

# Zero Waste Report to Council

## Zero Waste 2040 Single-Use Item Reduction Strategy Green Demolition

May 16, 2018



# Outline

Three zero waste reports for Council's consideration:

## 1. Zero Waste 2040 Strategic Plan

## 2. Single-Use Item Reduction Strategy

## 3. Green Demolition By-law Update

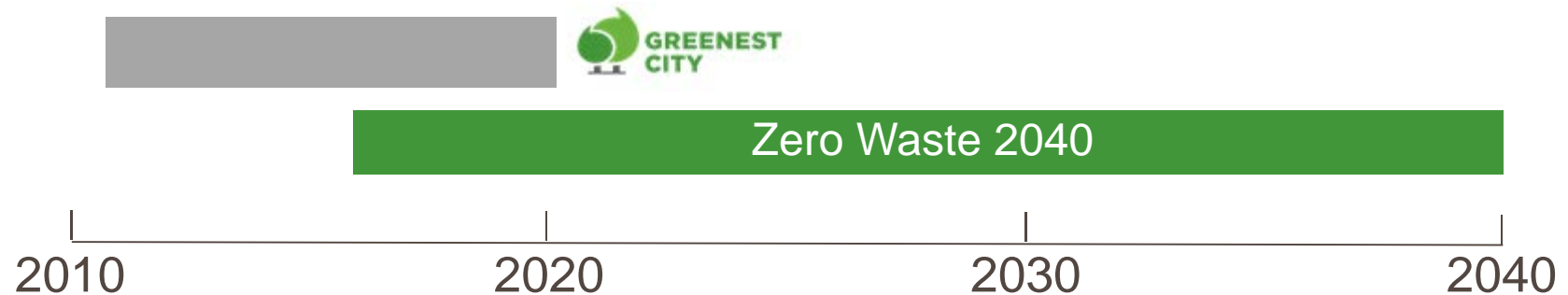
A photograph of a desk with a potted plant, a glass, and a 'Zero Waste' bag. The bag is white with green text and logos. The text 'ZERO WASTE' is prominently displayed in large green letters. Above it, the 'CITY OF VANCOUVER' logo and the 'GREENEST CITY' logo are visible. A teal-handled tool is resting on the bag. The background is slightly blurred, showing a desk with a potted plant and a glass.

# **Zero Waste 2040 Strategic Plan**

 CITY OF VANCOUVER |  GREENEST CITY  
**ZERO WASTE**

# Council Direction

May 31, 2016: Vancouver Council directed staff to develop a long-term plan for transforming Vancouver into a zero waste community by 2040.

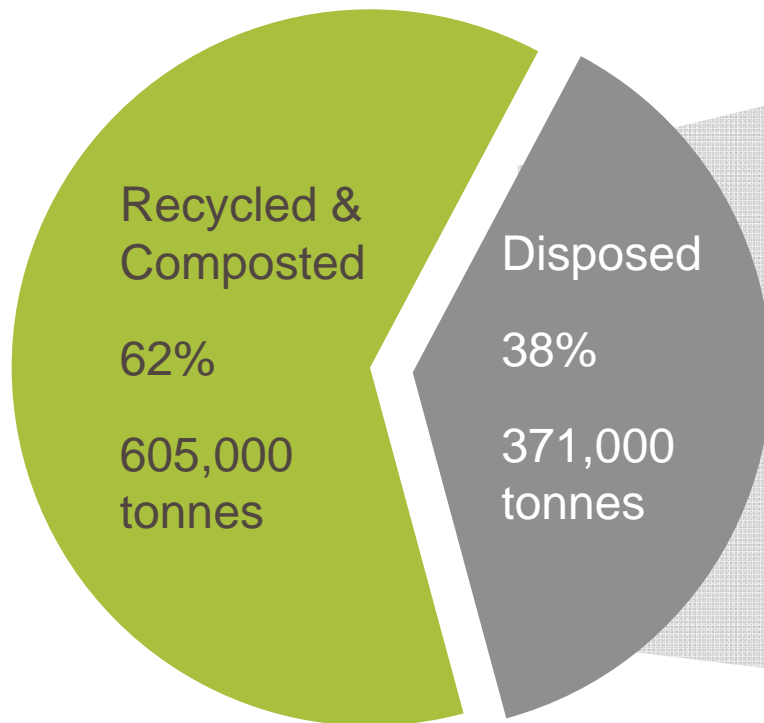


# Zero Waste 2040 Builds On a Strong, Integrated Policy Foundation

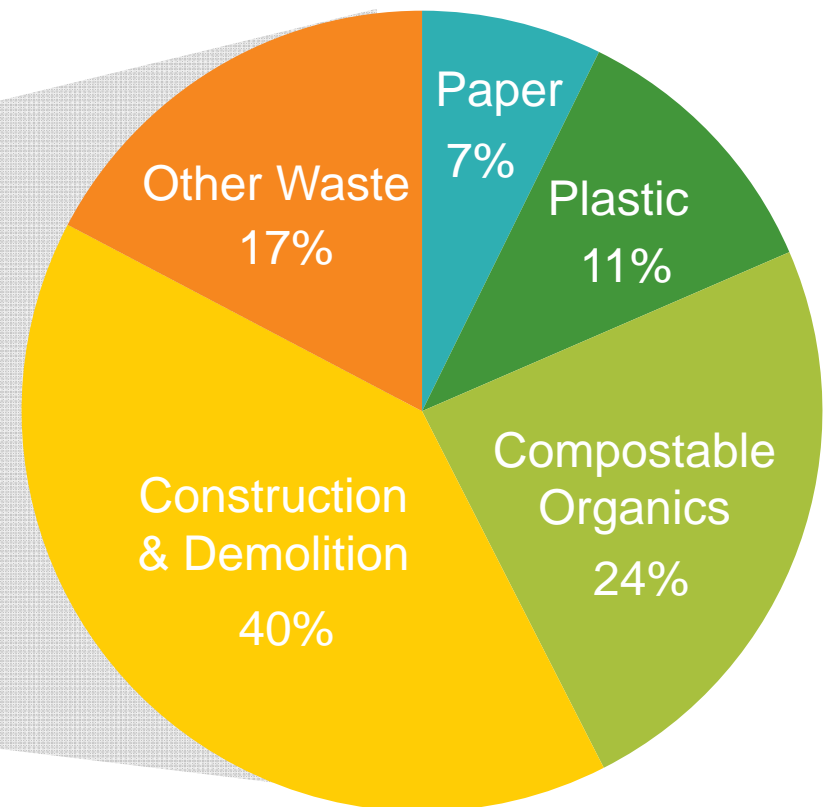


# Current Situation: Vancouver Solid Waste All Sectors (2016)

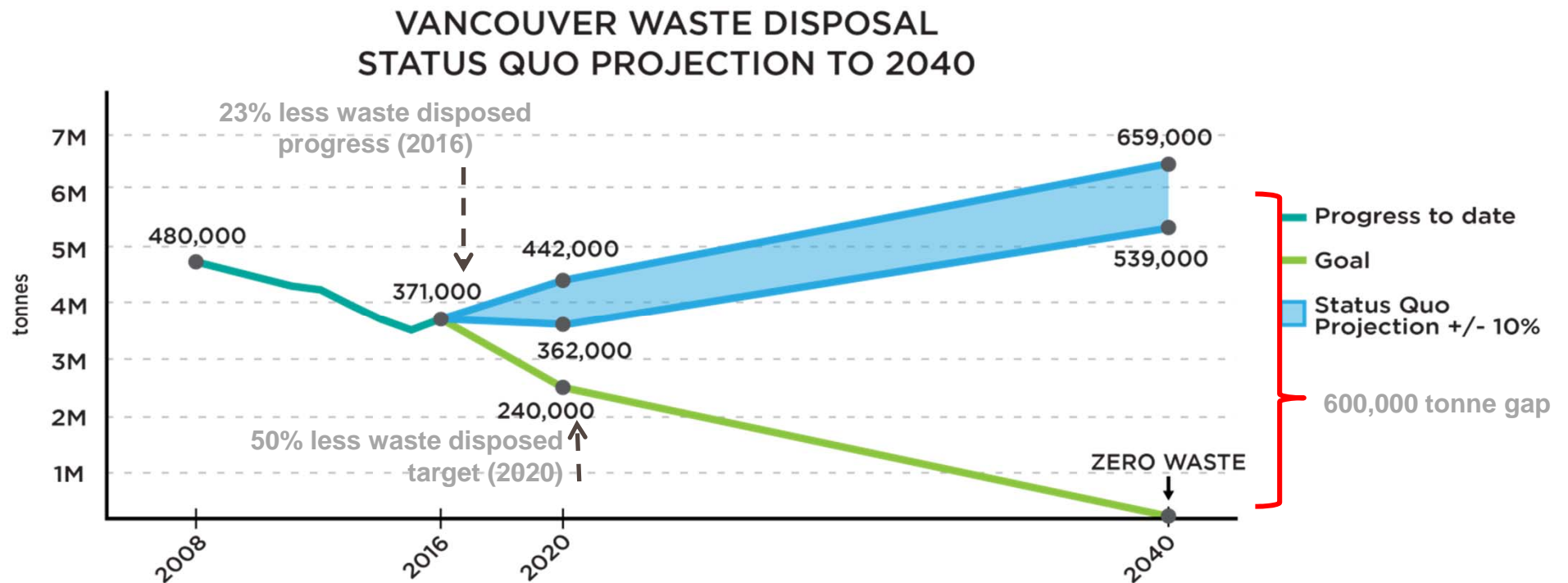
Total Waste Generated



Composition of Waste Disposed



# Current Situation: Waste Reduction Uphill Battle





# Planning Process

## Consultation

- Stakeholder engagement - Zero Waste 2040 workshops
- General public engagement - Surveys and Pop-up City Hall events
- Subject matter expert engagement - Zero Waste Advisory Panel Meetings
- **Total - Reached 7,000 people/organizations in person and 25,000 online\***



## Plan Development

- 2016 - Strategy framework
- 2017 - Identification and evaluation of opportunities
- 2018 – Finalize plan and report to Council





# What We Heard: Obstacles to Overcome

- **Consumption** = economic growth
- **Individual ownership** = convenient and status
- **Low priced goods** = replace instead of repair
- **Speed of technology/fashion** = replace early and often
- **Change in materials** = challenging to recycle
- **Single use disposable** = quick, clean and safe



# What We Heard: Directions to Pursue

- **Solutions require an engaged community and collaboration** - an individual municipality can't do it on their own
- **Focus on waste avoidance, reduction, reuse** - we can't recycle our way to Zero Waste
- **Pursue new opportunities to recover and divert residuals** - societal change takes time
- **Support investments in innovation** - many systems and technologies needed don't exist
- **Support a move to a Circular Economy** - reaching zero waste requires a different economic model (reward conservation rather than consumption, grow reuse & sharing, support local scale recycling)
- **Lead by example** - align City's practices and operations with zero waste approach, as we are asking the community to do



# What We Heard: Benefits Extend Beyond Reducing Waste Disposed

## Environment:

- Fewer GHG emissions and other pollutants
- Reduced ecological footprint

## Economic:

- Residents and business can save money from reducing consumption
- Grow green jobs and attract new businesses

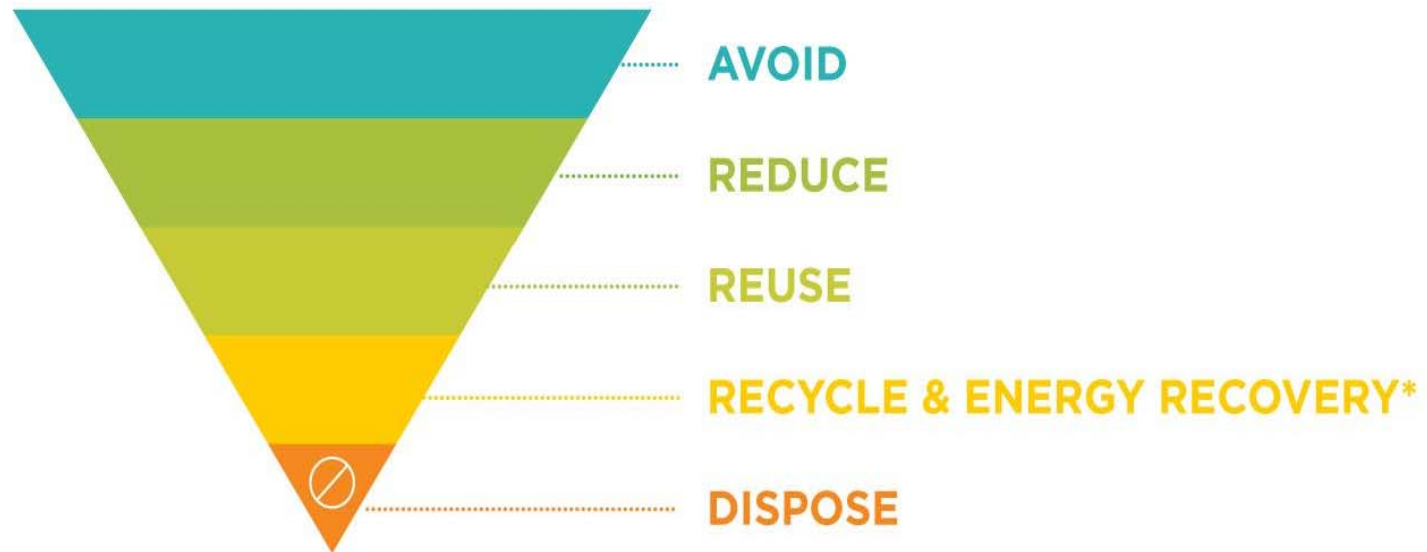
## Social:

- Connect people through repair, sharing, reuse
- Recovered products and rescued food provides opportunity for a fair and just system for all citizens



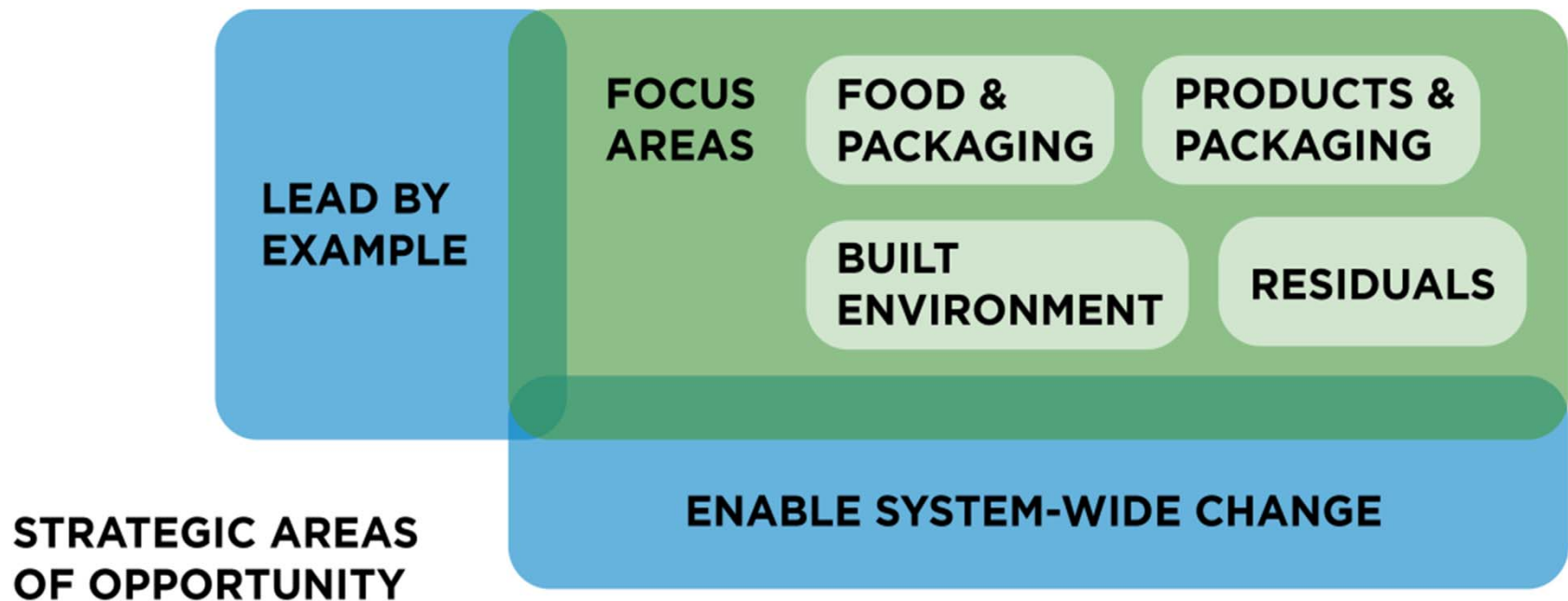
# Strategic Approach

## ZERO WASTE APPROACH FOR VANCOUVER



*\*Recovering energy from organic materials such as food and, in the case of single-use items, compostable packaging*

# Strategic Areas



# Recommended City Actions

City expected to play a stronger supportive and enabling role within community, expanding beyond historical role of collecting and transporting solid waste materials.

Actions organized as:

- **Transformative Actions** – ‘iconic’ initiatives designed to stimulate and sustain significant momentum towards zero waste.
- **Priority Actions** – actions underway or needed in the short term.
- **Enhanced & Expanded City Roles** – a variety of strategic actions for future change focused on the community as a whole.

# Transformative Actions

AREA	ACTION	STARTED
Food	<ul style="list-style-type: none"><li>• Become a Leading City in Food Waste Prevention</li></ul>	
Products	<ul style="list-style-type: none"><li>• Implement a Single-Use Item Reduction Strategy</li></ul>	✓
Built Environment	<ul style="list-style-type: none"><li>• Develop a Zero Waste Building Program</li></ul>	
Residuals	<ul style="list-style-type: none"><li>• Refocus Vancouver Landfill operations to recovery and diversion over disposal</li></ul>	✓
Cross Cutting	<ul style="list-style-type: none"><li>• Develop a Template Zero Waste Procurement Standard</li><li>• Form a Zero Waste Innovation Fund with Likeminded Partners</li></ul>	



# Priority Actions

AREA	ACTION	STARTED
Food & Residuals	• Become a national Love Food Hate Waste campaign partner	✓
	• Identify options to improve food rescue and redistribution	✓
	• Plan organics processing opportunities	
Products	• Develop new reduction & diversion strategies targeting paper and plastic	
	• Expand community Zero Waste Drop Off Events	✓
	• Identify and pursue options to support and grow product reuse and sharing	✓
	• Develop an Apparel Waste Reduction Strategy	✓
Built Environment & Residuals	• Expand Green Demolition By-Law	✓
	• Identify and pursue options to support and grow market for salvaged deconstruction materials	✓
	• Recover wood and produce biofuel from demolition materials at the Vancouver Landfill	✓
Cross Cutting	• Develop a Green Operations Zero Waste Plan	✓

# Enhanced & Expanded City Roles







## Single Use Item Reduction Strategy



# Council Direction

- **Feb. 3, 2016:** That staff investigate & report back on regulatory options to address the distribution, use, and recycling of commonly disposed items designed for single use, including coffee cups, plastic shopping bags and expanded polystyrene fast food packaging, including exploring options to restrict or ban the use of these products
- **Jun. 27, 2017:** That staff report back with the results of the Single-Use Item Reduction Strategy stakeholder consultation and public engagement



# Why a Single-Use Item Reduction Strategy for Vancouver?

Thrown in garbage each week:

- 2.6 million plastic-lined paper cups
- 2 million plastic bags

Material in public waste bins:

- 50% cups and take-out containers

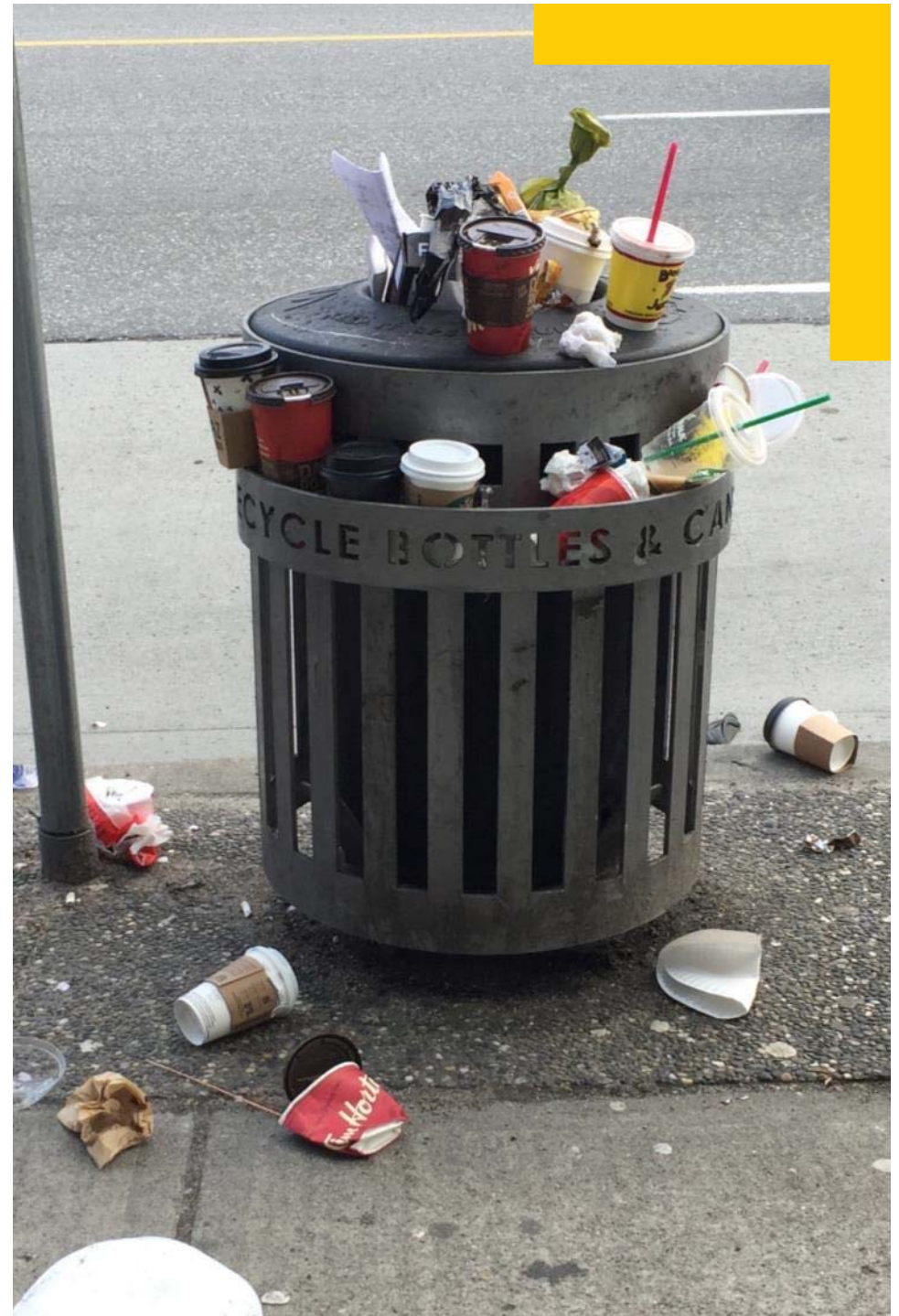
Large litter on land:

- 41% cups and take-out containers
- 3% plastic & paper bags

Shoreline litter:

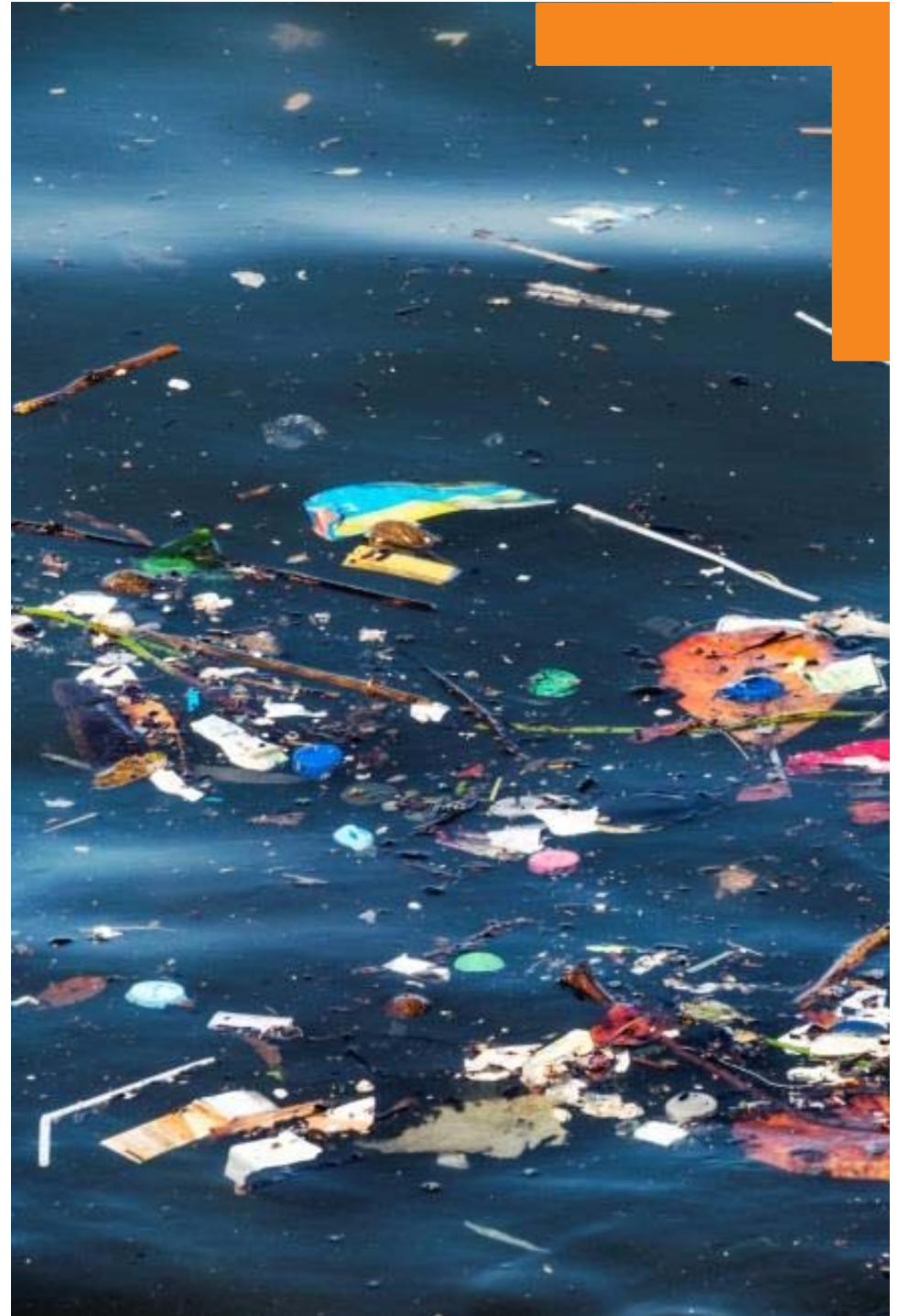
- 9% small foam pieces
- 3% plastic & paper bags
- 2% plastic straws & stir sticks

Cost to taxpayers: \$2.5M/year



# Marine Plastics

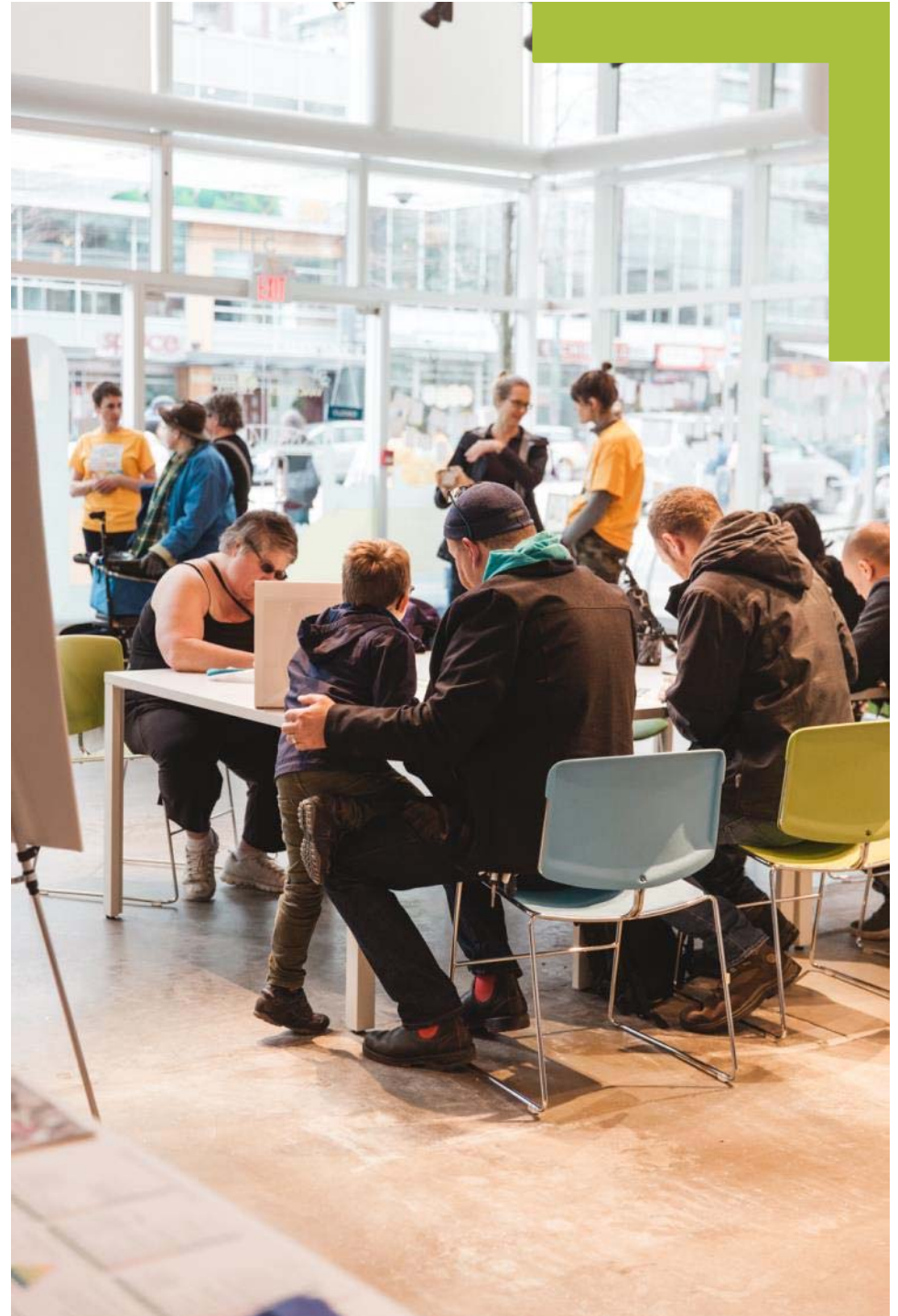
- Growing global and local issue
- Scientists predict more plastic in ocean than fish by 2050
- Great Pacific Garbage patch now bigger than B.C.+ Alberta
- Harm marine wildlife that eat, inhale or are entangled in them
- Local researchers are studying:
  - Microplastics in the Strait of Georgia (including from single-use items)
  - Amount ingested by plankton, shellfish and whales





# Consultation & Engagement

- Over **8,000 people** contributed to developing the strategy
- **Phase 1 (Oct 2016)**  
Early idea gathering  
Almost 70 people
- **Phase 2 (Jun 2017-Feb 2018)**  
Which options to include  
Over 6,500 people
- **Phase 3 (Mar-Apr 2018)**  
Draft strategy  
Over 1,400 people





# What We Heard: Key Themes in Phase 2

The strategy should be:

- Integrated
- Affordable
- Inclusive
- Equitable
- Harmonized
- Flexible
- Collaborative

And should:

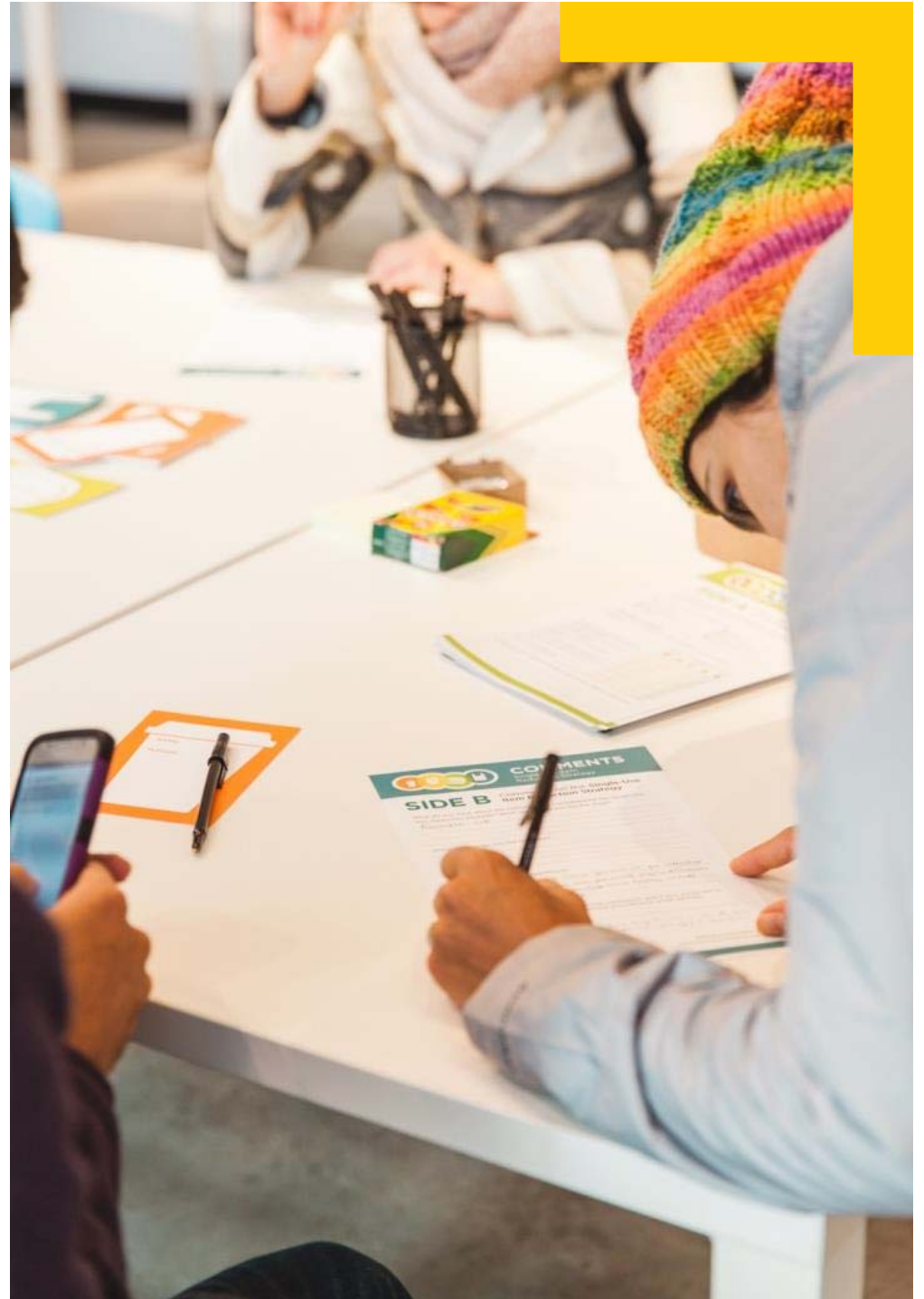
- Support and allow time for change
- Align packaging and recycling/composting systems
- Commit to continuous improvement



## What We Heard in Phase 3: Feedback on Draft Strategy

Key themes:

- Education & behaviour change
- Support business community
- Reduce burden to small business
- Language & cultural accessibility
- The time is now





# Momentum is Building

- 86% of Vancouver residents feel it is important to reduce single-use items
- Many businesses willing to work with City—especially with support like education
- Straw-free movement in Vancouver
- More local retailers charging fees on bags
- Retail Council of Canada & Recycle BC launched #BringYourOwnBag campaign and shopping bag reduction guide
- UBC mugshare pilot is expanding
- Local restaurants beginning to switch to recyclable and compostable take-out containers

# Priority Actions



Prohibit distribution of polystyrene foam cups and polystyrene take-out containers beginning Nov. 1, 2019.



**(Revised since draft strategy)** Prohibit distribution of plastic straws, beginning Nov. 1, 2019.



**(New since draft strategy)** Require disposable utensils to be given out only if customers ask for them, rather than receiving them automatically. (Begin in 2019-2020).



Introduce a requirement for businesses to have reduction plans for disposable cups and plastic/paper shopping bags. (Begin in 2019-2020).



Explore options to incentivize reduction and recover the City's costs of collecting single-use items in public waste bins and as litter from the businesses that distribute them







# Ban on Foam Cups and Containers

## If approved by Council:

- By-law will come into effect **Nov. 1, 2019**
- Applies to all business license holders

## Timeline allows for:

- Developing educational materials
- Education, outreach & dialogue
- Allows time for using up inventory

## Rationale:

- Can't be collected in curbside, multi-family or streetscape recycling programs
- As a result, foam is littered, potentially ends up in marine environment, or disposed in landfill/incinerator

## Opinion research:

- 78% of Vancouver residents agree with banning foam cups and containers
- 82% willing to pay more for take-out containers that can be recycled or composted in curbside or apartment programs





# Ban on Plastic Straws

## (Revised since draft strategy)

### If approved by Council:

- Staff will consult further to determine phasing and accommodate health care needs
- Staff will report back to Council with implementation plan by end of 2018
- By-law will come into effect Nov. 1, 2019

### Rationale:

- Feedback during Phase 3 consultation indicated customer prompt by-law proposed in draft strategy was not aggressive enough or practical

### Business support:

- Over 110 restaurants signed Drop the Straw petition asking City to adopt stricter policies on unnecessary use of plastic straws





# “By-Request” By-law for Single-Use Utensils (NEW since draft strategy)

## If approved by Council:

- Business license holders can only provide disposable utensils if customers ask for them
- By-law will come into effect in 2019-2020

## Rationale:

- In Phase 3 of consultation, stakeholders and the public wanted additional action on disposable utensils

## Opinion research:

- 71% of Vancouver residents would reduce their use of single-use items if they had to ask for them







# Reduction Plans for Cups and Bags

## If approved by Council:

- Reduction plans required for plastic & paper shopping bags & disposable cups, with options to:
  - Not give them out
  - Charge a fee
  - Other options that achieve a reduction target to be proposed and finalized through consultation
- Amounts distributed to be reported to City
- Applies to all plastic & paper bags, and disposable cups
- Applies to all business license holders
- By-law will come into effect in 2019-2020
- Staff will review need for plastic bag ban and/or fees on all bags/cups in 2021-2025 if dramatic reduction is not achieved

## Rationale:

- Modeled after organics and recycling plans in Solid Waste by-law
- Offers flexibility & choice





# Supportive Actions

- Education & outreach
  - Social media campaign, language-appropriate tools and resources to support the transition, outreach to affected businesses, Zero Waste Ambassadors volunteer program
- Infrastructure & programs to support reuse
  - Bring Your Own Container pilot, support development of travel mug & take-out container exchange programs, streetscape recycling, feasibility of mandatory dishwashers
- Collaboration & dialogue
  - E.g. Convene a forum for small businesses to explore group purchasing and reusable container programs





# Actions to Develop Targets

- Develop performance metrics based on best available data (2018)
- Work to overcome data gaps related to distribution, recovery and disposal of single-use items (2019-2020)
- Develop targets and timelines for achieving them (2019-2020)





A close-up photograph showing a person's hands using a dark-colored pry bar to demolish a wooden structure. The background is blurred, showing more of the demolition site.

# **Green Demolition By-law Update**



A close-up photograph showing a metal pry bar being used to demolish a concrete structure. The pry bar is positioned against a rough, grey concrete surface, and a piece of wood is visible in the background.

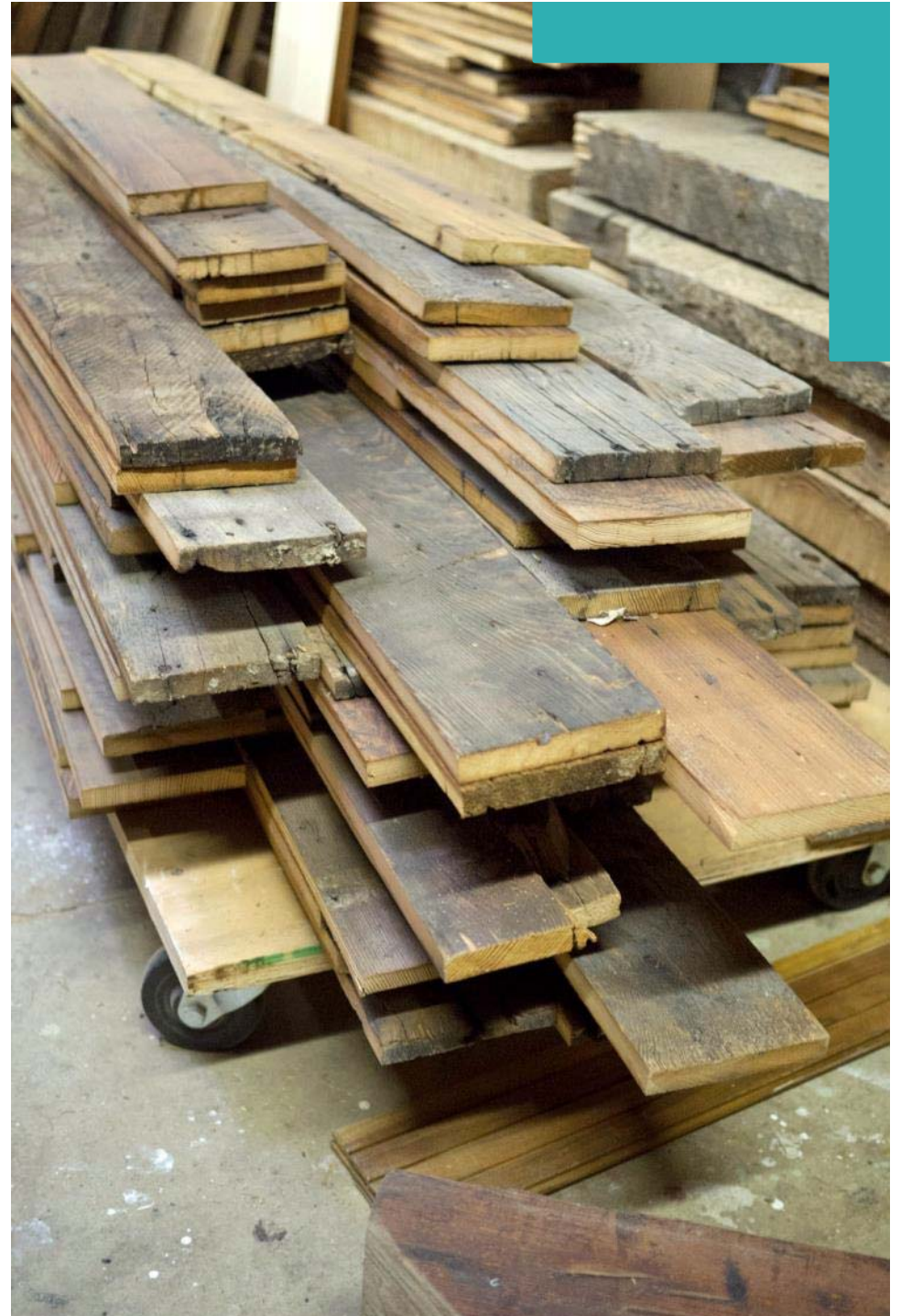


# Progress to Date

- Reducing demolition waste is a priority action for Greenest City Action Plan's zero waste goal
- Green Demolition Bylaw adopted by Council in 2014
  - 75% of waste from pre-1940 homes must be recycled or reused
  - 90% of waste from pre-1940 *character* homes must be recycled
- Roughly 10,000 tonnes of materials have been diverted from disposal annually
- The vast majority of that diversion is through recycling

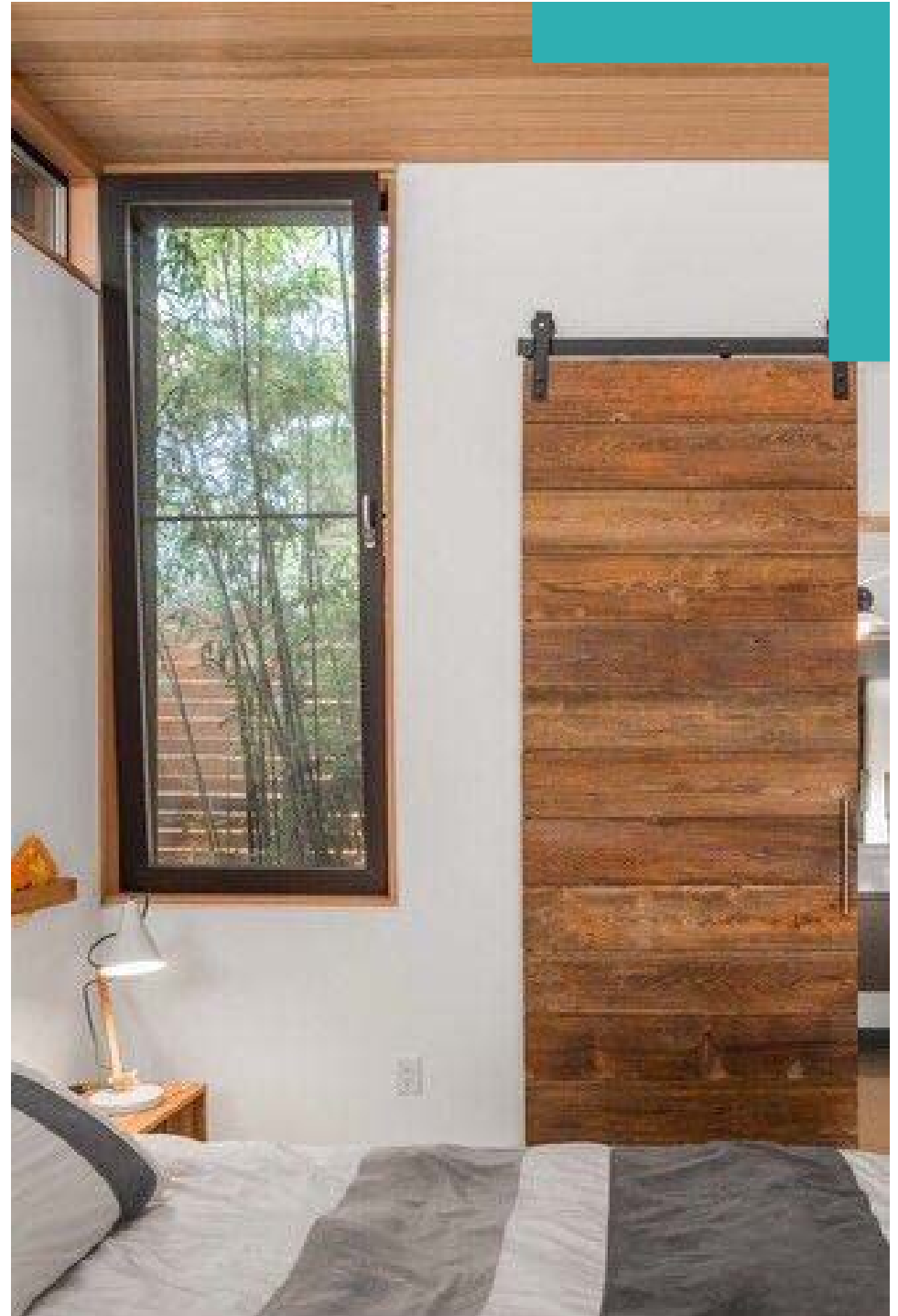
# Proposed By-law Amendments

- Expand Green Demolition By-law requirements from pre-1940 to pre-1950 homes
  - Amended by-law will capture 70% of demolitions compared to 40% currently
- Require “deconstruction” for pre-1910 and heritage-listed homes
  - Will mean homes are taken down more carefully to preserve wood and architectural details



# Supporting a Deconstruction Hub

- Deconstruction hub will fill a critical gap in the local market
  - Salvage market is currently fragmented and located largely outside Vancouver
- City funding contingent on selected operator securing matching funds
- Selected organization must have long-term business plan, sound financial capacity, and network of partners





# Implementation of By-law Updates

- Proposed by-law amendments will be effective Jan. 1 2018
- Staff will explore opportunities to support contractors through training and case studies
- By-law changes will be communicated through information bulletin, web site, and social media



# A Big Step Forward for Zero Waste in Vancouver

- Zero Waste 2040 Strategic Plan
- Single-Use Item Reduction Plan
- Green Demolition By-law Update

A photograph of a white plastic bag with green text and logos. The bag is lying flat on a light-colored surface. In the background, there is a small potted plant with green grass-like leaves in a silver metal pot, and a teal-colored handle or tool. The word 'Questions' is overlaid in the center of the image.

## Questions

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**ZERO WASTE**