

Zero Waste Demonstration Hub (ZWDH)

Supporting the Commercialization
of Zero Waste Technologies

Market Sounding Information Session



Agenda

1. Webinar Overview
2. Background
3. Concept
4. Site Layout
5. Current Status
6. How it Works
7. Target Audience
8. Next Steps
9. Survey Run-through
10. Q & A



For more information:

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 **This session is being recorded**

Webinar Overview

- Provide information on proposed **Zero Waste Demonstration Hub**
- Review upcoming survey to solicit your feedback
- Answer any questions about the proposed concept through chat function

 This session is being recorded

Background

-  **2016** - VEC identified lack of **industrial land** to demonstrate technology
-  **2017** - COV divested its curbside recycling collection operation to reduce costs for residents
-  **2018** - Council approved Zero Waste 2040 Strategic Plan, outlining support for waste technology research and incubation
-  **2020** – City of Vancouver Engineering explored plan to develop former recycling receiving yard into a Zero Waste Demonstration Hub



The Concept

What is it?

Co-location site for innovators to demonstrate zero waste solutions

Mission

Strengthen the zero-waste ecosystem, help commercialize and scale new ventures to accelerate impact, address zero waste targets.

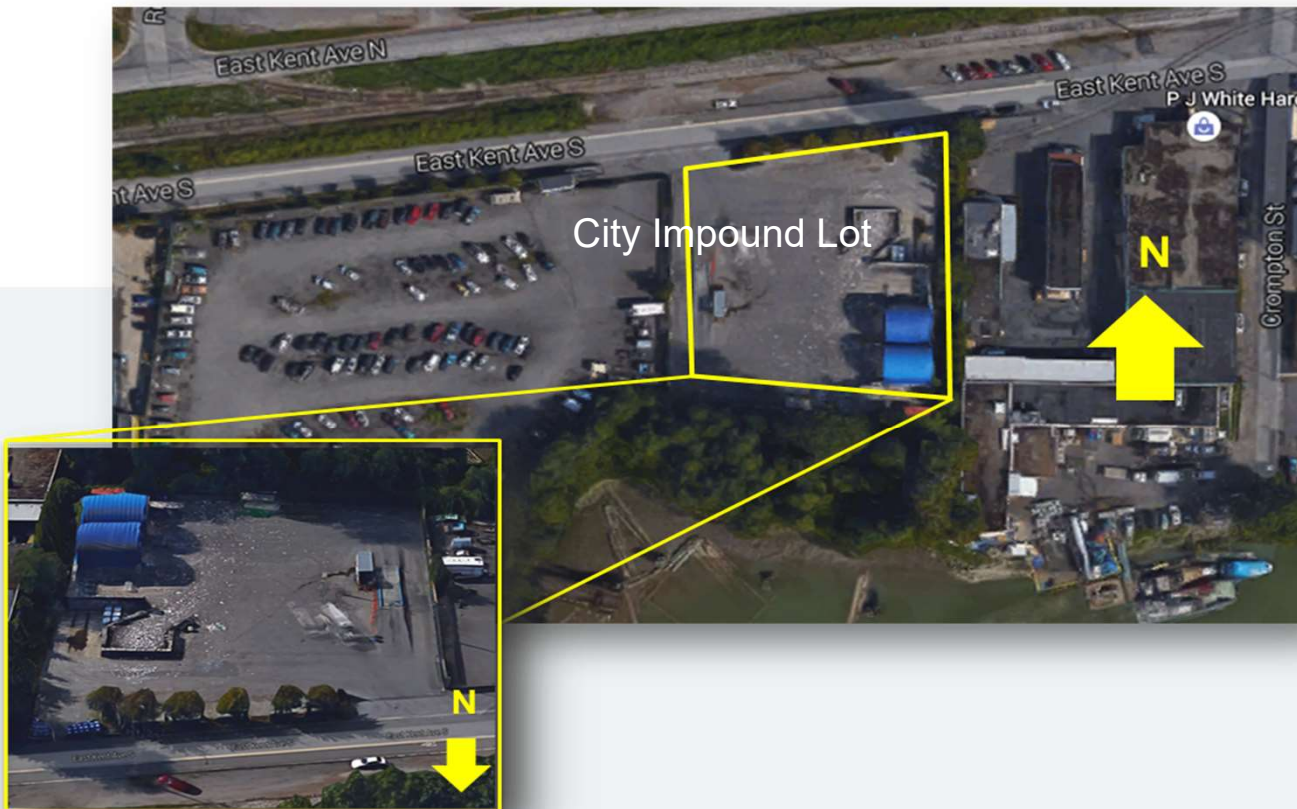
Location

1198 East Kent Ave
(former Recycling Receiving Yard)

1.1 acre industrial site, paved, secured, fenced and lit

The Site

Marine Drive



Knight Street

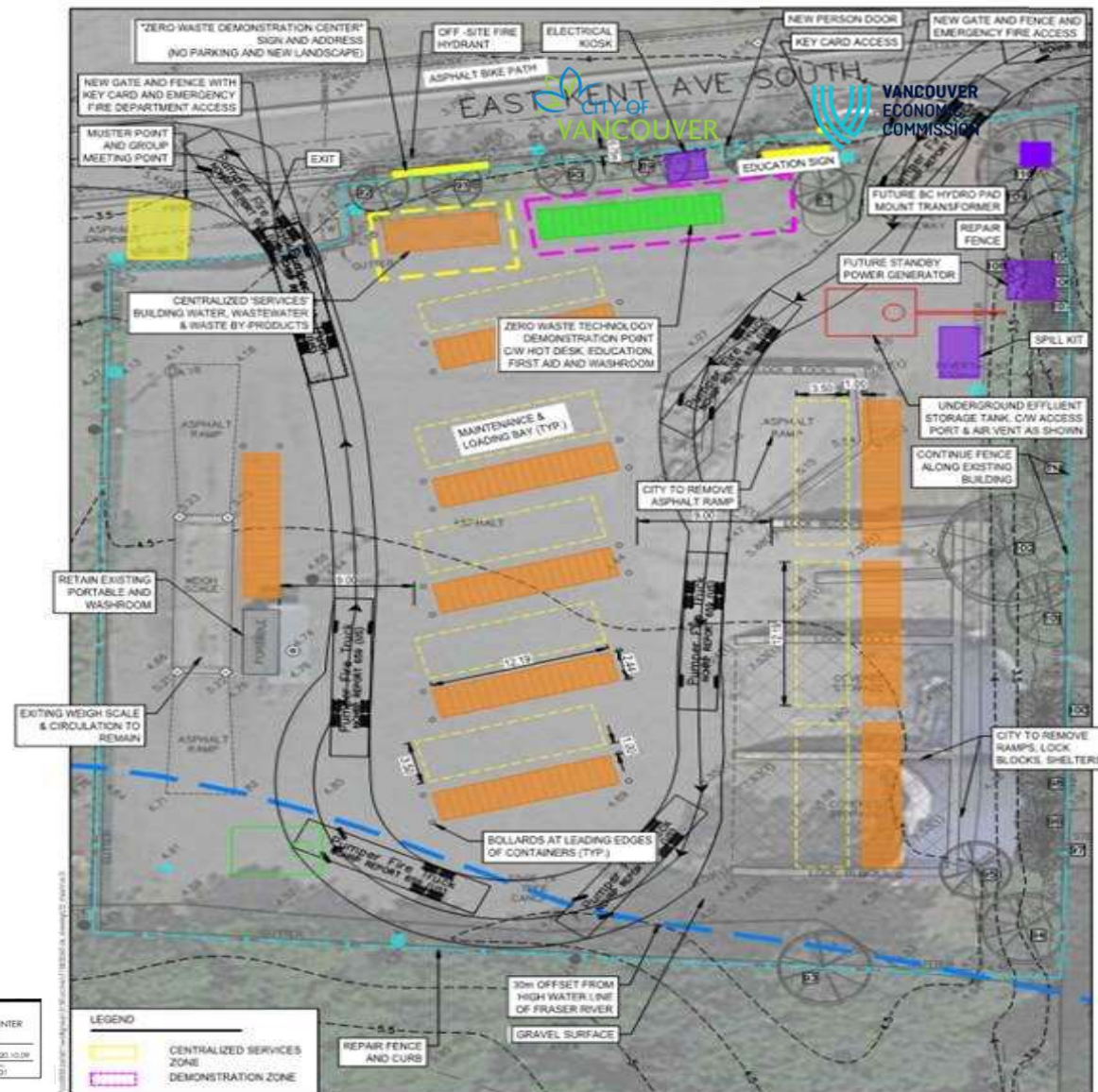
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Site Conditions

Stantec completed a **condition assessment** and regulatory scan with **cost estimate** for site development



1:250
0 2.5 7.5 12.5m

CITY OF VANCOUVER
SITE CONDITION
ASSESSMENT OF EAST 1198
KENT AVENUE SOUTH
117500045

ZERO WASTE
DEMONSTRATION CENTER
SITE LAYOUT SKETCH
DATE: 2008.10.09
REVISION: A-01

How it Works

- **Provide space** and utilities for approximately 5-10 solution providers for up to 2 years for pre-commercialization testing/demonstration.
- **Provide access** to City **waste/recycling** materials for testing, and possible connections with end users/buyers.
- **Report out** details on how technologies perform to inform future City operations and potential capital expenditures related to solid waste activities, in support of zero waste.

Target Audience

- **Innovative solution providers in zero waste space**
 - Technology Readiness Level 5+ (Post-Lab)
- **Low footprint systems**
(e.g. containerized, plug and play)
- **Limited infrastructure requirements**



Picture: Anaconda Waste Systems

Next Steps

- Debrief and **review feedback** on survey.
- **Send survey** to all registrants.

Survey is open for 3 weeks until July 9th, 2021 @ 5pm PDT

- City and VEC to **analyze information**, present to the project's Steering Committee and determine next steps.
- If demand exists and necessary City approvals are obtained, we will **launch an expression of interest** using *Project Greenlight* platform to identify prospective tenants.

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Survey Walk Through



SURVEY

Company Details

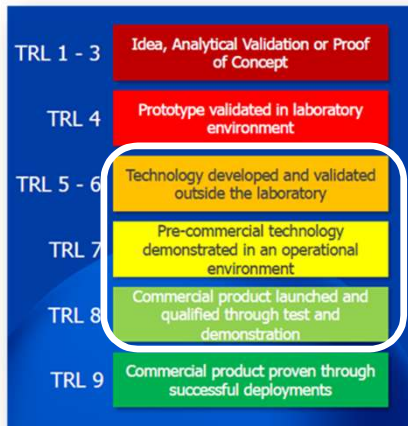
- Please provide overall details.
- If you're an enterprising non-profit institution or non-traditional venture, just explain in 'any other details' box.

Full Name	<input type="text"/>
Title	<input type="text"/>
Direct Phone	<input type="text"/>
Address	<input type="text"/>
Email Address	<input type="text"/>
Website	<input type="text"/>
Incorporation Date	<input type="text"/>
Total Employees	<input type="text"/>
Any other details?	<input type="text"/>

SURVEY

Technology & Business Model

- Please provide details on your technology, your current state, the pain point you're addressing, and market.



Q1. Describe the zero waste technology you are working to commercialize.

Q2. Describe the current technology readiness level of your technology. Reference Industry Canada for description: [Technology readiness levels](#)

Q3. What industry pain point are you trying to address? Please describe.

Q4. What is your market and who are your customers?

SURVEY

Technology & Business Model, cont.

- Please describe your current and desired strategic partners.
- Please provide input on how the City and VEC can help you obtain the most benefit.

Q5. Are you looking to partner with corporate strategics such as waste haulers, waste processors, or larger technology developers? Please explain.

Yes

No

What kind of support could the City provide?

Q6. Do you have any existing strategic partnerships? Please describe.

Q7. If the City and VEC were to set up the site, what benefits would you receive from an opportunity to pilot your technology at the proposed site?

SURVEY

Operational Requirements

- Please provide how your technology would be set up, operated day-to-day, and removed.

Operational Requirements

The proposed site for this opportunity is an outdoor site with minimal infrastructure. Your input will help the City and VEC determine how to outfit the site to meet the basic needs of the tenants should we decide to proceed with this initiative.

Q8. Please describe how your plant would run on a day-to-day basis including staff needs (# of staff, 24/7 access), whether you can run the technology remotely, frequency of deliveries, frequency of tours, and other requirement.

Q9. Can your system be weatherized such as a containerized system? This is important because the site does not have a building to shelter the technology. Furthermore, technologies that require occupancy permits will result in longer permitting times.

Q10. Please provide a description for how your system will be set up and removed.

SURVEY

Operational Requirements, cont.

- Please provide how your technology would be set up, operated day-to-day, and eventually removed in 12-24 months.

Q11. Please identify the feedstock or waste materials used in your technology's process.

Q12. Describe the end product(s) produced.

Q13. Describe any waste by-products (e.g. air emissions, garbage, inert materials) and how they would be handled.

Q14. Would you be willing to pay market rates to operate your technology at the site for a period of time (18-24 months)?

Yes

No

SURVEY

Operational Requirements, cont.

Now we get technical

- The site may not have all of your requirements to start.
- Staff and VEC are looking for funding opportunities to develop site.

	Detail (type, amounts, specifications of fittings, pipe sizing, etc.) Please describe.
Size of pilot plant	
Foundation needs (e.g. concrete, wooden pallets, on-grade)	
Power	
Water (clean, grey, leachate, etc.)	
Sewer	
Storm	
Gas	
Steam	
Compressed air	
Communications (e.g. fiber optics)	
Security (aside from the locked fence and lighting)	
Other	

SURVEY
Conclusion

**Did we miss anything
in the survey?**



Zero Waste Demonstration Hub

Supporting the Commercialization of Zero Waste Technologies

Questions?



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