. The task overall is monitoring waste, educating peers, and trying to win this friendly competition. All staff were automatically enrolled in the program, and representative leaders were chosen to award points on how well sorting was being done. In addition, they answered trivia questions to gain extra points!

Figures 11 and 12. One of the winning teams of YVRAA employees (left) and members of the Environment Department (right). February 8th, 2019. Photo credits: Kim Bellavance.



⁴ A team that developed new & innovative ideas to help YVR achieve leadership in sustainability.

⁵ A group of emerging leaders at YVR who were selected to be a part of the Navigating Through Change Program, a two-year certificate program aimed at developing change capability of the Airport Authority's future leaders through experiential learning.

3.2 Objectives

- a) Educate YVR staff on how to sort waste properly, avoiding contamination
- b) Inform employees about the Environmental Management Plan
- c) Emphasize the importance of employee commitment to recycling, and how their actions help the Airport Authority achieve waste diversion targets
- d) Becoming an example for the airport itself and communicate this through projects with tenants and clients
- e) Give positive reinforcement to staff who demonstrate best practices
- f) Educate staff about using less single use items.

3.3 Running Waste Wars

Below are details on how the internal Waste Wars was conducted. As this event has only been carried out once, continuous improvement may lead to changes in future years. This is a high-level summary:

1. Understand the objectives of the program
2. Confirm which locations and designated waste bins will be monitored
3. Create Teams: Based on proximity to waste stations in the various offices, teams in 2018 had 30 members each. A team leader emerged naturally by consistently answering online trivia questions. These individuals were noted for contacting about the final awards ceremony. In future versions of this program, it may be helpful to have teams designate an official leader.
4. Develop a Schedule: The 2018 internal Waste Wars ran for one month, and YVR Navigators took the initiative to check office bins at random times every day.

3.3.1 Scoring

Table 2: Internal Waste Wars scoring scale for bin sorting.

Points awarded	Level of Sorting Achieved
4	100%
3	75%
2	50%
1	25%
0	0%

5. Develop Trivia Questions: These targeted key aspects of YVR’s waste management. It was as simple as *“Which bin do coffee stir sticks go in?”* and as

tricky as “What percentage of waste do we aim to divert from landfill by 2020?”. Bonus points were awarded for correct answers.

6. Promote Outreach and Education:
 - a. Files on how to sort waste were provided on our intranet site to let employees know where waste belongs
 - b. A fun promotional campaign based on *Game of Thrones* was created. Team members proved their fierce motivation in the competition (Fig 13).
 - c. Phone Application: The YVR Waste Wars App allowed staff to keep track of the program (Fig 14)
 - d. A video was also produced to promote the program internally
7. Determine Winners: The scores are tabulated, and the top three teams are designated



- Welcome to the 2018 Waste Wars - YVR Edition, a friendly competition to help educate employees on how to sort waste properly at YVR and reduce the amount of waste going to landfill. Show us your best waste sorting skills and come out on top to be declared the Waste Wars Champions!
- If you have any questions about the competition, feel free to email us at environment@yvr.ca
- To use this app, swipe left and right to read about the waste that should go in each bin

Figure 13 and 14. Top: A fun promotional poster showing a Waste Wars participant. It truly was a fierce competition between employees! Bottom: Home screen of the Waste Wars phone application.

8. Develop an announcement article for the winners
9. Research and Acquire Prizes: Past prizes were restaurant gift cards
10. Hold an Awards Ceremony: The 2018 internal Waste Wars ceremony was held in early 2019. Key components included:
 - a. Create an agenda for the event detailing a timeline and roles
 - b. Book a photographer to take pictures of the event
 - c. Compile a list of winning team members and send out a meeting invite
 - d. Book a suitable room
 - e. Create and edit Certificates



Figures 15, 16, and 17. Winning team members from the internal Waste Wars competition were awarded with gift cards and a trophy on February 8th, 2019.

Photo credits: Kim Bellavance.



4. Conclusion

YVR is committed to sustainability. We work hard to lead the aviation industry with our innovative environmental, social, and economic programs. Waste Wars' purpose is to engage and educate tenants and staff on waste management practices. Waste Wars plays an important role in influencing waste sorting behaviour, which leads to more waste reduction. YVR is striving to divert as much waste as possible from the landfill. In 2016, 2017, and 2018, YVR has surpassed its Environmental Management Plan goal of diverting 50%. With anticipated further growth in passenger numbers, YVR continues to seek ways to maintain and increase our waste diversion rate. Waste Wars has been a great success for the last five years in raising awareness about proper waste sortation, reducing contamination, and supporting YVR employees to be role models in waste diversion. This document can act as a useful tool for other organizations who want to manage waste efficiently.

For further information, or to share your success stories of waste diversion, please contact environment@yvr.ca. To learn more about YVR's environment programs, see yvr.ca/environment.

5. References

Reducing Waste. (n.d.). Retrieved March 21, 2019, from <http://www.yvr.ca/en/about-yvr/environment/reducing-waste>

Vancouver Airport Authority (2014). Vancouver Airport Authority 2015-2019 Environmental Management Plan

Vancouver Airport Authority (2018). 2018 Annual Sustainability Report.

Vancouver International Airport (Facebook). (n.d.). Retrieved March 26, 2019, from <https://www.facebook.com/VancouverInternationalAirport/posts/1688610574510063>

<https://chopvalue.ca/>

<http://kimbellavance.com/>